AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
RUC RECOMMENDATIONS FOR CPT 2024
January 2023 Meeting

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AMA
AMERICAN MEDICAL ASSOCIATION

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February 8, 2023

The Honorable Chiquita Brooks-LaSure
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services
7500 Security Boulevard
Baltimore, MD 21244-1850

Subject: RUC Recommendations

Dear Administrator Brooks-LaSure,

The American Medical Association (AMA)/Specialty Society RVS Update Committee (RUC) submits the enclosed recommendations for work relative values and direct practice expense inputs to the Centers for Medicare & Medicaid Services (CMS). These recommendations relate to new and revised codes for *CPT 2024* and to existing services identified by the RUC's Relativity Assessment Workgroup and CMS.

Enclosed are the RUC recommendations for all the CPT codes reviewed at the January 11-14, 2023, RUC meeting.

CPT 2024 New and Revised Codes – *January 2023 RUC Submission*
The enclosed submission contains RUC recommendations, including those for new and revised CPT codes. **The RUC submits work value and/or practice expense inputs for 37 new/revised/related family CPT codes, referred 17 codes to the CPT Editorial Panel for revision and recommended contractor-pricing 2 codes from the January 2023 meeting.**

CPT 2024 New and Revised Codes – *Entire CPT 2024 Cycle*
The total number of coding changes for the entire *CPT 2024* cycle is 202 including 102 additions, 43 revisions, 29 deletions, and 28 codes that were identified as part of the family for review in relationship to the new/revised codes. Of the 173 new/revised/related family CPT codes, the RUC did not submit RUC recommendations for 4 Category I codes. Additionally, 27 services are not payable on the RBRVS or do not require physician work (eg, laboratory services and vaccines) and 36 are Category III codes, which the RUC does not submit any recommendations. Five new Category I codes were reviewed by the RUC HCPAC Review Board and CMS has previously received those recommendations.

The RUC submits recommendations for 101 new/revised/related family CPT codes for the 2024 Medicare Physician Payment Schedule.

Existing Services Identified by RUC and CMS for Review
In addition to the new/revised CPT code submission, the RUC submits recommendations for 10 services identified by the RUC or CMS as potentially misvalued and reviewed at the January 2023 RUC meeting. **The RUC recommendations are in addition to the 4 recommendations for existing services submitted to CMS following the RUC's April and September 2022 meetings, totaling 14 recommendations identified via the potentially misvalued services project for the 2024 Medicare Physician Payment Schedule.**

CPT 2023 New and Revised Codes
The RUC would like to remind CMS of the RUC recommendations that were submitted in January 2022 that were interim recommendations for 2023, resurveyed in April 2022 and subsequently submitted to CMS in May 2022.

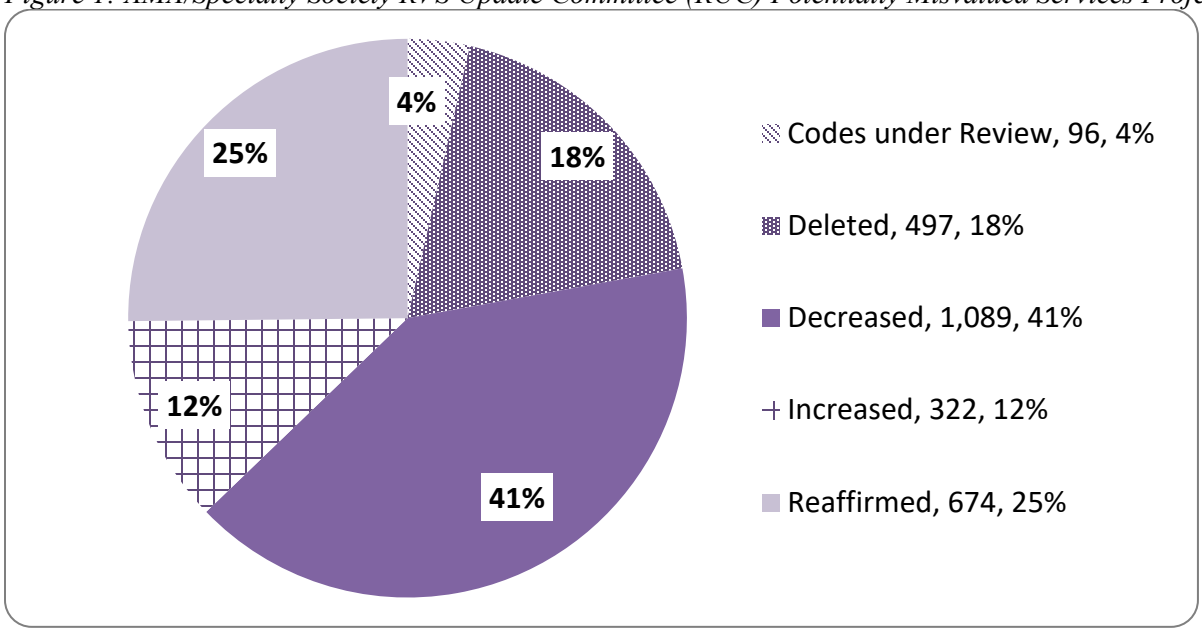
- Total Disc Arthroplasty (22857, 22860)

Office and Hospital Visits Included in Codes with a Surgical Global Period
The RUC strongly believes that the changes in valuation of the office and hospital E/M visits be incorporated to the visits in the surgical global periods. Since CMS did not apply the office E/M visit increases to the visits bundled into global surgery payment, it is disadvantaging specific specialties. An example of the shortcomings of this policy decision became apparent during discussion of CPT code 67141 *Prophylaxis of retinal detachment (eg, retinal break, lattice degeneration) without drainage; cryotherapy, diathermy* (RUC recommended work RVU = 2.53 and 2-99213 office visits) at the October 2020 RUC meeting. The RUC questioned whether the specialties had considered changing the global period to a 000-day global given that the intensity will be low and the office visits in 2021 will be of a different value. The specialties explained it is routine and typical that the two postoperative visits occur as part of the work within the 10 days after the procedure. The survey code is a good fit for the 010-day global and is in alignment with the other retinal laser codes and ophthalmic laser codes for other diseases. Relativity is therefore better maintained by keeping as a 010-day global even though the intensity is low. The RUC noted that these codes were being valued too low considering that office visits for the surgical global period were not going to be increased to the 2021 office E/M codes. Considering that the 99213 office visit is valued at 1.30 RVUs two 99213 office visits are valued higher than the 2.53 value of this code. Therefore, the CMS policy is disadvantageous to the eye surgeons and an example of shortcomings and rank order abnormalities the flawed policy creates. The Agency's position implies that the physician work for office visits is not the same when performed in a surgical global period, which is an inaccurate assumption.

The RUC recommends that CMS apply the office visit and hospital visit valuation changes uniformly across all services and specialties. CMS should not hold specific specialties to a different standard than others. The RUC urges CMS to apply the office visit and hospital visit changes to the office and hospital visits included in surgical global payment, as it has applied historically.

RUC Progress in Identifying and Reviewing Potentially Misvalued Codes
Since 2006, the RUC has identified 2,685 potentially misvalued services through objective screening criteria and has completed review of 2,589 of these services. The RUC has recommended that 60% of the services reviewed be decreased or deleted (Figure 1). The RUC has worked vigorously to identify and address mis-valuations in the RBRVS through the provision of revised physician time data and resource recommendations to CMS. The RUC looks forward to working with CMS on a concerted effort to address potentially misvalued services.

Figure 1: AMA/Specialty Society RVS Update Committee (RUC) Potentially Misvalued Services Project



Source: American Medical Association

Practice Expense Subcommittee

The attached materials include direct practice expense input (medical staff, supplies and equipment) recommendations for each code reviewed. As a reminder, cost estimates for proposed new clinical staff types, medical supplies and medical equipment (not listed as part of the CMS labor, supply, and equipment lists) are based on provided source(s), such as paid invoices and may not reflect the wholesale prices, quantity, cash discounts, prices for used equipment or any other factors that may alter the cost estimates. The RUC shares this information with CMS without making specific recommendations on the pricing.

High-Cost Disposable Supplies

The RUC calls on CMS to separately identify and pay for high-cost disposable supplies. The RUC makes this recommendation to address the outsized impact that high-cost disposable supplies have within the current practice expense RVU methodology. The current system not only accounts for a large amount of direct practice expense for these supplies but also allocates a large amount of indirect practice expense into the PE RVU for the procedure codes that include these supplies. Because of specialty pools and how the PE formula derives the code-level indirect practice expense in part as a multiple of the code-level direct practice expense inputs, when CPT codes include a high-cost disposable supply, a larger portion of indirect practice expense is allocated to the subset of practices performing the service which is subsidized by the broader specialty and all other Medicare providers. If high costs supplies were paid separately with appropriate HCPCS codes, the indirect expense would no longer be associated with that service. The result would be that indirect PE RVUs would be redistributed throughout the specialty practice expense pool and the practice expense for all other services. **The RUC recommends that CMS separately identify and pay for high-cost disposable supplies priced more than $500 using appropriate HCPCS codes. The pricing of these supplies should be based on a transparent process, where items are annually reviewed and updated.**

Skin Adhesives and Use of Generic Alternatives
The RUC determined that the Practice Expense (PE) Subcommittee should further review the issue of skin adhesives, specifically Dermabond, after accepting the use of SG007 *adhesive, skin (Dermabond)* as part of the Neurostimulator Services-Bladder Dysfunction tab in April 2022. The PE Subcommittee reviewed the issue of skin adhesives, focusing on wound closure, and identified several generic alternatives to Dermabond *(see 21 Other PE Related Recommendations)*. The PE Subcommittee discussed that the use of Dermabond is not typical and is only included in two CPT codes and four G codes. (These codes will be reviewed at the April 2023 PE Subcommittee meeting.) The Subcommittee noted that there are substitute adhesives available that are less expensive and that the CMS price of $57.67 does not appear to reflect accurate current pricing. The RUC agreed that there are multiple skin adhesive products at different price points available that work similar to Dermabond. The RUC determined that generic alternatives should be used overall in place of brand names.

- **The RUC recommends that CMS replace Dermabond with its generic cyanoacrylate skin adhesive alternative on the CMS Direct PE Inputs Medical Supplies Listing.**
- **The RUC recommends that CMS create new medical supply item codes to encompass the generic formulations of cyanoacrylate skin adhesive in multidose form and single use sterile application.**
- **The RUC recommends that CMS use generic alternatives in place of brand names on the CMS Direct PE Inputs Medical Supplies Listing.**

Enclosed Recommendations and Supporting Materials:

- RUC Recommendation Status Report for New and Revised Codes for *CPT 2024.*
- RUC Recommendation Summary of Existing Codes Identified by CMS or the Relativity Assessment Workgroup.
- RUC Recommendation Progress and Status Reports for 2,685 services identified to date by the Relativity Assessment Workgroup and CMS as potentially misvalued.
- RUC Referrals to the CPT Editorial Panel – both for CPT nomenclature revisions and *CPT Assistant* articles.
- Physician Time File – A list of the physician time data for each of the CPT codes reviewed at the January 2023 RUC meeting.
- Pre-Service and Post-Service Time Packages Definitions – The RUC developed physician pre-service and post-service time packages which have been incorporated into these recommendations. The intent of these packages is to streamline the RUC review process as well as create standard pre-service and post-service time data for all codes reviewed by the RUC.
- PLI Crosswalk Table – The RUC has committed to selecting appropriate professional liability insurance crosswalks for new and revised codes and existing codes under review. We have provided a PLI Crosswalk Table listing the reviewed code and its crosswalk code for easy reference. We hope that the provision of this table will assist CMS in reviewing and implementing the RUC recommendations.

- BETOS Assignment Table – The RUC, for each meeting, provides CMS with suggested BETOS classification assignments for new/revised codes. Furthermore, if an existing service is reviewed and the specialty believes the current assignment is incorrect, this table will reflect the desired change.

- Utilization Data Crosswalk – A table estimating the flow of claims data from existing codes to the new/revised codes. This information is used to project the work relative value savings to be included in the 2024 conversion factor increase.

- New Technology List and Timeline – In April 2006, the RUC adopted a process to identify and review codes that represent new technology or services that have the potential to change in value. To date, the RUC has identified 815 of these procedures through the review of new CPT codes. A table of these codes identified as new technology services and the date of review is enclosed, as well as a flow chart providing a detailed description of the process to be utilized to review these services.

- RUC Recommendations on Modifications to Visits in the Global Period – This includes changes in work RVUs and time by incorporating the increase of office visits and hospital visits in the surgical global periods.

We appreciate your consideration of these RUC recommendations. If you have any questions regarding the attached materials, please contact Sherry Smith at Sherry.Smith@ama-assn.org.

Sincerely,



Ezequiel Silva III, MD
Chair, AMA/Specialty Society RVS Update Committee

Enclosures

cc: RUC Participants
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Ryan Howe
Scott Lawrence
Michael Soracoe
Gift Tee

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
RUC RECOMMENDATIONS FOR CPT 2024

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CPT 2024 RUC Recommendations

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0404T	YYY	D	Sep 2022	12	Category III - Transcervical RF Ablation of Uterine Fibroids		Jan 2023	9					☐		☐
0424T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0425T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0426T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0427T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0428T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0429T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0430T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0431T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0432T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0433T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0434T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0435T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0436T	YYY	D	Sep 2022	17	Category III - Phrenic Nerve Stimulation System		Jan 2023	6					☐		☐
0465T	YYY	D	Sep 2022	24	Category III - Suprachoroidal Ablation		Jan 2023	10					☐		☐
0493T	YYY	D	Sep 2022	EC-D	Category III - Parenthetical Revisions - Noncontact SPECT		Cat III						☐		☐
0499T	YYY	D	Sep 2022	13	Category III - Cystourethroscopy with Urethral Therapeutic Drug Delivery		Jan 2023	8					☐		☐
0501T	YYY	D	Sep 2022	27	Category III - Fractional Flow Reserve with CT		Jan 2023	11					☐		☐
0502T	YYY	D	Sep 2022	27	Category III - Fractional Flow Reserve with CT		Jan 2023	11					☐		☐
0503T	YYY	D	Sep 2022	27	Category III - Fractional Flow Reserve with CT		Jan 2023	11					☐		☐
0504T	YYY	D	Sep 2022	27	Category III - Fractional Flow Reserve with CT		Jan 2023	11					☐		☐
0512T	YYY	D	Feb 2023	37	Category III Sundown		Deleted						☐		☐
0513T	YYY	D	Feb 2023	37	Category III Sundown		Deleted						☐		☐
0533T	YYY	D	Feb 2023	37	Category III Sundown		Deleted						☐		☐
0534T	YYY	D	Feb 2023	37	Category III Sundown		Deleted						☐		☐
0535T	YYY	D	Feb 2023	37	Category III Sundown		Deleted						☐		☐
0536T	YYY	D	Feb 2023	37	Category III Sundown		Deleted						☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0552T	YYY	R	May 2022	37	Category III - Post Operative Low Level Laser Therapy		Sep 2022	6					☐		☐
0587T	YYY	R	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0588T	YYY	R	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0589T	YYY	R	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0590T	YYY	R	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0656T	YYY	R	Sep 2022	26	Category III - Vertebral Body Tethering		Jan 2023	5					☐		☐
0657T	YYY	R	Sep 2022	26	Category III - Vertebral Body Tethering		Jan 2023	5					☐		☐
06X1T	YYY	N	Sep 2022	26	Category III - Vertebral Body Tethering		Jan 2023	5					☐		☐
0715T	YYY	D	Sep 2022	34	Category III - Percutaneous Coronary Interventions		Jan 2023	12					☐		☐
0775T	YYY	D	Sep 2022	16	Category III - Dorsal Sacroiliac Joint Arthrodesis		Jan 2023	4					☐		☐
0784T	YYY	N	Feb 2022	11/43	Category III - Spinal Neurostimulator Services		Sep 2022	4					☐		☐
0785T	YYY	N	Feb 2022	11/43	Category III - Spinal Neurostimulator Services		Sep 2022	4					☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0787T	YYY	N	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0789T	YYY	N	Feb 2022	11/43	Category III - Spinal Neurostimulator Services		Sep 2022	4					☐		☐
27279	090	F	Sep 2022	16	Dorsal Sacroiliac Joint Arthrodesis	I2	Jan 2023	4	AANS/CNS, NASS, OEIS				☑	No RUC Recommendation	☐
27280	090	F	Sep 2022	16	Dorsal Sacroiliac Joint Arthrodesis	I3	Jan 2023	4	AANS/CNS, NASS				☑	No RUC Recommendation	☐
28292	090	R	Sep 2022	18	Metatarsal Arthrodesis for Bunion Correction		Editorial			7.44	7.44	Yes	☑		☐
28297	090	R	Sep 2022	18	Metatarsal Arthrodesis for Bunion Correction		Editorial			9.29	9.29	Yes	☑		☐
28740	090	R	Sep 2022	18	Metatarsal Arthrodesis for Bunion Correction		Editorial			9.29	9.29	Yes	☑		☐
27278	090	N	Sep 2022	16	Dorsal Sacroiliac Joint Arthrodesis	I1	Jan 2023	4	ACR, ASA, ASIPP, ASRA, NANS, OEIS, SIR	8.95	7.86		☑		☑
22836	090	N	Sep 2022	26	Vertebral Body Tethering	J1	Jan 2023	5	AANS/CNS, AAOS, NASS	32.00	32.00		☑		☑
22837	090	N	Sep 2022	26	Vertebral Body Tethering	J2	Jan 2023	5	AANS/CNS, AAOS, NASS	35.50	35.50		☑		☑
22838	090	N	Sep 2022	26	Vertebral Body Tethering	J3	Jan 2023	5	AANS/CNS, AAOS, NASS	36.00	36.00		☑		☑
30117	090	F	Sep 2022	22	Posterior Nasal Nerve Ablation	L1	Jan 2023	7	AAO-HNS	3.91	3.91		☑		☐
30118	090	F	Sep 2022	22	Posterior Nasal Nerve Ablation	L2	Jan 2023	7	AAO-HNS	9.55	9.55		☑		☐
33276	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K1	Jan 2023	6	AASM, ACC, HRS	10.75	9.50		☑		☑
33277	ZZZ	N	Sep 2022	17	Phrenic Nerve Stimulation System	K2	Jan 2023	6	AASM, ACC, HRS	7.49	5.43		☑		☑
33278	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K3	Jan 2023	6	AASM, ACC, HRS	10.51	9.55		☑		☑

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
33279	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K4	Jan 2023	6	AASM, ACC, HRS	9.71	5.42		☑		☑
33280	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K5	Jan 2023	6	AASM, ACC, HRS	6.90	3.04		☑		☑
33281	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K6	Jan 2023	6	AASM, ACC, HRS	9.00	6.00		☑		☑
33287	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K7	Jan 2023	6	AASM, ACC, HRS	7.83	6.05		☑		☑
33288	090	N	Sep 2022	17	Phrenic Nerve Stimulation System	K8	Jan 2023	6	AASM, ACC, HRS	10.13	8.51		☑		☑
31242	000	N	Sep 2022	22	Posterior Nasal Nerve Ablation	L3	Jan 2023	7	AAO-HNS	2.70	2.70		☑		☑
31243	000	N	Sep 2022	22	Posterior Nasal Nerve Ablation	L4	Jan 2023	7	AAO-HNS	2.70	2.70		☑		☑
43882	YYY	R	Sep 2022	EC-C	Parenthetical Revisions - Gastric Neurostimulator		Editorial			0.00	0.00	Yes	☑		☐
58661	010	R	Feb 2023	EC-J	Parenthetical Revision - 58661		Editorial			11.35	11.35	Yes	☑		☐
52284	000	N	Sep 2022	13	Cystourethroscopy with Urethral Therapeutic Drug Delivery	M1	Jan 2023	8	AUA	3.10	3.10		☑		☑
58580	010	N	Sep 2022	12	Transcervical RF Ablation of Uterine Fibroids	N1	Jan 2023	9	ACOG	7.21	7.21		☑		☑
61889	090	N	Feb 2022	10	Skull-Mounted Cranial Neurostimulator	A1	Apr 2022	5	AANS, CNS	25.75	25.75		☑		☑
61891	090	N	Feb 2022	10	Skull-Mounted Cranial Neurostimulator	A2	Apr 2022	5	AANS, CNS	11.25	11.25		☑		☑
61892	090	N	Feb 2022	10	Skull-Mounted Cranial Neurostimulator	A3	Apr 2022	5	AANS, CNS	15.00	15.00		☑		☑
63685	010	R	Feb 2022	11/43	Spinal Neurostimulator Services	B1	Sep 2022	4	AANS, AAPM, AAPM&R, ASA, ASIPP, CNS, NANS, NASS, SIS	5.19	5.19	Yes	☑		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
63688	010	R	Feb 2022	11/43	Spinal Neurostimulator Services	B2	Sep 2022	4	AANS, AAPM, AAPM&R, ASA, ASIPP, CNS, NANS, NASS, SIS	5.14	4.35		☑		☐
64590	010	R	Feb 2022	11/43	Neurostimulator Services-Bladder Dysfunction	E1	Apr 2022	7	ACOG, AUA	5.10	5.10		☑		☐
64595	010	R	Feb 2022	11/43	Neurostimulator Services-Bladder Dysfunction	E2	Apr 2022	7	ACOG, AUA	4.00	3.79		☑		☐
64596	010	N	Feb 2022	11/43	Spinal Neurostimulator Services	B3	Sep 2022	4	AAPM, ASA, ASIPP, NANS				☑	Contractor Price	☑
64597	ZZZ	N	Feb 2022	11/43	Spinal Neurostimulator Services	B4	Sep 2022	4	AAPM, ASA, ASIPP, NANS				☑	Contractor Price	☑
64598	010	N	Feb 2022	11/43	Spinal Neurostimulator Services	B5	Sep 2022	4	AAPM, ASA, ASIPP, NANS				☑	Contractor Price	☑
67516	000	N	Sep 2022	24	Suprachoroidal Ablation	O1	Jan 2023	10	AAO, ASRS	1.53	1.53		☑		☑
75574	XXX	F	Sep 2022	27	Fractional Flow Reserve with CT	P1	Jan 2023	11	ACC, ACR, SCCT				☑	No RUC Recommendation	☐
76998	XXX	F	May 2022	20	Intraoperative Ultrasound Services	F5	Sep 2022	5	AATS, ACC, ACS, ASBrS, STS	1.20	1.20	Yes	☑		☐
76984	XXX	N	May 2022	20	Intraoperative Ultrasound Services	F1	Sep 2022	5	AATS, ACC, STS	0.60	0.60		☑		☑
76987	XXX	N	May 2022	20	Intraoperative Ultrasound Services	F2	Sep 2022	5	AATS, ACC, STS	1.90	1.90		☑		☑
76988	XXX	N	May 2022	20	Intraoperative Ultrasound Services	F3	Sep 2022	5	AATS, ACC, STS	1.20	1.20		☑		☑
76989	XXX	N	May 2022	20	Intraoperative Ultrasound Services	F4	Sep 2022	5	AATS, ACC, STS	1.55	1.55		☑		☑
75580	XXX	N	Sep 2022	27	Fractional Flow Reserve with CT	P2	Jan 2023	11	ACC, ACR, SCCT	0.84	0.75		☑		☑
81171	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
81172	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81243	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81244	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81403	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81404	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81405	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81406	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81407	XXX	R	Sep 2022	30	MoPath Editorial Language Revisions		CLFS						☐		☐
81445	XXX	R	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81449	XXX	R	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81450	XXX	R	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81451	XXX	R	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81455	XXX	R	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81456	XXX	R	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81490	XXX	R	Feb 2023	12	Appendix O Proprietary Name Revision - 81490		CLFS						☐		☐
82166	XXX	N	Feb 2023	15	Anti-Mullerian Hormone (AMH)		CLFS						☐		☐
81457	XXX	N	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81458	XXX	N	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81459	XXX	N	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
81462	XXX	N	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81463	XXX	N	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81464	XXX	N	Feb 2023	11	GSP - Tumor Genomics Testing		CLFS						☐		☐
81517	XXX	N	Feb 2023	13	MAAA - Enhanced Liver Fibrosis Assay		CLFS						☐		☐
92920	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q1	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92921	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q2	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92924	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q3	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92925	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q4	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92928	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q5	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92929	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q6	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92933	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q7	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92934	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q8	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92937	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q9	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92938	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q10	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92941	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q11	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
92943	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q12	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92944	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q13	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92973	ZZZ	F	Sep 2022	34	Percutaneous Coronary Interventions	Q15	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92975	000	F	Sep 2022	34	Percutaneous Coronary Interventions	Q16	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
92977	XXX	F	Sep 2022	34	Percutaneous Coronary Interventions	Q17	Jan 2023	12	ACC, SCAI				☑	Referred to CPT	☐
93593	000	F	Sep 2022	50	Venography Services	D1	Jan 2023	14	ACC, SCAI	3.99	3.99	Yes	☑	Affirm Oct. 2020 RUC Recommendation	☑
93594	000	F	Sep 2022	50	Venography Services	D2	Jan 2023	14	ACC, SCAI	6.10	6.10	Yes	☑	Affirm Oct. 2020 RUC Recommendation	☑
93595	000	F	Sep 2022	50	Venography Services	D3	Jan 2023	14	ACC, SCAI	6.00	6.00		☑	Affirm Oct. 2020 RUC Recommendation	☑
93596	000	F	Sep 2022	50	Venography Services	D4	Jan 2023	14	ACC, SCAI	7.91	7.91		☑	Affirm Oct. 2020 RUC Recommendation	☑
93597	000	F	Sep 2022	50	Venography Services	D5	Jan 2023	14	ACC, SCAI	9.99	9.99		☑	Affirm Oct. 2020 RUC Recommendation	☑
93598	ZZZ	F	Sep 2022	50	Venography Services	D11	Jan 2023	14	ACC, SCAI	1.75	1.75		☑	Affirm Oct. 2020 RUC Recommendation	☑
96446	XXX	R	Sep 2022	39	Hyperthermic Intraperitoneal Chemotherapy (HIPEC)		Jan 2023	15	ACOG, ACS	0.37	0.37	Yes	☑		☐
99202	XXX	R	Feb 2023	6	E-M Revisions		Editorial			1.00	0.93	Yes	☑		☐
99203	XXX	R	Feb 2023	6	E-M Revisions		Editorial			1.60	1.60	Yes	☑		☐
99204	XXX	R	Feb 2023	6	E-M Revisions		Editorial			2.60	2.60	Yes	☑		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
99205	XXX	R	Feb 2023	6	E-M Revisions		Editorial			3.50	3.50	Yes	☑		☐
99212	XXX	R	Feb 2023	6	E-M Revisions		Editorial			0.75	0.70	Yes	☑		☐
99213	XXX	R	Feb 2023	6	E-M Revisions		Editorial			1.30	1.30	Yes	☑		☐
99214	XXX	R	Feb 2023	6	E-M Revisions		Editorial			2.00	1.92	Yes	☑		☐
99215	XXX	R	Feb 2023	6	E-M Revisions		Editorial			2.80	2.80	Yes	☑		☐
99306	XXX	R	Feb 2023	6	E-M Revisions		Editorial			3.50	3.50	Yes	☑		☐
99308	XXX	R	Feb 2023	6	E-M Revisions		Editorial			1.30	1.30	Yes	☑		☐
93584	ZZZ	N	Sep 2022	50	Venography Services	D6	Jan 2023	14	ACC, SCAI	1.60	1.20		☑		☑
93585	ZZZ	N	Sep 2022	50	Venography Services	D7	Jan 2023	14	ACC, SCAI	1.63	1.13		☑		☑
93586	ZZZ	N	Sep 2022	50	Venography Services	D8	Jan 2023	14	ACC, SCAI	2.05	1.43		☑		☑
93587	ZZZ	N	Sep 2022	50	Venography Services	D9	Jan 2023	14	ACC, SCAI	2.11	2.11		☑		☑
93588	ZZZ	N	Sep 2022	50	Venography Services	D10	Jan 2023	14	ACC, SCAI	2.13	2.13		☑		☑
97037	XXX	N	May 2022	37	Post Operative Low Level Laser Therapy	H1	Sep 2022	6					☑	No RUC Recommendation	☑
96547	ZZZ	N	Sep 2022	39	Hyperthermic Intraperitoneal Chemotherapy (HIPEC)	S1	Jan 2023	15	ACOG, ACS				☑	Contractor Price - Referred to CPT	☐
96548	ZZZ	N	Sep 2022	39	Hyperthermic Intraperitoneal Chemotherapy (HIPEC)	S2	Jan 2023	15	ACOG, ACS				☑	Contractor Price - Referred to CPT	☐
99459	ZZZ	N	Sep 2022	10	Pelvic Exam (PE Only)	R1	Jan 2023	13	AAFP, ACOG, ANA, AUA	0.00	0.00		☑	PE Only	☐
93150	XXX	N	Sep 2022	17	Phrenic Nerve Stimulation System	K9	Jan 2023	6	AASM, ACC, HRS	1.20	0.85		☑		☑
93151	XXX	N	Sep 2022	17	Phrenic Nerve Stimulation System	K10	Jan 2023	6	AASM, ACC, HRS	1.00	0.80		☑		☑
93152	XXX	N	Sep 2022	17	Phrenic Nerve Stimulation System	K11	Jan 2023	6	AASM, ACC, HRS	2.25	1.82		☑		☑
93153	XXX	N	Sep 2022	17	Phrenic Nerve Stimulation System	K12	Jan 2023	6	AASM, ACC, HRS	0.72	0.43		☑		☑

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
92972	ZZZ	N	Sep 2022	34	Percutaneous Coronary Interventions	Q14	Jan 2023	12	ACC, SCAI	3.90	2.97		☑	Referred to CPT	☑
90589	XXX	N	Feb 2023	18	Chikungunya Virus Vaccine, Live Attenuated		Vaccine						☐		☐
90623	XXX	N	Feb 2023	19	Pentavalent Meningococcal Vaccine		Vaccine						☐		☐
90679	XXX	N	Feb 2023	21	Respiratory Syncytial Virus Adjuvanted		Vaccine						☐		☐
0786T	YYY	N	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0788T	YYY	N	Feb 2022	11/43	Category III - Spinal Neurostimulator Services		Sep 2022	4					☐		☐
0777T	YYY	N	Feb 2022	11/43	Category III - Neurostimulator Services-Bladder Dysfunction		Apr 2022	7					☐		☐
0805T	YYY	N	Sep 2022	53/61	Category III - SVC-IVC Prosthetic Valve Insertion		Cat III						☐		☐
0806T	YYY	N	Sep 2022	53/61	Category III - SVC-IVC Prosthetic Valve Insertion		Cat III						☐		☐
0820T	YYY	N	Feb 2023	27	Category III - Psychedelic Drug Monitoring Services		Cat III						☐		☐
0821T	YYY	N	Feb 2023	27	Category III - Psychedelic Drug Monitoring Services		Cat III						☐		☐
0822T	YYY	N	Feb 2023	27	Category III - Psychedelic Drug Monitoring Services		Cat III						☐		☐
0791T	YYY	N	Sep 2022	38	Category III - Virtual Reality (VR) Faciliated Motor-Cognitive Training		Cat III						☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0794T	YYY	N	Sep 2022	51	Category III - AI-Assisted Oncologic Treatment		Cat III						☐		☐
0807T	YYY	N	Sep 2022	54	Category III - Pulmonary Tissue Ventilation Analysis		Cat III						☐		☐
0810T	YYY	N	Sep 2022	59	Category III - Subretinal Drug Delivery Injection		Cat III						☐		☐
0793T	YYY	N	Sep 2022	49	Category III - Transcatheter Pulmonary Artery Denervation		Cat III						☐		☐
0795T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0796T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0797T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0798T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0799T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0800T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0801T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0802T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0803T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0804T	YYY	N	Sep 2022	52	Category III - Dual Chamber Leadless Pacemaker		Cat III						☐		☐
0809T	YYY	N	Sep 2022	58	Category III - Hybrid Sacroiliac Joint Fusion		Cat III						☐		☐
0792T	YYY	N	Sep 2022	48	Category III - Silver Diamine Fluoride Application		Cat III						☐		☐
0808T	YYY	N	Sep 2022	54	Category III - Pulmonary Tissue Ventilation Analysis		Cat III						☐		☐
0814T	YYY	N	Feb 2023	30	Category III - Insertion of Calcium Based Implant-Femur		Cat III						☐		☐
0813T	YYY	N	Feb 2023	29	Category III - Adjustment of Gastric Balloon		Cat III						☐		☐
0815T	YYY	N	Feb 2023	31	Category III - Ultrasound Based REMS Axial Bone Density Study		Cat III						☐		☐
0823T	YYY	N	Feb 2023	35	Category III - Right Atrial Leadless Pacemaker		Cat III						☐		☐
0824T	YYY	N	Feb 2023	35	Category III - Right Atrial Leadless Pacemaker		Cat III						☐		☐
0825T	YYY	N	Feb 2023	35	Category III - Right Atrial Leadless Pacemaker		Cat III						☐		☐
0826T	YYY	N	Feb 2023	35	Category III - Right Atrial Leadless Pacemaker		Cat III						☐		☐
0816T	YYY	N	Feb 2023	36	Category III - Tibial Neurostimulator Services		Cat III						☐		☐
0817T	YYY	N	Feb 2023	36	Category III - Tibial Neurostimulator Services		Cat III						☐		☐

CPT Code	Global Period	Coding Change	CPT Date	CPT Tab	Issue	Tracking Number	RUC Date	RUC Tab	S.S.	Original Specialty Rec	RUC Rec	Same RVU as last year?	MFS?	Comments	New Tech/Service
0818T	YYY	N	Feb 2023	36	Category III - Tibial Neurostimulator Services		Cat III						☐		☐
0819T	YYY	N	Feb 2023	36	Category III - Tibial Neurostimulator Services		Cat III						☐		☐
0811T	YYY	N	Feb 2023	7	Category III - Remote Patient Multi-Day Comprehensive Uroflowmetry		Cat III						☐		☐
0812T	YYY	N	Feb 2023	7	Category III - Remote Patient Multi-Day Comprehensive Uroflowmetry		Cat III						☐		☐

RUC Recommendations for CMS Requests & Relativity Assessment Identified Code - January 2023

CPT Code	Long Descriptor	Issue	Tab	RUC Recommendation	CMS/Other Utilization over 20,000	CMS Request - Final Rule for 2023	Contractor Priced High Volume	High Volume Growth
G0277	Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval	Hyperbaric Oxygen Under Pressure (PE Only)	16	New PE Inputs and Refer to CPT				X
G0425	Telehealth consultation, emergency department or initial inpatient, typically 30 minutes communicating with the patient via telehealth	Telehealth Consultation - ED or Initial Inpatient	17	No recommendation. Review in April 2025 or April 2029 based on Telemedicine code development	X			
G0426	Telehealth consultation, emergency department or initial inpatient, typically 50 minutes communicating with the patient via telehealth	Telehealth Consultation - ED or Initial Inpatient	17	No recommendation. Review in April 2025 or April 2029 based on Telemedicine code development	X			
G0427	Telehealth consultation, emergency department or initial inpatient, typically 70 minutes or more communicating with the patient via telehealth	Telehealth Consultation - ED or Initial Inpatient	17	No recommendation. Review in April 2025 or April 2029 based on Telemedicine code development	X			
65778	Placement of amniotic membrane on the ocular surface; without sutures	Ocular Surface Amniotic Membrane Placement/Reconstruction	18	0.84				X
65779	Placement of amniotic membrane on the ocular surface; single layer, sutured	Ocular Surface Amniotic Membrane Placement/Reconstruction	18	1.75				X
65780	Ocular surface reconstruction; amniotic membrane transplantation, multiple layers	Ocular Surface Amniotic Membrane Placement/Reconstruction	18	7.03				X
76881	Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation	Neuromuscular Ultrasound (PE Only)	19	New PE Inputs		X		
76882	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation	Neuromuscular Ultrasound (PE Only)	19	New PE Inputs		X		
76883	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity	Neuromuscular Ultrasound (PE Only)	19	New PE Inputs		X		

RUC Recommendations for CMS Requests & Relativity Assessment Identified Code - January 2023

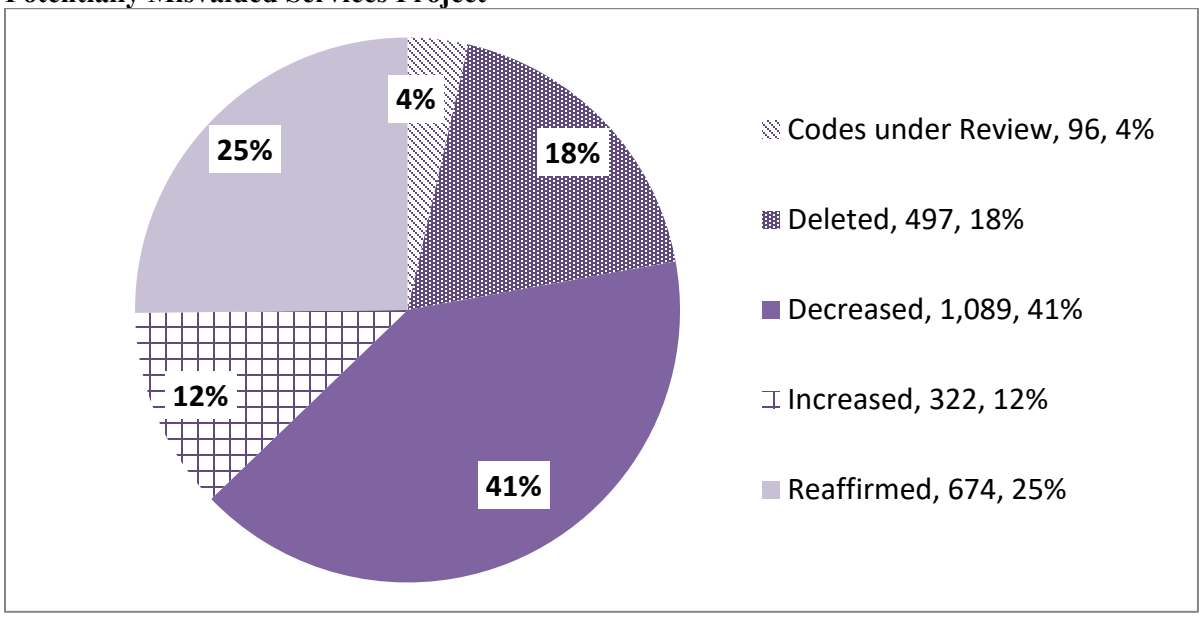
CPT Code	Long Descriptor	Issue	Tab	RUC Recommendation	CMS/Other Utilization over 20,000	CMS Request - Final Rule for 2023	Contractor Priced High Volume	High Volume Growth
93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional	Remote Interrogation Deviec Evaluation - Cardiovascular (PE Only)	20	0.52 and New PE Inputs			X	
93298	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional	Remote Interrogation Deviec Evaluation - Cardiovascular (PE Only)	20	0.52 and New PE Inputs			X	
G2066	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	Remote Interrogation Device Evaluation - Cardiovascular (PE Only)	20	New PE Inputs			X	

The RUC Relativity Assessment Workgroup Progress Report

In 2006, the AMA/Specialty Society RVS Update Committee (RUC) established the Five-Year Identification Workgroup (now referred to as the Relativity Assessment Workgroup) to identify potentially misvalued services using objective mechanisms for reevaluation prior to the next Five-Year Review. Since the inception of the Relativity Assessment Workgroup, the Workgroup and the Centers for Medicare and Medicaid Services (CMS) have identified over 2,600 services through over 20 different screening criteria for further review by the RUC. Additionally, the RUC charged the Workgroup with maintaining the "new technology" list of services that will be re-reviewed by the RUC as reporting and cost data become available.

To provide Medicare with reliable data on how physician work has changed over time, the RUC, with more than 300 experts in medicine and research, are examining 2,685 potentially misvalued services accounting for $45 billion in Medicare spending. The update committee has recommended reductions and deletions to 1,586 services, redistributing $5 billion annually. Below are the outcomes for the committee's review of 2,685 codes:

Potentially Misvalued Services Project



Source: American Medical Association

New Technology

As the RUC identifies new technology services that should be re-reviewed, a list of these services is maintained and forwarded to CMS. Currently, codes are identified as new technology based on recommendations from the appropriate specialty society and consensus among RUC members at the time of the RUC review for these services. RUC members consider several factors to evaluate potential new technology services, including recent FDA-approval, newness or novelty of the service, use of an existing service in a new or novel way, and migration of the service from a Category III to Category I CPT® code. The Relativity Assessment Workgroup maintains and develops all standards and procedures associated with the list, which currently contains 815 services. In September 2010, the re-review cycle began and since then the RUC has recommended 57 services to be re-examined. The remaining services are rarely

performed (i.e., less than 500 times per year in the Medicare population) and will not be further examined. The Workgroup will continue to review the remaining 318 services every April after three years of Medicare claims data is available for each service.

Methodology Improvements
The RUC implemented process improvements to methodology following its October 2013 meeting. The process improvements are designed to strengthen the RUC's primary mission of providing the final RVS update recommendations to the Centers for Medicare and Medicaid Services.

In the area of methodology, the RUC is continuously improving its processes to ensure that it is best utilizing reliable, extant data. At its most recent meeting, the RUC increased the minimum number of respondents required for each survey of commonly performed codes:

- For services performed 1 million or more times per year in the Medicare population, at least 75 physicians must complete the survey.
- For services performed from 100,000 to 999,999 times annually, at least 50 physicians will be required.

Further strengthening its methodology, the RUC also announced that specialty societies will move to a centralized online survey process, which will be coordinated by the AMA and will utilize external expertise to ensure survey and reporting improvements.

Site of Service Anomalies
The Workgroup initiated its effort by reviewing services with anomalous sites of service when compared to Medicare utilization data. Specifically, these services are performed less than 50% of the time in the inpatient setting yet include inpatient hospital Evaluation and Management services within their global period.

The RUC identified 194 services through the site of service anomaly screen. The RUC required the specialties to resurvey 129 services to capture the appropriate physician work involved. These services were reviewed by the RUC between April 2008 and February 2011. CMS implemented 124 of these recommendations in the 2009, 2010 and 2011 Medicare Physician Payment Schedules. The RUC submitted another five recommendations as well as re-reviewed and submitted 44 recommendations to previously reviewed site of service identified codes to CMS for the 2012 Medicare Physician Payment Schedule.

Of the remaining 65 services that were not re-surveyed, the RUC modified the discharge day management for 46 services, maintained three codes and removed two codes from the screen as the typical patient was not a Medicare beneficiary and would be an inpatient. The CPT® Editorial Panel deleted 14 codes. The RUC completed review of services under this initial screen.

During this review, the RUC uncovered several services that are reported in the outpatient setting, yet, according to several expert panels and survey data from physicians who perform the procedure, the service, typically requires a hospital stay of greater than 23 hours. The RUC maintains that physician work that is typically performed, such as visits on the date of service and discharge work the following day, should be included within the overall valuation. Subsequent observation day visits and discharge day management service are appropriate proxies for this work.

The RUC will reassess the data each year going forward to determine if any new site of service anomalies arise. In 2015, the RUC identified three services in which the Medicare data from 2011-2013 indicated it was performed less than 50% of the time in the inpatient setting yet included inpatient hospital Evaluation and Management services within the global period. These services were referred to CPT and recommendations were submitted to CMS for the 2018 Medicare Physician Payment Schedule.

In 2016, the RUC identified one site of service anomaly CPT code and submitted the recommendation to CMS for the 2019 Medicare Physician Payment Schedule. In 2017, the RUC identified one site of service anomaly CPT code which was revised at the CPT Editorial Panel and the RUC submitted recommendations for the 2020 Medicare Physician Payment Schedule.

In 2018, the RUC also performed a site-of-service anomaly screen based on the review of three years of data (2015, 2016 and 2017e) for services with utilization over 10,000 in which a service is typically performed in the inpatient hospital setting, yet only a half discharge day management (99238) is included. One service was identified via this screen and another identified for the outpatient site of service anomaly screen. The RUC submitted these recommendations for the 2021 and 2023 Medicare Physician Payment Schedules.

In 2019, the RUC lowered the threshold for site-of-service anomalies based on the review of three years of data (2016, 2017 and 2018e) for services with utilization over 5,000 in the outpatient setting more than 50% of the time but includes inpatient hospital Evaluation and Management services within the global period. The RUC identified nine services, expanding to 38 services to include the family of services. The CPT Editorial Panel deleted 13 services and the RUC submitted 24 recommendations for the 2021-2023 Medicare Physician Payment Schedule. The RUC will review one service to determine if educational coding guidance was effective.

In 2020, the RUC identified one code with Medicare data from 2017-2019e that was performed less than 50% of the time in the inpatient setting yet included inpatient hospital Evaluation and Management services within the global period and 2019e Medicare utilization over 10,000. The RUC submitted this recommendation for the 2021 Medicare Physician Payment Schedule.

High Volume Growth

The Workgroup assembled a list of all services with a total Medicare utilization of 1,000 or more that have increased by at least 100% from 2004 through 2006. The query initially resulted in the identification of 81 services, but was expanded by 16 services to include the family of services, totaling 97 services. Specialty societies submitted comments to the Workgroup in April 2008 to provide rationales for the growth in reporting. Following this review, the RUC required the specialties to survey 35 services to capture the appropriate work effort and/or direct practice expense inputs. These services were reviewed by the RUC between February 2009 and April 2010.

The RUC recommended removing 15 services from the screen as the volume growth did not impact the resources required to provide these services. The CPT® Editorial Panel deleted 34 codes. The RUC submitted 44 recommendations to CMS for services for the 2012-2017 Medicare Physician Payment Schedules and four recommendations for the CPT 2020 Medicare Physician Payment Schedule. The RUC completed review of services under this first iteration of the high growth screen.

In April 2013, the RUC assembled a list of all services with a total Medicare utilization of 10,000 or more that have increased by at least 100% from 2006 through 2011. The query resulted in the identification of 40 services and expanded to 62 services to include the appropriate family of services. The RUC recommended removing three services from the screen as the volume growth did not impact the resources required to provide these services. The RUC recommended review of one service after an additional utilization data is collected. The CPT Editorial Panel deleted ten codes and the RUC submitted recommendations for 48 services for the 2015-2019 and 2023 Medicare Physician Payment Schedules.

In October 2015, the RUC ran this screen again for services based on Medicare utilization of 10,000 or more that have increased by at least 100% from 2008 through 2013. The query resulted in the identification of 19 services and expanded to 31 services to include the appropriate family of services.

The RUC recommended removing one service from the screen as the volume growth did not impact the resources required to provide these services. The RUC will review one service after additional utilization data is collected. The CPT Editorial Panel deleted 12 codes and the RUC submitted recommendations for 17 services for the 2017-2020 Medicare Physician Payment Schedules.

In October 2016, the RUC ran this screen for its fourth iteration and the query resulted in the identification of 12 services, which was expanded to 53 services. The RUC recommended removing two services from the screen as the volume growth did not impact the resources required to provide these services. The CPT Editorial Panel deleted five services. The RUC submitted recommendations for 46 services for the 2019-2022 Medicare Physician Payment Schedules. The RUC completed review of services under this fourth iteration of the high volume growth screen.

In October 2018, the RUC ran this query for its fifth iteration for services with 2017e Medicare utilization of 10,000 or more that has increased by at least 100% from 2012 through 2017. Eleven (11) codes were identified. The RUC recommended removing two services from the screen as the volume growth was appropriate. The CPT Editorial Panel deleted one code. The RUC referred one code to the CPT Editorial Panel for revision and submitted recommendations for seven services for the 2020-2021 Medicare Physician Payment Schedule.

In October 2019, the RUC completed its sixth iteration of this screen for services with 2018e Medicare utilization of over 10,000 that have increased by at least 100% from 2013 through 2018. The RUC identified 13 services. The RUC removed three services from the screen as the volume growth did not impact the resources required to provide these services. The RUC will review one code after additional utilization data is available. The RUC submitted recommendations for seven services for the 2021 Medicare Physician Payment Schedule and for three services for the 2023 Medicare Physician Payment Schedule.

In October 2020, the RUC completed its seventh iteration of this screen for services with 2019e Medicare utilization over 10,000 that have increased by at least 100% from 2014 through 2019. The RUC identified six services. The RUC removed four services as the growth was appropriate and submitted two recommendations for the 2023 and 2024 Medicare Physician Payment Schedules. The RUC completed review of services under this seventh iteration of the high volume growth screen.

In April 2022, the RUC completed its eighth iteration of this screen for services with 2020 Medicare utilization over 10,000 that have increased by at least 100% from 2015-2020. The RUC identified 10 services. The Relativity Assessment Workgroup removed two service as the growth was appropriate and will review three services after additional data is available. The RUC will review five services in for the 2024 and 2025 Physician Payment Schedules.

CMS Fastest Growing

In 2008, CMS developed the Fastest Growing Screen to identify all services with growth of at least 10% per year over the course of three years from 2005-2007. Through this screen, CMS identified 114 fastest growing services and the RUC added 69 services to include the family of services, totaling 183. The RUC required the specialties to survey 72 services to capture the appropriate work effort and/or direct practice expense inputs. These services were reviewed by the RUC from February 2008 through April 2010 and submitted to CMS for the Medicare Physician Payment Schedule.

The RUC recommended removing 27 services from the screen as the volume growth did not impact the resources required to provide the service. The CPT® Editorial Panel deleted 43 codes. The RUC submitted 41 recommendations to CMS for the 2012-2019 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

High IWPUT
The Workgroup assembled a list of all services with a total Medicare utilization of 1,000 or more that have an intra-service work per unit of time (IWPUT) calculation greater than 0.14, indicating an outlier intensity. The query resulted in identification of 32 services. Specialty societies submitted comments to the Workgroup in April 2008 for these services. As a result of this screen, the RUC has reviewed and submitted recommendations to CMS for 28 codes, removing four services from the screen as the IWPUT was considered appropriate. The RUC completed review of services under this screen.

Services Surveyed by One Specialty – Now Performed by a Different Specialty
In October 2009, services that were originally surveyed by one specialty, but now performed predominantly by other specialties were identified and reviewed. The RUC identified 21 services by this screen, adding 19 services to address various families of codes. The majority of these services required clarification within CPT®. The CPT® Editorial Panel deleted 18 codes. The RUC submitted 22 recommendations for physician work and practice expense to CMS for the 2011-2014 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

In April 2013, the RUC queried the top two dominant specialties performing services based on Medicare utilization more than 1,000 and compared it to who originally surveyed the service. Two services were identified and the RUC recommended that one be removed from the screen since the specialty societies currently performing this service indicated that the service is appropriate and recommended that the other code be referred to CPT® to be revised. The RUC completed review of services under this screen.

In October 2019, the RUC queried the top two dominant specialties performing services based on Medicare utilization more than 1,000 and compared it to who originally surveyed the service. Two services were identified, one was deleted by CPT Editorial Panel and other was referred to develop a CPT Assistant article for education. The RUC completed review of services under this screen.

In April 2022, the RUC queried the top two dominant specialties performing services based on 2020 Medicare utilization more than 1,000 and compared it to who originally surveyed the service. Six services were identified. The RUC will review two codes after additional utilization data is available. The RUC will submit recommendations for four services for the 2025 Medicare Physician Payment Schedule.

Harvard Valued
Utilization over 1 Million
CMS requested that the RUC pay specific attention to Harvard valued codes that have a high utilization. The RUC identified nine Harvard valued services with high utilization (performed over 1 million times per year). The RUC also incorporated an additional 12 Harvard valued codes within the initial family of services identified. The CPT® Editorial Panel deleted one code. The RUC submitted 20 relative value work recommendations to CMS for the 2011 and 2012 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

Utilization over 100,000
The RUC continued to review Harvard valued codes with significant utilization. The Relativity Assessment Workgroup expanded the review of Harvard codes to those with utilization over 100,000 which totaled 38 services. The RUC expanded this screen by 101 codes to include the family of services, totaling 139 services. The CPT® Editorial Panel deleted 27 codes. The RUC submitted 112 recommendations to CMS for the 2011-2014 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

Utilization over 30,000
In April 2011, the RUC continued to identify Harvard valued codes with utilization over 30,000, based on 2009 Medicare claims data. The RUC determined that the specialty societies should survey the remaining 36 Harvard codes with utilization over 30,000 for September 2011. The RUC expanded the screen to include the family of services, totaling 65 services. The CPT® Editorial Panel deleted 12 codes. The RUC submitted recommendations for 53 services for the 2013-2014 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

In October 2015, the RUC reran this screen on Harvard valued services with 2014e Medicare utilization over 30,000. Seven services were identified and expanded to nine codes to include the family of services. The CPT Editorial Panel deleted two codes. The RUC submitted recommendations for 7 services for the 2018-2019 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

In October 2018, the RUC reran this screen on Harvard valued services with 2017e Medicare utilization over 30,000. One service was identified. The RUC submitted this recommendation for the 2021 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

In October 2019, the RUC reran this screen on Harvard valued services with 2018e Medicare utilization over 30,000. Three services were identified, which was expanded to five to include the family of services. The RUC submitted recommendations for these five services for the 2022-2023 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

In October 2020, the RUC ran this service on Harvard valued services with 2019e Medicare utilization over 30,000 and one service was identified. The RUC submitted a recommendation for this service for the 2023 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

Medicare Allowed Charges >$10 million
In June 2012, CMS identified 16 services that were Harvard valued with annual allowed charges (2011 data) > $10 million. The RUC expanded this screen to 33 services to include the proper family of services. The RUC removed two services from review as the allowed charges are approximately $1 million and did not meet the screen criteria. The CPT® Editorial Panel deleted one service. The RUC submitted recommendations for 30 services for the 2013-2017 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

CMS/Other
Utilization over 500,000
In April 2011, the RUC identified 410 codes with a source of "CMS/Other." CMS/Other codes are services which were not reviewed by the Harvard studies or the RUC and were either gap filled, most often via crosswalk by CMS or were part of a radiology fee schedule. "CMS/Other" source codes would not have been flagged in the Harvard only screens, therefore the RUC recommended that a list of all CMS/Other codes be developed and reviewed. The RUC established the threshold for CMS/Other source codes with Medicare utilization of 500,000 or more, which resulted in 19 codes. The RUC expanded this screen to 21 services to include the proper family of services. The RUC removed one service from the screen. The CPT® Editorial Panel deleted three services. The RUC submitted recommendations for 16 services for the 2013-2015 Medicare Physician Payment Schedules and one service for the 2023 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

Utilization over 250,000
In April 2013, the RUC lowered the threshold to the CMS/Other source codes with Medicare utilization of 250,000 or more, which resulted in 26 services and was expanded to 52 services to include the family of services. The CPT Editorial Panel deleted 11 codes identified under this screen. The RUC removed nine services and submitted 32 recommendations to CMS for the 2015-2019 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

Utilization over 100,000
In October 2016, the RUC lowered the threshold to the CMS/Other source codes with Medicare utilization of 100,000 or more, which resulted in 27 services and was expanded to 41 services to include the family of services. The RUC referred two codes to CPT for deletion and submitted recommendations for 39 services for the 2019 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

Utilization over 30,000
In October 2017, the RUC lowered the threshold to the CMS/Other source codes with Medicare utilization of 30,000 or more, which resulted in 34 services and was expanded to 55 services to include the family of services. The CPT Editorial Panel deleted 10 codes. The submitted recommendations for 45 services for the 2019-2020 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

In October 2018, the RUC reran this screen for CMS/Other source codes with 2017e Medicare utilization over 30,000, which resulted in seven services and expanded to 15 services. The CPT Editorial Panel deleted one code. The RUC submitted recommendations for 14 services for the 2020-2021 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

Utilization over 20,000
In October 2019, the RUC lowered the threshold for this screen of CMS/Other source codes with 2018e Medicare utilization over 20,000, which resulted in nine services and expanded to 16 to include the family of services. The RUC removed one code from the screen. The CPT Editorial Panel deleted five codes. The RUC submitted recommendations for 10 services for the 2021-2024 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

In October 2020, the RUC ran a second iteration of this screen of CMS/Other source codes with 2019e Medicare utilization over 20,000, which resulted in 10 codes. Three services were removed from this screen, one was referred to the CPT Editorial Panel for revision, one was requested for CMS to delete and five will be reviewed after additional utilization data is available.

In April 2022, the RUC ran a third iteration of this screen of CMS/Other source codes with 2020 Medicare utilization over 20,000, which resulted in six codes. This was expanded to nine services to include services that are part of a family. The RUC noted one service was deleted by the CPT Editorial Panel. The RUC recommended that one service be maintained, three services be reviewed after additional data are available and referred two services to the CPT Editorial Panel. The RUC submitted recommendations for two services for the 2024 Medicare Physician Payment Schedule.

Bundled CPT® Services

Reported 95% or More Together
The Relativity Assessment Workgroup solicited data from CMS regarding services inherently performed by the same physician on the same date of service (95% of the time) in an attempt to identify pairings of services that should be bundled together. The CPT® Editorial Panel deleted 31 individual component

codes and replaced them with 53 new codes that describe bundles of services. The RUC then surveyed and reviewed work and practice costs associated with these services to account for any efficiencies achieved through the bundling. The RUC completed review of all services under this screen.

Reported 75% or More Together
In February 2010, the Workgroup continued review of services provided on the same day by the same provider, this time lowering the threshold to 75% or more together. The Relativity Assessment Workgroup again analyzed the Medicare claims data and found 151 code pairs which met the threshold. The Workgroup then collected these code pairs into similar "groups" to ensure that the entire family of services would be coordinated under one code bundling proposal. The grouping effort resulted in 20 code groups, totaling 80 codes, and were sent to specialty societies to solicit action plans for consideration at the April 2010 RUC meeting. Resulting from the Relativity Assessment Workgroup review, 81 additional codes were added for review as part of the family of services to ensure duplication of work and practice expense was mitigated throughout the entire set of services. Of the 161 total codes under review, the CPT® Editorial Panel deleted 35 individual component codes and replaced the component coding with 126 new and/or revised codes that described the bundles of services. The RUC completed review of all services under this screen.

In August 2011, the Joint CPT®/RUC Workgroup on Codes Reported Together Frequently reconvened to perform its second cycle of analysis of code pairs reported together with 75% or greater frequency. The Workgroup reviewed 30 code pair groups and recommended code bundling for 64 individual codes. In October 2012, the CPT® Editorial Panel started the review of code bundling solutions. Of the 153 total codes under review, the CPT® Editorial Panel deleted 50 services. The RUC has submitted 103 code recommendations for the 2014-2019 Medicare Physician Payment Schedules. The RUC completed review of all services under this screen.

In January and April 2015, the Joint CPT/RUC Workgroup on Codes Reported Together Frequently reconvened to perform its third cycle analysis of code pairs reported together with 75% or greater frequency. The Workgroup reviewed 8 code pair groups and recommended code bundling for 18 individual codes. In October 2015, the CPT Editorial Panel started review of the code bundling solutions. Of the 75 total codes under review, the CPT Editorial Panel deleted 26 services. The RUC reviewed two services after additional data was obtained and determined that they be maintained. The RUC submitted 47 code recommendations for the 2017-2019 Medicare Physician Payment Schedules. The RUC completed review of all services under this screen.

In October 2017 the Relativity Assessment Workgroup performed the fourth cycle analysis of code pairs reported together with 75% or greater frequency. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in Medicare claims data and/or contained at least one ZZZ global service were removed. Based on these criteria four groups or 8 codes were identified. The Relativity Assessment Workgroup determined two groups totaling four codes require code bundling solutions. Of the 12 total codes under review, the CPT Editorial Panel deleted one service. The RUC submitted 11 code recommendations for the 2020 and 2021 Medicare Physician Payment Schedules. The RUC completed review of all services under this screen.

In April 2022, the Relativity Assessment Workgroup performed the fifth cycle analysis of code pairs reported together with 75% or greater frequency. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. Based on these criteria 19 code pairs were identified, which was expanded to 23 services to include families of services. The RUC removed five services from this screen, as these services are

distinct separate services that do not warrant bundling. The RUC referred six services to CPT Assistant for correct coding guidance, and referred 11 services to the CPT Editorial Panel for code bundling solutions. The remaining service will be reviewed by the Relativity Assessment Workgroup when additional utilization data is available.

Low Value/Billed in Multiple Units
CMS has requested that services with low work RVUs that are commonly billed with multiple units in a single encounter be reviewed. CMS identified services that are reported in multiples of five or more per day, with work RVUs of less than or equal to 0.50 RVUs.

In October 2010, the Workgroup reviewed 12 CMS identified services and determined that six of the codes were improperly identified as the services were either not reported in multiple units or were reported in a few units and that was considered in the original valuation. The RUC submitted recommendations for the remaining six services for the 2012 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

Low Value/High Volume Codes
CMS has requested that services with low work RVUs and high utilization be reviewed. CMS has requested that the RUC review 24 services that have low work RVUs (less than or equal to 0.25) and high utilization. The RUC questioned the criteria CMS used to identify these services as it appeared some codes were missing from the screen criteria indicated. The RUC identified codes with a work RVU ranging from 0.01 - 0.50 and Medicare utilization greater than one million. In February 2011, the RUC reviewed the codes identified by these criteria and added 5 codes, totaling 29. The RUC submitted 24 recommendations to CMS for the 2012 Medicare Physician Payment Schedule and five recommendations to CMS for the 2013 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

Multi-Specialty Points of Comparison List
CMS requested that services on the Multi-Specialty Points of Comparison (MPC) list should be reviewed. CMS prioritized the review of the MPC list to 33 codes, ranking the codes by allowed service units and charges based on CY 2009 claims data as well as those services reviewed by the RUC more than six years ago. The RUC expanded the list to 182 services to include additional codes as part of a family (over 100 of these codes are part of the review of GI endoscopy codes). The CPT® Editorial Panel deleted 25 codes. The RUC submitted recommendations for 157 codes for the 2012-2015 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

CMS High Expenditure Procedural Codes
In the Proposed Rule for 2012, CMS requested that the RUC review a list of 70 high Medicare Physician Payment Schedule expenditure procedural codes representing services furnished by an array of specialties. CMS selected these codes since they have not been reviewed for at least 6 years, and in many cases the last review occurred more than 10 years ago.

The RUC reviewed the 70 services identified and expanded the list to 145 services to include additional codes as part of the family. The CPT® Editorial Panel deleted 20 codes. The RUC submitted 125 recommendations to CMS for the 2013-2019 Medicare Physician Payment Schedules. The RUC completed review of services under the first iteration of this screen.

In the Final Rule for 2016, CMS requested that the RUC review a list of 103 high Medicare Physician Payment Schedule high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010.

The RUC expanded the list of services to 238 services to include additional codes as part of the family. The CPT Editorial Panel deleted 30 codes. The RUC submitted 208 recommendations to CMS for the 2017-2019 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

Services with Stand-Alone PE Procedure Time
In June 2012, CMS proposed adjustments to services with stand-alone procedure time assumptions used in developing non-facility PE RVUs. These assumptions are not based on physician time assumptions. CMS prioritized CPT® codes that have annual Medicare allowed charges of $100,000 or more, include direct equipment inputs that amount to $100 or more, and have PE procedure times greater than five minutes for review. The RUC reviewed 27 services identified through this screen and expanded to 29 services to include additional codes as part of the family. The CPT® Editorial Panel deleted 11 codes. The RUC submitted 18 recommendations for the 2014-2015 Medicare Physician Payment Schedules. The RUC completed review of services under this screen.

Pre-Time Analysis
In January 2014, the RUC reviewed codes that were RUC reviewed prior to April 2008, with pre-time greater than pre-time package 4 *Facility - Difficult Patient/Difficult Procedure* (63 minutes) for services with 2012 Medicare Utilization over 10,000. The screen identified 19 services with more pre-service time than the longest standardized pre-service package and was expanded to 24 to include additional codes as part of the family. The RUC reviewed these services and referred three services to the CPT® Editorial Panel for revision. The CPT Editorial Panel deleted one service and will review three services for CPT 2018. The RUC reviewed 18 services and noted that they were all originally valued by magnitude estimation and therefore readjustments in pre-service time categories did not alter the work values. Additionally, crosswalk references for each service were presented validating the pre-time adjustments. The RUC noted that this screen was useful, however did not reveal any large outliers and therefore the utilization threshold does not need to be lowered to identify more services. The RUC submitted 20 recommendations for the 2016 Medicare Physician Payment Schedule. The RUC completed review of services under this screen.

Post-Operative Visits
010-Day Global Codes
In January 2014, the RUC reviewed all 477, 010-day global codes to determine any outliers. Many 010-day global period services only include one post-operative office visit. The Relativity Assessment Workgroup pared down the list to 19 services with >1.5 office visits and 2012 Medicare utilization > 1,000. The RUC reviewed the 19 services, which was expanded to 21 services for additional codes in the family of services, identified via this screen. The RUC referred two codes to the CPT Editorial Panel for revision. The RUC submitted recommendations for 21 services for the 2015-2017 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

In October 2019, the identified five 010-day global period services more than one office visit based on 2018e Medicare utilization over 1,000, which was expanded to eight services to include the family of services. The RUC submitted eight recommendations for the 2021-2022 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

090-Day Global Codes
In January 2014, the RUC reviewed all 3,788, 090-day global codes to determine any outliers. Based on 2012 Medicare utilization data, 10 services were identified, that were reported at least 1,000 times per year and included more than six office visits. The RUC expanded the services identified in this screen to 38 to include additional codes as part of the family. The CPT® Editorial Panel deleted 8 services. The RUC submitted recommendations for 30 services for the 2015-2017 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

In October 2019, the identified three 090-day global period services more than six office visits based on 2018e Medicare utilization over 1,000. The RUC submitted recommendations for these three services for the 2021 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

High Level E/M in Global Period
In October 2015, the RUC reviewed all services with Medicare utilization greater than 10,000 that have a level 4 (99214) or level 5 (99215) office visit included in the global period. There were no codes with volume greater than 10,000 that had a level 5 office visits included. Seven services were identified that have a level 4 office visit included. The RUC expanded the list of services to 11 services to include additional codes as part of the family. The RUC confirmed that the level 4 post-operative visits were appropriate and well-defined for four services. The CPT Editorial Panel deleted one code. The RUC submitted recommendations for 10 services for the 2017-2018 Medicare Physician Payment Schedules. The RUC noted that this screen will be complete after these services are reviewed because the RUC has more rigorously questioned level 4 office visits in the global period in recent years and will continue this process going forward. The RUC has completed review of the services under this screen.

000-Day Global Services Reported with an E/M with Modifier 25
In the NPRM for 2017 CMS identified 83 services with a 000-day global period billed with an E/M 50 percent of the time or more, on the same day of service, same patient, by the same physician, which have not been reviewed in the last five years with Medicare utilization greater than 20,000.

The RUC commented that it appreciated CMS' identification of an objective screen and reasonable query. However, based on further analysis of the codes identified, it appears only 19 services met the criteria for this screen and have not been reviewed to specifically address an E/M performed on the same date. There were 38 codes that did not meet the screen criteria; they were either reviewed in the last 5 years and/or are not typically reported with an E/M. For 26 codes, the summary of recommendation (SOR), RUC rationale or practice expense inputs submitted specifically states that an E/M is typically reported with these services and the RUC accounted for this in its valuation.

The RUC requested that CMS remove 64 services that did not meet the screen criteria or which have already been valued as typically being reported with an E/M service. The RUC requested that CMS condense and finalize the list of services for this screen to the 19 remaining services.

In the Final Rule for 2017, CMS did finalize the list of 000-day global services reported with an E/M to the 19 services that truly met the criteria. The RUC recommended that two additional codes be removed from this screen as the specialty societies discovered that in fact an E/M as typical was considered in the survey process. Additional codes were added as part of the family of codes identified, totaling 22. The CPT Editorial Panel deleted one code and the RUC submitted 21 recommendations for the 2019 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

Negative IWPUT
In October 2017, the RUC identified 22 services with a negative IWPUT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. The RUC expanded the services identified in this screen to 56 services to include additional codes as part of the family. The CPT Editorial Panel deleted 15 services. The RUC submitted 41 recommendations for the 2019-2020 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

Contractor Priced with High Volume
In April 2018, the RUC identified five contractor-priced Category I CPT codes that have 2017 estimated Medicare utilization over 10,000. The CPT Editorial Panel deleted one code. The RUC submitted four recommendations for the 2020-2021 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

In April 2022, the RUC identified five contractor-priced Category I CPT codes that have 2020 Medicare utilization over 10,000. The RUC expanded the services identified to six services to include additional codes as part of the family. The RUC removed one service, maintained one service, requested that CMS delete one service and will review two services after additional data is available. The RUC submitted one recommendation for the 2024 Medicare Physician Payment Schedule.

CPT Modifier -51 Exempt List
In April 2018, the RUC identified seven services on the CPT Modifier -51 *Multiple Procedures* exempt list with 2017 estimated Medicare utilization over 10,000. The RUC examined the data provided on the percentage reported alone, physician pre and intra time and determined that this is an appropriate screen. The RUC recommended that four services be removed from the Modifier -51 exempt list and that three services remain on the list as they are separate and distinct services. The RUC notes that the CPT Editorial Panel will be reexamining this list in February 2019. The RUC has completed review of the services under this screen.

High Volume Category III Codes
In October 2019, the RUC identified seven Category III codes with 2018 estimated Medicare utilization over 1,000. The RUC expanded the services identified in this screen to 10 to include additional codes as part of a family. The CPT Editorial Panel deleted two codes. The RUC recommended to maintain 3 codes as data collection was underway for obtaining Category I codes. The RUC submitted recommendations for three codes for the 2022 Medicare Physician Payment Schedule and will review two services in three years after additional utilization data is available.

In April 2022, the RUC identified five Category III codes with 2020 Medicare utilization over 1,000. The RUC referred one code to the CPT Editorial Panel for creation of a Category I code and will review the remaining four services after additional data is available.

PE Units Screen
In April 2020, the RUC identified seven services with more than one median unit of service reported and a direct practice expense supply item unit cost greater than $100 based on 2018 Medicare utilization. In October 2020, the Practice Expense Subcommittee reviewed the supplies and kits identified to determine if any duplication occurs when reported in multiple units. The RUC determined that three of the seven codes identified had duplicative supplies. The RUC submitted new direct practice expense inputs for the 2022 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

Public Comment Requests
In 2011, CMS announced that due to the ongoing identification of potentially misvalued services by CMS and the RUC, the Agency will no longer conduct a separate Five-Year Review. CMS will call for public comments on an annual basis as part of the comment process on the Final Rule each year.

Final Rule for 2013
In the Final Rule for the 2013 Medicare Physician Payment Schedule, the public and CMS identified 35 potentially misvalued services, which was expanded to 39 services to include the entire code family. The RUC reviewed these services and recommended that eight services be removed from review as two G-codes lacked specialty society interest and six services are not potentially misvalued since there is no reliable way to determine an incremental difference from open thoracotomy to thorascopic procedures. The CPT Editorial Panel deleted two services. The RUC submitted recommendations for 29 services for the 2014-2019 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

Final Rule for 2014
CMS did not receive any publicly nominated potentially misvalued codes for inclusion in the Proposed Rule for 2014. To broaden participation in the process of identifying potentially misvalued codes, CMS sought the input of Medicare contractor medical directors (CMDs). The CMDs have identified over a dozen services which CMS is proposing as potentially misvalued. The RUC reviewed these services and appropriate families, totaling 90 services. The CPT® Editorial Panel deleted 11 services. The RUC submitted recommendations to CMS for 79 services for the 2015-2018 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

Final Rule for 2015
In the Final Rule for 2015 the public and CMS nominated 26 services as potentially misvalued, which the RUC expanded to 53 services to include additional codes as part of this family. The CPT Editorial Panel deleted 16 services. The RUC submitted 37 recommendations for the 2016-2019 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

Final Rule for 2016
In the Final Rule for 2016 the public and CMS nominated 25 services as potentially misvalued, which the RUC expanded to 53 services to include an additional code as part of the family. The CPT Editorial Panel deleted eight services. The RUC submitted 45 recommendations for the 2017-2019 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

Final Rule for 2017
In the Final Rule for 2017 there were no public nominations for services in which the RUC was not already addressing.

Final Rule for 2018
In the Final Rule for 2018 the public and CMS nominated six services as potentially misvalued, which the RUC expanded to nine services. The RUC submitted nine recommendations for the 2019-2020 Medicare Physician Payment Schedules. The RUC has completed review of the services under this screen.

Final Rule for 2019
In the Final Rule for 2019 the public and CMS nominated nine services as potentially misvalued, which was expanded to 12 services as part of the family. The CPT Editorial Panel deleted two services. The RUC submitted 10 recommendations for the 2021 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

Final Rule for 2020
In the Final Rule for 2020, the public and CMS nominated 10 services as potentially misvalued, which was expanded to 14 services as part of the family. The RUC submitted recommendations for 13 services for the 2021 and 2023 Medicare Physician Payment Schedules. The RUC could not submit a recommendation for one code as it was determined it was not adequately described to evaluate. The RUC has completed review of the services under this screen.

Final Rule for 2021
In the Final Rule for 2021, CMS received public nomination of two codes as potentially misvalued, which was expanded to 10 services to include the family. The RUC submitted 10 recommendations for the 2022-2023 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

Final Rule for 2022
In the Final Rule for 2022, CMS received public nomination on one code as potentially misvalued. The RUC reviewed and submitted a recommendation for the 2023 Medicare Physician Payment Schedule. The RUC has completed review of the services under this screen.

Work Neutrality
For every CPT code recommendation and family, the RUC submits utilization assumptions based on the specialty societies estimate for the next year of Medicare utilization. Starting with CPT 2009, the Relativity Assessment Workgroup began assessing all services for work neutrality. In 2012, the RUC confirmed that the RUC and specialty societies work neutrality calculation expectation is a zero change target. However, if actual work RVUs turn out to be 10% or greater than the former work RVUs for the family, the family should undergo review by the Relativity Assessment Workgroup. Three code families have been identified for re-examination, one from CPT 2009, CPT 2011 and CPT 2012. Two families were determined to have correct utilization assumptions after re-evaluating the coding structure and initial assumptions. The CPT 2012 family went through revisions at the CPT Editorial Panel as well as extensive educational efforts were engaged. However, after continued examination this family was resurveyed and the RUC submitted recommendations for four services for the 2022 Medicare Physician Payment Schedule.

Three additional code families were identified for re-examination from CPT 2018. One family, continuous glucose monitoring was reviewed and determined the utilization is appropriate and the service valuation was appropriately decreased and no further changes are necessary. The remaining two code families will be re-examined after additional utilization data are available.

Other Issues
In addition to the above screening criteria, the Relativity Assessment Workgroup performed an exhaustive search of the RUC database for services indicated by the RUC to be re-reviewed at a later date. Three codes were found that had not yet been re-reviewed. The RUC recommended a work RVU decrease for two codes and to maintain the work RVU for another code. CMS also identified 72 services that required further practice expense review. The RUC submitted practice expense recommendations on 67 services and the CPT® Editorial Panel deleted 5 services. The RUC also reviewed special requests for 19 audiology and speech-language pathology services. The RUC submitted recommendations for 10 services for the 2010 Medicare Physician Payment Schedule and the remaining nine services for the 2011 Medicare Physician Payment Schedule.

CMS Requests and RUC Relativity Assessment Workgroup Code Status

Total Number of Codes Identified*	**2,685**
Codes Completed	**2,589**
Work and PE Maintained	674
Work Increased	322
Work Decreased	907
Direct Practice Expense Revised (beyond work changes)	182
Deleted from CPT®	497
Contractor Priced	7
Codes Under Review	**96**
Referred to CPT® Editorial Panel or CPT Assistant	42
RUC to Review for *CPT 2025*	7
RUC to review future review after additional data obtained	47

**The total number of codes identified will not equal the number of codes from each screen as some codes have been identified in more than one screen.*

The RUC's efforts for 2009-2022 have resulted in more than $5 billion in annual redistribution within the Medicare Physician Payment Schedule.

Status Report: CMS Requests and Relativity Assessment Issues

0042T **Cerebral perfusion analysis using computed tomography with contrast administration, including post-processing of parametric maps with determination of cerebral blood flow, cerebral blood volume, and mean transit time**

Global: XXX **Issue:** RAW **Screen:** High Volume Category III Codes 2022 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2022 **2021 Medicare Utilization:** 32,146

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Refer to CPT **Referred to CPT** May 2023 **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

00534 **Anesthesia for transvenous insertion or replacement of pacing cardioverter-defibrillator**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** ASA **First Identified:** October 2018 **2021 Medicare Utilization:** 29,379

2023 Work RVU: 7.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

00537 **Anesthesia for cardiac electrophysiologic procedures including radiofrequency ablation**

Global: XXX **Issue:** Anesthesia for Cardiac Electrophysiologic Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 13 **Specialty Developing Recommendation:** ASA **First Identified:** October 2016 **2021 Medicare Utilization:** 97,493

2023 Work RVU: 10.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 12 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

0054T **Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image-guidance based on fluoroscopic images (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** RAW **Screen:** High Volume Category III Codes 2022 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOS, NASS **First Identified:** April 2022 **2021 Medicare Utilization:** 3,790

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

0055T **Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image-guidance based on ct/mri images (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** RAW **Screen:** High Volume Category III Codes 2022 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOS, NASS **First Identified:** April 2022 **2021 Medicare Utilization:** 8,113

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

00560 **Anesthesia for procedures on heart, pericardial sac, and great vessels of chest; without pump oxygenator**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** ASA **First Identified:** October 2018 **2021 Medicare Utilization:** 60,260

2023 Work RVU: 15.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

00731 **Anesthesia for upper gastrointestinal endoscopic procedures, endoscope introduced proximal to duodenum; not otherwise specified**

Global: XXX **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA

First Identified: September 2016 **2021 Medicare Utilization:** 1,082,677

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 5 base units

Referred to CPT September 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

00732 **Anesthesia for upper gastrointestinal endoscopic procedures, endoscope introduced proximal to duodenum; endoscopic retrograde cholangiopancreatography (ercp)**

Global: XXX **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA

First Identified: September 2016 **2021 Medicare Utilization:** 95,856

2023 Work RVU: 6.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 6 base units

Referred to CPT September 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

00740 **Anesthesia for upper gastrointestinal endoscopic procedures, endoscope introduced proximal to duodenum**

Global: **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA

First Identified: July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT September 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

00810 **Anesthesia for lower intestinal endoscopic procedures, endoscope introduced distal to duodenum**

Global: **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

00811 **Anesthesia for lower intestinal endoscopic procedures, endoscope introduced distal to duodenum; not otherwise specified**

Global: XXX **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** September 2016 **2021 Medicare Utilization:** 1,059,171

2023 Work RVU: 4.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4 base units **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

00812 **Anesthesia for lower intestinal endoscopic procedures, endoscope introduced distal to duodenum; screening colonoscopy**

Global: XXX **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** September 2016 **2021 Medicare Utilization:** 500,444

2023 Work RVU: 3.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 3 base units **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

00813 **Anesthesia for combined upper and lower gastrointestinal endoscopic procedures, endoscope introduced both proximal to and distal to the duodenum**

Global: XXX **Issue:** Anesthesia for Intestinal Endoscopic Procedures **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** September 2016 **2021 Medicare Utilization:** 507,450

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 5 base units **Referred to CPT** September 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

00918 **Anesthesia for transurethral procedures (including urethrocystoscopy); with fragmentation, manipulation and/or removal of ureteral calculus**

Global: XXX **Issue:** Anesthesia for transurethral procedures **Screen:** High Volume Growth7 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: October 2020

2021 Medicare Utilization: 100,511

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

01916 **Anesthesia for diagnostic arteriography/venography**

Global: XXX **Issue:** **Screen:** High Volume Growth6 **Complete?** No

Most Recent RUC Meeting: October 2020 **Tab:** 23 **Specialty Developing Recommendation:**

First Identified: October 2019

2021 Medicare Utilization: 44,007

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

0191T **Insertion of anterior segment aqueous drainage device, without extraocular reservoir, internal approach, into the trabecular meshwork; initial insertion**

Global: XXX **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: October 2019

2021 Medicare Utilization: 57,554

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

01930 **Anesthesia for therapeutic interventional radiological procedures involving the venous/lymphatic system (not to include access to the central circulation); not otherwise specified**

Global: XXX **Issue:** Anesthesia for Interventional Radiology **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ASA

First Identified: February 2008

2021 Medicare Utilization: 14,318

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

01935 **Anesthesia for percutaneous image guided procedures on the spine and spinal cord; diagnostic**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** January 2021 **2021 Medicare Utilization:** 21,981

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2020 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

01936 **Anesthesia for percutaneous image guided procedures on the spine and spinal cord; therapeutic**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** October 2016 **2021 Medicare Utilization:** 265,058

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2020 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

01937 **Anesthesia for percutaneous image-guided injection, drainage or aspiration procedures on the spine or spinal cord; cervical or thoracic**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 4.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4 **Referred to CPT** October 2020 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

01938 **Anesthesia for percutaneous image-guided injection, drainage or aspiration procedures on the spine or spinal cord; lumbar or sacral**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 4.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

01939 **Anesthesia for percutaneous image-guided destruction procedures by neurolytic agent on the spine or spinal cord; cervical or thoracic**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 4.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

01940 **Anesthesia for percutaneous image-guided destruction procedures by neurolytic agent on the spine or spinal cord; lumbar or sacral**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 4.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

01941 **Anesthesia for percutaneous image-guided neuromodulation or intravertebral procedures (eg, kyphoplasty, vertebroplasty) on the spine or spinal cord; cervical or thoracic**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 6 **Referred to CPT** October 2020 **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

01942 **Anesthesia for percutaneous image-guided neuromodulation or intravertebral procedures (eg, kyphoplasty, vertebroplasty) on the spine or spinal cord; lumbar or sacral**

Global: XXX **Issue:** Anesthesia Services for Image-Guided Spinal Procedures **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 04 **Specialty Developing Recommendation:** ASA **First Identified:** January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 5.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 6 **Referred to CPT** October 2020 **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

0232T **Injection(s), platelet rich plasma, any site, including image guidance, harvesting and preparation when performed**

Global: XXX **Issue:** RAW **Screen:** High Volume Category III Codes 2022 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOS, AAPM&R, NASS **First Identified:** April 2022 **2021 Medicare Utilization:** 2,835

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review action plan **Referred to CPT** **Result:**
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

0275T **Percutaneous laminotomy/laminectomy (interlaminar approach) for decompression of neural elements, (with or without ligamentous resection, discectomy, facetectomy and/or foraminotomy), any method, under indirect image guidance (eg, fluoroscopic, ct), single or multiple levels, unilateral or bilateral; lumbar**

Global: YYY **Issue:** **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:**

First Identified: October 2019 **2021 Medicare Utilization:** 6,641

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

0376T **Insertion of anterior segment aqueous drainage device, without extraocular reservoir, internal approach, into the trabecular meshwork; each additional device insertion (List separately in addition to code for primary procedure)**

Global: XXX **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: October 2019 **2021 Medicare Utilization:** 10,561

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

0379T **Visual field assessment, with concurrent real time data analysis and accessible data storage with patient initiated data transmitted to a remote surveillance center for up to 30 days; technical support and patient instructions, surveillance, analysis, and transmission of daily and emergent data reports as prescribed by a physician or other qualified health care professional**

Global: XXX **Issue:** **Screen:** High Volume Category III Codes 2019 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:**

First Identified: October 2019 **2021 Medicare Utilization:** 48,918

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review in 3 years (Sept 2023)

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

Status Report: CMS Requests and Relativity Assessment Issues

0394T **High dose rate electronic brachytherapy, skin surface application, per fraction, includes basic dosimetry, when performed**

Global: XXX **Issue:** **Screen:** High Volume Category III Codes 2019 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 29,188

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review in 3 years (Sept 2023) **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

0446T **Creation of subcutaneous pocket with insertion of implantable interstitial glucose sensor, including system activation and patient training**

Global: 000 **Issue:** Insertion/ Removal of Implantable Interstital Glucose Sensor System **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 33 **Specialty Developing Recommendation:** AACE, ES **First Identified:** November 2019 **2021 Medicare Utilization:** 51

2023 Work RVU: 1.14
2023 NF PE RVU: 93.00
2023 Fac PE RVU: 0.45

RUC Recommendation: Contractor Price **Referred to CPT** February 2021 **Result:** Contractor Price

Referred to CPT Asst ☐ **Published in CPT Asst:**

0447T **Removal of implantable interstitial glucose sensor from subcutaneous pocket via incision**

Global: 000 **Issue:** Insertion/ Removal of Implantable Interstital Glucose Sensor System **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 33 **Specialty Developing Recommendation:** AACE, ES **First Identified:** November 2019 **2021 Medicare Utilization:** 19

2023 Work RVU: 1.34
2023 NF PE RVU: 1.52
2023 Fac PE RVU: 0.53

RUC Recommendation: Contractor Price **Referred to CPT** February 2021 **Result:** Contractor Price

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

0448T **Removal of implantable interstitial glucose sensor with creation of subcutaneous pocket at different anatomic site and insertion of new implantable sensor, including system activation**

Global: 000 **Issue:** Insertion/ Removal of Implantable Interstital Glucose Sensor System **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 33 **Specialty Developing Recommendation:** AACE, ES **First Identified:** November 2019 **2021 Medicare Utilization:** 43

2023 Work RVU: 1.91
2023 NF PE RVU: 91.72
2023 Fac PE RVU: 0.76

RUC Recommendation: Contractor Price **Referred to CPT** February 2021 **Result:** Contractor Price

Referred to CPT Asst ☐ **Published in CPT Asst:**

0449T **Insertion of aqueous drainage device, without extraocular reservoir, internal approach, into the subconjunctival space; initial device**

Global: YYY **Issue:** **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 3,088

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

0474T **Insertion of anterior segment aqueous drainage device, with creation of intraocular reservoir, internal approach, into the supraciliary space**

Global: XXX **Issue:** **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 1

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

0507T **Near infrared dual imaging (ie, simultaneous reflective and transilluminated light) of meibomian glands, unilateral or bilateral, with interpretation and report**

Global: XXX **Issue:** RAW **Screen:** High Volume Category III Codes 2022 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAO, AOA

First Identified: April 2022

2021 Medicare Utilization: 5,605

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

0509T **Electroretinography (erg) with interpretation and report, pattern (perg)**

Global: XXX **Issue:** Electroretinography **Screen:** Work Neutrality 2019 **Complete?** No

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: October 2020

2021 Medicare Utilization: 17,553

2023 Work RVU: 0.40
2023 NF PE RVU: 1.83
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

0671T **Insertion of anterior segment aqueous drainage device into the trabecular meshwork, without external reservoir, and without concomitant cataract removal, one or more**

Global: YYY **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: January 2021

2021 Medicare Utilization:

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Contractor Price

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

Status Report: CMS Requests and Relativity Assessment Issues

10004 **Fine needle aspiration biopsy, without imaging guidance; each additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017

2021 Medicare Utilization: 287

2023 Work RVU: 0.80
2023 NF PE RVU: 0.61
2023 Fac PE RVU: 0.35
Result: Decrease

RUC Recommendation: 0.80

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

10005 **Fine needle aspiration biopsy, including ultrasound guidance; first lesion**

Global: XXX **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 / CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 21 **Specialty Developing Recommendation:**

First Identified: June 2017

2021 Medicare Utilization: 128,051

2023 Work RVU: 1.46
2023 NF PE RVU: 2.44
2023 Fac PE RVU: 0.55
Result: Decrease

RUC Recommendation: 1.63

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

10006 **Fine needle aspiration biopsy, including ultrasound guidance; each additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017

2021 Medicare Utilization: 30,901

2023 Work RVU: 1.00
2023 NF PE RVU: 0.69
2023 Fac PE RVU: 0.38
Result: Decrease

RUC Recommendation: 1.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

10007 **Fine needle aspiration biopsy, including fluoroscopic guidance; first lesion**

Global: XXX **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017

2021 Medicare Utilization: 429

2023 Work RVU: 1.81

2023 NF PE RVU: 6.90

2023 Fac PE RVU: 0.62

RUC Recommendation: 1.81

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

10008 **Fine needle aspiration biopsy, including fluoroscopic guidance; each additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017

2021 Medicare Utilization: 29

2023 Work RVU: 1.18

2023 NF PE RVU: 2.96

2023 Fac PE RVU: 0.20

RUC Recommendation: 1.18

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

10009 **Fine needle aspiration biopsy, including ct guidance; first lesion**

Global: XXX **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017

2021 Medicare Utilization: 2,883

2023 Work RVU: 2.26

2023 NF PE RVU: 10.59

2023 Fac PE RVU: 0.74

RUC Recommendation: 2.43

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

10010 **Fine needle aspiration biopsy, including ct guidance; each additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017 **2021 Medicare Utilization:** 53

2023 Work RVU: 1.65
2023 NF PE RVU: 5.32
2023 Fac PE RVU: 0.28

RUC Recommendation: 1.65

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

10011 **Fine needle aspiration biopsy, including mr guidance; first lesion**

Global: XXX **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017 **2021 Medicare Utilization:** 64

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Contractor Price

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

10012 **Fine needle aspiration biopsy, including mr guidance; each additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Fine Needle Aspiration **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: June 2017 **2021 Medicare Utilization:** 34

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Contractor Price

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

Status Report: CMS Requests and Relativity Assessment Issues

10021 **Fine needle aspiration biopsy, without imaging guidance; first lesion**

Global: XXX **Issue:** Fine Needle Aspiration **Screen:** CMS Request - Final Rule for 2016 / CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 21 **Specialty Developing Recommendation:** AACE, ASBS, ASC, CAP, ES, AAOHNS, ACS **First Identified:** July 2015 **2021 Medicare Utilization:** 12,848

2023 Work RVU: 1.03
2023 NF PE RVU: 1.88
2023 Fac PE RVU: 0.46

RUC Recommendation: 1.20 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

10022 **Fine needle aspiration; with imaging guidance**

Global: **Issue:** Fine Needle Aspiration **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 04 **Specialty Developing Recommendation:** AACE, ASBS, ASC, CAP, ES, ACR, SIR **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

10030 **Image-guided fluid collection drainage by catheter (eg, abscess, hematoma, seroma, lymphocele, cyst), soft tissue (eg, extremity, abdominal wall, neck), percutaneous**

Global: 000 **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:** 7,984

2023 Work RVU: 2.75
2023 NF PE RVU: 16.46
2023 Fac PE RVU: 0.94

RUC Recommendation: 3.00 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

10040 **Acne surgery (eg, marsupialization, opening or removal of multiple milia, comedones, cysts, pustules)**

Global: 010 **Issue:** Acne Surgery **Screen:** Harvard Valued - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 13 **Specialty Developing Recommendation:** AAD **First Identified:** October 2015 **2021 Medicare Utilization:** 41,148

2023 Work RVU: 0.91
2023 NF PE RVU: 2.48
2023 Fac PE RVU: 0.53

RUC Recommendation: 0.91 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

10060 **Incision and drainage of abscess (eg, carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or paronychia); simple or single**

Global: 010 **Issue:** Incision and Drainage of Abscess **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 07 **Specialty Developing Recommendation:** APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 297,751

2023 Work RVU: 1.22
2023 NF PE RVU: 2.42
2023 Fac PE RVU: 1.80

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

10061 **Incision and drainage of abscess (eg, carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or paronychia); complicated or multiple**

Global: 010 **Issue:** Incision and Drainage of Abscess **Screen:** Harvard Valued - Utilization over 100,000 / 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** APMA **First Identified:** October 2009 **2021 Medicare Utilization:** 105,170

2023 Work RVU: 2.45
2023 NF PE RVU: 3.62
2023 Fac PE RVU: 2.72

RUC Recommendation: Maintain. 2.45 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

10120 **Incision and removal of foreign body, subcutaneous tissues; simple**

Global: 010 **Issue:** **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 12 **Specialty Developing Recommendation:** APMA, AAFP **First Identified:** April 2011 **2021 Medicare Utilization:** 38,137

2023 Work RVU: 1.22
2023 NF PE RVU: 3.15
2023 Fac PE RVU: 1.75

RUC Recommendation: 1.25 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

10180 **Incision and drainage, complex, postoperative wound infection**

Global: 010 **Issue:** **Screen:** RUC identified when reviewing comparison codes **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** **First Identified:** January 2013 **2021 Medicare Utilization:** 7,788

2023 Work RVU: 2.30
2023 NF PE RVU: 5.10
2023 Fac PE RVU: 2.53

RUC Recommendation: Remove from re-review **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

11040 **Deleted from CPT**

Global: **Issue:** Excision and Debridement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, APTA **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

11041 **Deleted from CPT**

Global: **Issue:** Excision and Debridement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, APTA **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11042 **Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less**

Global: 000 **Issue:** Excision and Debridement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 04 **Specialty Developing Recommendation:** APMA, APTA

First Identified: September 2007 **2021 Medicare Utilization:** 1,980,217

2023 Work RVU: 1.01
2023 NF PE RVU: 2.73
2023 Fac PE RVU: 0.64

RUC Recommendation: 1.12

Referred to CPT October 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

11043 **Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); first 20 sq cm or less**

Global: 000 **Issue:** Debridement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 04 **Specialty Developing Recommendation:** APMA, APTA

First Identified: September 2007 **2021 Medicare Utilization:** 552,830

2023 Work RVU: 2.70
2023 NF PE RVU: 3.83
2023 Fac PE RVU: 1.45

RUC Recommendation: 3.00

Referred to CPT October 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

11044 **Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less**

Global: 000 **Issue:** Debridement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 04 **Specialty Developing Recommendation:** APMA, APTA

First Identified: September 2007 **2021 Medicare Utilization:** 114,689

2023 Work RVU: 4.10
2023 NF PE RVU: 4.51
2023 Fac PE RVU: 1.92

RUC Recommendation: 4.56

Referred to CPT October 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

11045 **Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); each additional 20 sq cm, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Excision and Debridement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, APTA

First Identified: February 2010 **2021 Medicare Utilization:** 599,986

2023 Work RVU: 0.50
2023 NF PE RVU: 0.61
2023 Fac PE RVU: 0.17

RUC Recommendation: 0.69

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

11046 **Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); each additional 20 sq cm, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Debridement **Screen:** Site of Service Anomaly / High Volume Growth8 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACS, APMA, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 307,724

2023 Work RVU: 1.03
2023 NF PE RVU: 0.95
2023 Fac PE RVU: 0.40
Result: Decrease

RUC Recommendation: Review action plan. 1.29

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

11047 **Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); each additional 20 sq cm, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Debridement **Screen:** Site of Service Anomaly / High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** ACS, APMA, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 91,066

2023 Work RVU: 1.80
2023 NF PE RVU: 1.45
2023 Fac PE RVU: 0.72
Result: Increase

RUC Recommendation: 2.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

11055 **Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); single lesion**

Global: 000 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** APMA **First Identified:** November 2011 **2021 Medicare Utilization:** 774,459

2023 Work RVU: 0.35
2023 NF PE RVU: 1.76
2023 Fac PE RVU: 0.08
Result: Maintain

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11056 **Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions**

Global: 000 **Issue:** Trim Skin Lesions **Screen:** MPC List / CMS Request to Re-Review Families of Recently Reviewed CPT Codes **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 53 **Specialty Developing Recommendation:** APMA **First Identified:** October 2010 **2021 Medicare Utilization:** 1,807,522

2023 Work RVU: 0.50
2023 NF PE RVU: 1.93
2023 Fac PE RVU: 0.11

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

11057 **Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); more than 4 lesions**

Global: 000 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** APMA **First Identified:** November 2011 **2021 Medicare Utilization:** 312,718

2023 Work RVU: 0.65
2023 NF PE RVU: 2.00
2023 Fac PE RVU: 0.15

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

11100 **Biopsy of skin, subcutaneous tissue and/or mucous membrane (including simple closure), unless otherwise listed; single lesion**

Global: **Issue:** Biopsy of Skin Lesion **Screen:** MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** AAD **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11101 **Biopsy of skin, subcutaneous tissue and/or mucous membrane (including simple closure), unless otherwise listed; each separate/additional lesion (List separately in addition to code for primary procedure)**

Global: **Issue:** Biopsy of Skin Lesion **Screen:** Low Value Billed in Multiple Units / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** AAD **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

11102 **Tangential biopsy of skin (eg, shave, scoop, saucerize, curette); single lesion**

Global: 000 **Issue:** Skin Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** **First Identified:** February 2017 **2021 Medicare Utilization:** 3,163,916

2023 Work RVU: 0.66
2023 NF PE RVU: 2.32
2023 Fac PE RVU: 0.39

RUC Recommendation: 0.66 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

11103 **Tangential biopsy of skin (eg, shave, scoop, saucerize, curette); each separate/additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Skin Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** **First Identified:** February 2017 **2021 Medicare Utilization:** 1,387,504

2023 Work RVU: 0.38
2023 NF PE RVU: 1.09
2023 Fac PE RVU: 0.22

RUC Recommendation: 0.38 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11104 **Punch biopsy of skin (including simple closure, when performed); single lesion** **Global:** 000 **Issue:** Skin Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** **First Identified:** February 2017 **2021 Medicare Utilization:** 330,155

2023 Work RVU: 0.83
2023 NF PE RVU: 2.85
2023 Fac PE RVU: 0.46

RUC Recommendation: 0.83 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

11105 **Punch biopsy of skin (including simple closure, when performed); each separate/additional lesion (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Skin Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** **First Identified:** February 2017 **2021 Medicare Utilization:** 88,175

2023 Work RVU: 0.45
2023 NF PE RVU: 1.27
2023 Fac PE RVU: 0.25

RUC Recommendation: 0.45 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

11106 **Incisional biopsy of skin (eg, wedge) (including simple closure, when performed); single lesion** **Global:** 000 **Issue:** Skin Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:** **First Identified:** February 2017 **2021 Medicare Utilization:** 33,505

2023 Work RVU: 1.01
2023 NF PE RVU: 3.55
2023 Fac PE RVU: 0.54

RUC Recommendation: 1.01 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11107 **Incisional biopsy of skin (eg, wedge) (including simple closure, when performed); each separate/additional lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Skin Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 05 **Specialty Developing Recommendation:**

First Identified: February 2017 **2021 Medicare Utilization:** 6,888

2023 Work RVU: 0.54
2023 NF PE RVU: 1.54
2023 Fac PE RVU: 0.30

RUC Recommendation: 0.54

Referred to CPT February 2017
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

11300 **Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter 0.5 cm or less**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD

First Identified: January 2012 **2021 Medicare Utilization:** 90,082

2023 Work RVU: 0.60
2023 NF PE RVU: 2.38
2023 Fac PE RVU: 0.34

RUC Recommendation: 0.60

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

11301 **Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter 0.6 to 1.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD

First Identified: January 2012 **2021 Medicare Utilization:** 189,558

2023 Work RVU: 0.90
2023 NF PE RVU: 2.67
2023 Fac PE RVU: 0.52

RUC Recommendation: 0.90

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

11302 **Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter 1.1 to 2.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 101,686

2023 Work RVU: 1.05
2023 NF PE RVU: 2.97
2023 Fac PE RVU: 0.61

RUC Recommendation: 1.16 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

11303 **Shaving of epidermal or dermal lesion, single lesion, trunk, arms or legs; lesion diameter over 2.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 16,022

2023 Work RVU: 1.25
2023 NF PE RVU: 3.19
2023 Fac PE RVU: 0.71

RUC Recommendation: 1.25 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

11305 **Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter 0.5 cm or less**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 89,775

2023 Work RVU: 0.80
2023 NF PE RVU: 2.31
2023 Fac PE RVU: 0.24

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

11306 **Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 96,135

2023 Work RVU: 0.96
2023 NF PE RVU: 2.64
2023 Fac PE RVU: 0.40

RUC Recommendation: 1.18 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11307 **Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter 1.1 to 2.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 52,364

2023 Work RVU: 1.20
2023 NF PE RVU: 2.87
2023 Fac PE RVU: 0.54

RUC Recommendation: 1.20 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

11308 **Shaving of epidermal or dermal lesion, single lesion, scalp, neck, hands, feet, genitalia; lesion diameter over 2.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 16,450

2023 Work RVU: 1.46
2023 NF PE RVU: 2.83
2023 Fac PE RVU: 0.49

RUC Recommendation: 1.46 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

11310 **Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.5 cm or less**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 58,618

2023 Work RVU: 0.80
2023 NF PE RVU: 2.61
2023 Fac PE RVU: 0.46

RUC Recommendation: 1.19 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

11311 **Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.6 to 1.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 87,211

2023 Work RVU: 1.10
2023 NF PE RVU: 2.90
2023 Fac PE RVU: 0.64

RUC Recommendation: 1.43 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11312 **Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 1.1 to 2.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD

First Identified: January 2012

2021 Medicare Utilization: 39,225

2023 Work RVU: 1.30
2023 NF PE RVU: 3.24
2023 Fac PE RVU: 0.76

RUC Recommendation: 1.80

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

11313 **Shaving of epidermal or dermal lesion, single lesion, face, ears, eyelids, nose, lips, mucous membrane; lesion diameter over 2.0 cm**

Global: 000 **Issue:** Shaving of Epidermal or Dermal Lesions **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 38 **Specialty Developing Recommendation:** AAD

First Identified: January 2012

2021 Medicare Utilization: 7,132

2023 Work RVU: 1.68
2023 NF PE RVU: 3.58
2023 Fac PE RVU: 0.96

RUC Recommendation: 2.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

11719 **Trimming of nondystrophic nails, any number**

Global: 000 **Issue:** Debridement of Nail **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 32 **Specialty Developing Recommendation:** APMA

First Identified: October 2010

2021 Medicare Utilization: 648,206

2023 Work RVU: 0.17
2023 NF PE RVU: 0.24
2023 Fac PE RVU: 0.04

RUC Recommendation: 0.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

11720 **Debridement of nail(s) by any method(s); 1 to 5**

Global: 000 **Issue:** Debridement of Nail **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 53 **Specialty Developing Recommendation:** APMA

First Identified: Septemer 2011

2021 Medicare Utilization: 1,879,999

2023 Work RVU: 0.32
2023 NF PE RVU: 0.62
2023 Fac PE RVU: 0.07

RUC Recommendation: 0.32 (Interim)

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

11721 **Debridement of nail(s) by any method(s); 6 or more**

Global: 000 **Issue:** Debridement of Nail **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 53 **Specialty Developing Recommendation:** APMA

First Identified: October 2010

2021 Medicare Utilization: 5,698,272

2023 Work RVU: 0.54
2023 NF PE RVU: 0.74
2023 Fac PE RVU: 0.12

RUC Recommendation: 0.54 (Interim)

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

11730 **Avulsion of nail plate, partial or complete, simple; single**

Global: 000 **Issue:** Removal of Nail Plate **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 56 **Specialty Developing Recommendation:** APMA

First Identified: July 2015

2021 Medicare Utilization: 326,549

2023 Work RVU: 1.05
2023 NF PE RVU: 2.30
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.10

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

11750 **Excision of nail and nail matrix, partial or complete (eg, ingrown or deformed nail), for permanent removal**

Global: 010 **Issue:** Excision of Nail Bed - HCPAC **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 26 **Specialty Developing Recommendation:**

First Identified: January 2014

2021 Medicare Utilization: 167,442

2023 Work RVU: 1.58
2023 NF PE RVU: 3.07
2023 Fac PE RVU: 1.29

RUC Recommendation: 1.99

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

11752 **Excision of nail and nail matrix, partial or complete (eg, ingrown or deformed nail), for permanent removal; with amputation of tuft of distal phalanx**

Global: **Issue:** Excision of Nail Bed - HCPAC **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 28 **Specialty Developing Recommendation:**

First Identified: January 2014

2021 Medicare Utilization:

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

11755 **Biopsy of nail unit (eg, plate, bed, matrix, hyponychium, proximal and lateral nail folds) (separate procedure)**

Global: 000 **Issue:** Biopsy of Nail **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 41i **Specialty Developing Recommendation:** APMA **First Identified:** July 2016 **2021 Medicare Utilization:** 52,685

2023 Work RVU: 1.25
2023 NF PE RVU: 2.32
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.25 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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11900 **Injection, intralesional; up to and including 7 lesions**

Global: 000 **Issue:** Skin Injection Services **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 31 **Specialty Developing Recommendation:** AAD **First Identified:** October 2009 **2021 Medicare Utilization:** 253,112

2023 Work RVU: 0.52
2023 NF PE RVU: 1.13
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.52 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

11901 **Injection, intralesional; more than 7 lesions**

Global: 000 **Issue:** Skin Injection Services **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 31 **Specialty Developing Recommendation:** AAD **First Identified:** February 2010 **2021 Medicare Utilization:** 69,181

2023 Work RVU: 0.80
2023 NF PE RVU: 1.21
2023 Fac PE RVU: 0.47

RUC Recommendation: 0.80 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

Status Report: CMS Requests and Relativity Assessment Issues

11980 **Subcutaneous hormone pellet implantation (implantation of estradiol and/or testosterone pellets beneath the skin)**

Global: 000 **Issue:** Drug Delivery Implant Procedures **Screen:** High Volume Growth2 / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, ACOG, AUA **First Identified:** April 2013 **2021 Medicare Utilization:** 29,305

2023 Work RVU: 1.10
2023 NF PE RVU: 1.55
2023 Fac PE RVU: 0.39

RUC Recommendation: 1.10 **Referred to CPT** May 2018 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

11981 **Insertion, drug-delivery implant (ie, bioresorbable, biodegradable, non-biodegradable)**

Global: 000 **Issue:** Drug Delivery Implant Procedures **Screen:** High Volume Growth1 / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, ACOG, AUA **First Identified:** June 2008 **2021 Medicare Utilization:** 8,284

2023 Work RVU: 1.14
2023 NF PE RVU: 1.67
2023 Fac PE RVU: 0.52

RUC Recommendation: 1.30 **Referred to CPT** May 2018 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

11982 **Removal, non-biodegradable drug delivery implant**

Global: 000 **Issue:** Drug Delivery Implant Procedures **Screen:** High Volume Growth1 / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, ACOG, AUA **First Identified:** February 2008 **2021 Medicare Utilization:** 2,738

2023 Work RVU: 1.34
2023 NF PE RVU: 1.78
2023 Fac PE RVU: 0.61

RUC Recommendation: 1.70 **Referred to CPT** May 2018 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

11983 **Removal with reinsertion, non-biodegradable drug delivery implant** **Global:** 000 **Issue:** Drug Delivery Implant Procedures **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, ACOG, AUA **First Identified:** June 2008 **2021 Medicare Utilization:** 1,339

2023 Work RVU: 1.91
2023 NF PE RVU: 2.01
2023 Fac PE RVU: 0.83

RUC Recommendation: 2.10 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12001 **Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 2.5 cm or less** **Global:** 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** October 2009 **2021 Medicare Utilization:** 158,450

2023 Work RVU: 0.84
2023 NF PE RVU: 1.82
2023 Fac PE RVU: 0.33

RUC Recommendation: 0.84 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12002 **Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 2.6 cm to 7.5 cm** **Global:** 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** October 2009 **2021 Medicare Utilization:** 129,274

2023 Work RVU: 1.14
2023 NF PE RVU: 2.06
2023 Fac PE RVU: 0.39

RUC Recommendation: 1.14 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12004 **Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 7.6 cm to 12.5 cm** **Global:** 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 20,365

2023 Work RVU: 1.44
2023 NF PE RVU: 2.26
2023 Fac PE RVU: 0.46

RUC Recommendation: 1.44 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12005 **Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 12.6 cm to 20.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 5,699

2023 Work RVU: 1.97
2023 NF PE RVU: 2.97
2023 Fac PE RVU: 0.47

RUC Recommendation: 1.97 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12006 **Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 20.1 cm to 30.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 1,055

2023 Work RVU: 2.39
2023 NF PE RVU: 3.32
2023 Fac PE RVU: 0.61

RUC Recommendation: 2.39 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12007 **Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); over 30.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 333

2023 Work RVU: 2.90
2023 NF PE RVU: 3.49
2023 Fac PE RVU: 0.84

RUC Recommendation: 2.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12011 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.5 cm or less**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 80,967

2023 Work RVU: 1.07
2023 NF PE RVU: 2.11
2023 Fac PE RVU: 0.37

RUC Recommendation: 1.07 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12013 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.6 cm to 5.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 48,082

2023 Work RVU: 1.22
2023 NF PE RVU: 2.07
2023 Fac PE RVU: 0.27

RUC Recommendation: 1.22 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12014 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 5.1 cm to 7.5 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 6,474

2023 Work RVU: 1.57
2023 NF PE RVU: 2.43
2023 Fac PE RVU: 0.35

RUC Recommendation: 1.57 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12015 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 7.6 cm to 12.5 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 3,170

2023 Work RVU: 1.98
2023 NF PE RVU: 2.82
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.98 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

12016 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 cm to 20.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 443

2023 Work RVU: 2.68
2023 NF PE RVU: 3.41
2023 Fac PE RVU: 0.61

RUC Recommendation: 2.68 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12017 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 20.1 cm to 30.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 56

2023 Work RVU: 3.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.73

RUC Recommendation: 3.18 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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12018 **Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; over 30.0 cm**

Global: 000 **Issue:** Repair of Superficial Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 32 **Specialty Developing Recommendation:** ACEP, AAFP **First Identified:** April 2010 **2021 Medicare Utilization:** 22

2023 Work RVU: 3.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.80

RUC Recommendation: 3.61 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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12031 **Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 2.5 cm or less**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 59,863

2023 Work RVU: 2.00
2023 NF PE RVU: 5.67
2023 Fac PE RVU: 2.26

RUC Recommendation: 2.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

12032 **Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 2.6 cm to 7.5 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** October 2009 **2021 Medicare Utilization:** 310,362

2023 Work RVU: 2.52
2023 NF PE RVU: 6.32
2023 Fac PE RVU: 2.83

RUC Recommendation: 2.52 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

12034 **Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 7.6 cm to 12.5 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 32,053

2023 Work RVU: 2.97
2023 NF PE RVU: 6.68
2023 Fac PE RVU: 2.73

RUC Recommendation: 2.97 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

12035 **Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 12.6 cm to 20.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 5,165

2023 Work RVU: 3.50
2023 NF PE RVU: 7.57
2023 Fac PE RVU: 3.04

RUC Recommendation: 3.60 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12036 **Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 20.1 cm to 30.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 1,024

2023 Work RVU: 4.23
2023 NF PE RVU: 7.92
2023 Fac PE RVU: 3.31

RUC Recommendation: 4.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

12037 **Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); over 30.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 488

2023 Work RVU: 5.00
2023 NF PE RVU: 8.54
2023 Fac PE RVU: 3.73

RUC Recommendation: 5.25 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

12041 **Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 2.5 cm or less**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 20,276

2023 Work RVU: 2.10
2023 NF PE RVU: 5.59
2023 Fac PE RVU: 1.95

RUC Recommendation: 2.10 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12042 **Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 2.6 cm to 7.5 cm** **Global:** 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 61,284

2023 Work RVU: 2.79
2023 NF PE RVU: 6.21
2023 Fac PE RVU: 2.70

RUC Recommendation: 2.79 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

12044 **Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 7.6 cm to 12.5 cm** **Global:** 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 2,990

2023 Work RVU: 3.19
2023 NF PE RVU: 7.84
2023 Fac PE RVU: 2.72

RUC Recommendation: 3.19 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

12045 **Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 12.6 cm to 20.0 cm** **Global:** 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 329

2023 Work RVU: 3.75
2023 NF PE RVU: 8.06
2023 Fac PE RVU: 3.77

RUC Recommendation: 3.90 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12046 **Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; 20.1 cm to 30.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 121

2023 Work RVU: 4.30
2023 NF PE RVU: 9.65
2023 Fac PE RVU: 4.11

RUC Recommendation: 4.60 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

12047 **Repair, intermediate, wounds of neck, hands, feet and/or external genitalia; over 30.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 35

2023 Work RVU: 4.95
2023 NF PE RVU: 10.27
2023 Fac PE RVU: 4.35

RUC Recommendation: 5.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

12051 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.5 cm or less**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 53,156

2023 Work RVU: 2.33
2023 NF PE RVU: 5.91
2023 Fac PE RVU: 2.41

RUC Recommendation: 2.33 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

12052 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.6 cm to 5.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 94,390

2023 Work RVU: 2.87
2023 NF PE RVU: 6.28
2023 Fac PE RVU: 2.71

RUC Recommendation: Remove from screen **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Remove from Screen

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12053 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 5.1 cm to 7.5 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 14,469

2023 Work RVU: 3.17
2023 NF PE RVU: 7.38
2023 Fac PE RVU: 2.82

RUC Recommendation: 3.17 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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12054 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 7.6 cm to 12.5 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 3,544

2023 Work RVU: 3.50
2023 NF PE RVU: 7.55
2023 Fac PE RVU: 2.50

RUC Recommendation: 3.50 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

12055 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 cm to 20.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 286

2023 Work RVU: 4.50
2023 NF PE RVU: 9.97
2023 Fac PE RVU: 3.62

RUC Recommendation: 4.65 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

12056 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 20.1 cm to 30.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 41

2023 Work RVU: 5.30
2023 NF PE RVU: 11.21
2023 Fac PE RVU: 5.22

RUC Recommendation: 5.50 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

12057 **Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; over 30.0 cm**

Global: 010 **Issue:** Repair of Intermediate Wounds **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 22 **Specialty Developing Recommendation:** AAO-HNS, AAD, AAP, ACEP, ASPS, AAFP, ACS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 20

2023 Work RVU: 6.00
2023 NF PE RVU: 11.27
2023 Fac PE RVU: 5.42

RUC Recommendation: 6.28 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

13100 **Repair, complex, trunk; 1.1 cm to 2.5 cm** **Global:** 010 **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** July 2011 **2021 Medicare Utilization:** 4,827

2023 Work RVU: 3.00
2023 NF PE RVU: 6.89
2023 Fac PE RVU: 2.58

RUC Recommendation: 3.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

13101 **Repair, complex, trunk; 2.6 cm to 7.5 cm** **Global:** 010 **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** July 2011 **2021 Medicare Utilization:** 84,542

2023 Work RVU: 3.50
2023 NF PE RVU: 8.04
2023 Fac PE RVU: 3.43

RUC Recommendation: 3.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

13102 **Repair, complex, trunk; each additional 5 cm or less (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** July 2011 **2021 Medicare Utilization:** 21,197

2023 Work RVU: 1.24
2023 NF PE RVU: 2.07
2023 Fac PE RVU: 0.69

RUC Recommendation: 1.24 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

13120 **Repair, complex, scalp, arms, and/or legs; 1.1 cm to 2.5 cm** **Global:** 010 **Issue:** Complex Wound Repair **Screen:** CMS Fastest Growing / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** October 2008 **2021 Medicare Utilization:** 10,368

2023 Work RVU: 3.23
2023 NF PE RVU: 7.07
2023 Fac PE RVU: 3.26

RUC Recommendation: 3.23 **Referred to CPT** September 2018 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** 1st article: May 2011; 2nd article July 2016; Sept 2018 CPT Editorial Meeting Tab 9, specialties submitted revisions to the guidelines.

Status Report: CMS Requests and Relativity Assessment Issues

13121 **Repair, complex, scalp, arms, and/or legs; 2.6 cm to 7.5 cm**

Global: 010 **Issue:** Complex Wound Repair **Screen:** CMS Fastest Growing / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** October 2008 **2021 Medicare Utilization:** 182,651

2023 Work RVU: 4.00
2023 NF PE RVU: 8.34
2023 Fac PE RVU: 3.18

RUC Recommendation: 4.00 **Referred to CPT** September 2018 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** 1st article: May 2011; 2nd article July 2016; Sept 2018 CPT Editorial Meeting Tab 9, specialties submitted revisions to the guidelines.

13122 **Repair, complex, scalp, arms, and/or legs; each additional 5 cm or less (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Complex Wound Repair **Screen:** CMS Fastest Growing / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** October 2008 **2021 Medicare Utilization:** 27,329

2023 Work RVU: 1.44
2023 NF PE RVU: 2.16
2023 Fac PE RVU: 0.79

RUC Recommendation: 1.44 **Referred to CPT** September 2018 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** 1st article: May 2011; 2nd article July 2016; Sept 2018 CPT Editorial Meeting Tab 9, specialties submitted revisions to the guidelines.

13131 **Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; 1.1 cm to 2.5 cm**

Global: 010 **Issue:** Complex Wound Repair **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 32,774

2023 Work RVU: 3.73
2023 NF PE RVU: 7.50
2023 Fac PE RVU: 2.99

RUC Recommendation: 3.73 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

13132 **Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; 2.6 cm to 7.5 cm**

Global: 010 **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** September 2011 **2021 Medicare Utilization:** 252,586

2023 Work RVU: 4.78
2023 NF PE RVU: 8.83
2023 Fac PE RVU: 3.64

RUC Recommendation: 4.78 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

13133 **Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; each additional 5 cm or less (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** September 2011 **2021 Medicare Utilization:** 13,790

2023 Work RVU: 2.19
2023 NF PE RVU: 2.57
2023 Fac PE RVU: 1.23

RUC Recommendation: 2.19 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

13150 **Repair, complex, eyelids, nose, ears and/or lips; 1.0 cm or less**

Global: **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

13151 **Repair, complex, eyelids, nose, ears and/or lips; 1.1 cm to 2.5 cm**

Global: 010 **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** September 2011 **2021 Medicare Utilization:** 28,161

2023 Work RVU: 4.34
2023 NF PE RVU: 7.85
2023 Fac PE RVU: 3.37

RUC Recommendation: 4.34 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

13152 **Repair, complex, eyelids, nose, ears and/or lips; 2.6 cm to 7.5 cm**

Global: 010 **Issue:** Complex Wound Repair **Screen:** Harvard Valued - Utilization over 30,000 / Harvard-Valued with Annual Allowed Charges over $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 47,544

2023 Work RVU: 5.34
2023 NF PE RVU: 8.93
2023 Fac PE RVU: 3.95

RUC Recommendation: 5.34 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

13153 **Repair, complex, eyelids, nose, ears and/or lips; each additional 5 cm or less (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Complex Wound Repair **Screen:** CMS Request **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 37 **Specialty Developing Recommendation:** AAD, AAO-HNS, ASPS **First Identified:** July 2011 **2021 Medicare Utilization:** 754

2023 Work RVU: 2.38
2023 NF PE RVU: 2.82
2023 Fac PE RVU: 1.31

RUC Recommendation: 2.38 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

14000 **Adjacent tissue transfer or rearrangement, trunk; defect 10 sq cm or less**

Global: 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** ACS, AAD, ASPS **First Identified:** April 2008 **2021 Medicare Utilization:** 5,804

2023 Work RVU: 6.37
2023 NF PE RVU: 11.59
2023 Fac PE RVU: 7.55

RUC Recommendation: 6.19 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

14001 **Adjacent tissue transfer or rearrangement, trunk; defect 10.1 sq cm to 30.0 sq cm** **Global:** 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** ACS, AAD, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 8,527

2023 Work RVU: 8.78
2023 NF PE RVU: 13.91
2023 Fac PE RVU: 9.09

RUC Recommendation: 8.58 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

14020 **Adjacent tissue transfer or rearrangement, scalp, arms and/or legs; defect 10 sq cm or less** **Global:** 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** AAD, ASPS **First Identified:** April 2008 **2021 Medicare Utilization:** 15,643

2023 Work RVU: 7.22
2023 NF PE RVU: 12.81
2023 Fac PE RVU: 8.61

RUC Recommendation: 7.02 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

14021 **Adjacent tissue transfer or rearrangement, scalp, arms and/or legs; defect 10.1 sq cm to 30.0 sq cm** **Global:** 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** AAD, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 18,586

2023 Work RVU: 9.72
2023 NF PE RVU: 14.88
2023 Fac PE RVU: 10.03

RUC Recommendation: 9.52 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

14040 **Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less** **Global:** 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** AAD, ASPS, AAO-HNS **First Identified:** April 2008 **2021 Medicare Utilization:** 58,271

2023 Work RVU: 8.60
2023 NF PE RVU: 13.02
2023 Fac PE RVU: 8.84

RUC Recommendation: 8.44 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

14041 **Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10.1 sq cm to 30.0 sq cm**

Global: 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** AAD, ASPS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 43,225

2023 Work RVU: 10.83
2023 NF PE RVU: 15.43
2023 Fac PE RVU: 10.49

RUC Recommendation: 10.63 **Referred to CPT** **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

14060 **Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less**

Global: 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** AAD, ASPS, AAO-HNS **First Identified:** April 2008 **2021 Medicare Utilization:** 80,653

2023 Work RVU: 9.23
2023 NF PE RVU: 12.62
2023 Fac PE RVU: 9.42

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

14061 **Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10.1 sq cm to 30.0 sq cm**

Global: 090 **Issue:** Skin Tissue Rearrangement **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 9 **Specialty Developing Recommendation:** AAD, ASPS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 29,256

2023 Work RVU: 11.48
2023 NF PE RVU: 16.86
2023 Fac PE RVU: 11.43

RUC Recommendation: 11.25 **Referred to CPT** **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

14300 **Deleted from CPT**

Global: **Issue:** Adjacent Tissue Transfer **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 04 **Specialty Developing Recommendation:** ACS, AAD, ASPS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

14301 **Adjacent tissue transfer or rearrangement, any area; defect 30.1 sq cm to 60.0 sq cm**

Global: 090 **Issue:** Adjacent Tissue Transfer **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 04 **Specialty Developing Recommendation:** ACS, AAO-HNS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 39,025

2023 Work RVU: 12.65
2023 NF PE RVU: 17.84
2023 Fac PE RVU: 11.23

RUC Recommendation: 12.47 **Referred to CPT** February 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

14302 **Adjacent tissue transfer or rearrangement, any area; each additional 30.0 sq cm, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Adjacent Tissue Transfer **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 04 **Specialty Developing Recommendation:** ACS, AAO-HNS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 46,941

2023 Work RVU: 3.73
2023 NF PE RVU: 2.01
2023 Fac PE RVU: 2.01

RUC Recommendation: 3.73 **Referred to CPT** February 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15002 **Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar (including subcutaneous tissues), or incisional release of scar contracture, trunk, arms, legs; first 100 sq cm or 1% of body area of infants and children**

Global: 000 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** ASPS **First Identified:** January 2014 **2021 Medicare Utilization:** 23,825

2023 Work RVU: 3.65
2023 NF PE RVU: 6.05
2023 Fac PE RVU: 2.20

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15004 **Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar (including subcutaneous tissues), or incisional release of scar contracture, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet and/or multiple digits; first 100 sq cm or 1% of body area of infants and children**

Global: 000 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** ASPS, APMA **First Identified:** January 2014 **2021 Medicare Utilization:** 33,789

2023 Work RVU: 4.58
2023 NF PE RVU: 6.58
2023 Fac PE RVU: 2.49

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15100 **Split-thickness autograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children (except 15050)**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** ASPS **First Identified:** January 2014 **2021 Medicare Utilization:** 11,671

2023 Work RVU: 9.90
2023 NF PE RVU: 14.27
2023 Fac PE RVU: 9.58

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15120 **Split-thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children (except 15050)**

Global: 090 **Issue:** Autograft **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAO-HNS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 7,599

2023 Work RVU: 10.15
2023 NF PE RVU: 13.55
2023 Fac PE RVU: 8.78

RUC Recommendation: Remove from screen

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15170 **Acellular dermal replacement, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children**

Global: **Issue:** Acellular Dermal Replacement **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15171 **Acellular dermal replacement, trunk, arms, legs; each additional 100 sq cm, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)**

Global: **Issue:** Acellular Dermal Replacement **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15175 **Acellular dermal replacement, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children**

Global: **Issue:** Acellular Dermal Replacement **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15176 **Acellular dermal replacement, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; each additional 100 sq cm, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)**

Global: **Issue:** Acellular Dermal Replacement **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

15220 **Full thickness graft, free, including direct closure of donor site, scalp, arms, and/or legs; 20 sq cm or less**

Global: 090 **Issue:** Skin Graft **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAO-HNS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 9,254

2023 Work RVU: 8.09
2023 NF PE RVU: 13.81
2023 Fac PE RVU: 8.92

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

15240 **Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** ASPS, AAD **First Identified:** January 2014 **2021 Medicare Utilization:** 12,274

2023 Work RVU: 10.41
2023 NF PE RVU: 15.99
2023 Fac PE RVU: 11.86

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

15271 **Application of skin substitute graft to trunk, arms, legs, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area**

Global: 000 **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 134,215

2023 Work RVU: 1.50
2023 NF PE RVU: 2.88
2023 Fac PE RVU: 0.75

RUC Recommendation: 1.50 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15272 **Application of skin substitute graft to trunk, arms, legs, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 17,378

2023 Work RVU: 0.33
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.12

RUC Recommendation: 0.59 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15273 **Application of skin substitute graft to trunk, arms, legs, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children**

Global: 000 **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 6,285

2023 Work RVU: 3.50
2023 NF PE RVU: 5.17
2023 Fac PE RVU: 1.65

RUC Recommendation: 3.50 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15274 **Application of skin substitute graft to trunk, arms, legs, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 27,593

2023 Work RVU: 0.80
2023 NF PE RVU: 1.50
2023 Fac PE RVU: 0.35

RUC Recommendation: 0.80 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15275 **Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area**

Global: 000 **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 153,979

2023 Work RVU: 1.83
2023 NF PE RVU: 2.72
2023 Fac PE RVU: 0.73

RUC Recommendation: 1.83 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15276 **Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 7,165

2023 Work RVU: 0.50
2023 NF PE RVU: 0.40
2023 Fac PE RVU: 0.17

RUC Recommendation: 0.59 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15277 **Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children**

Global: 000 **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 1,611

2023 Work RVU: 4.00
2023 NF PE RVU: 5.62
2023 Fac PE RVU: 1.93

RUC Recommendation: 4.00 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15278 **Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 2,798

2023 Work RVU: 1.00
2023 NF PE RVU: 1.67
2023 Fac PE RVU: 0.46

RUC Recommendation: 1.00 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15320 **Deleted from CPT**

Global: **Issue:** Skin Allograft **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15321 **Deleted from CPT**

Global: **Issue:** Skin Allograft **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15330 **Acellular dermal allograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children**

Global: **Issue:** Allograft **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ASPS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15331 **Deleted from CPT**

Global: **Issue:** Acellular Dermal Allograft **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** AAO-HNS, APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15335 **Deleted from CPT**

Global: **Issue:** Acellular Dermal Allograft **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** AAO-HNS, APMA, ASPS **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15336 **Deleted from CPT** **Global:** **Issue:** Acellular Dermal Allograft **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** AAO-HNS, APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15360 **Deleted from CPT** **Global:** **Issue:** Tissue Cultured Allogeneic Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15361 **Deleted from CPT** **Global:** **Issue:** Tissue Cultured Allogeneic Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15365 **Deleted from CPT** **Global:** **Issue:** Tissue Cultured Allogeneic Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15366 **Deleted from CPT**

Global: **Issue:** Tissue Cultured Allogeneic Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15400 **Deleted from CPT**

Global: **Issue:** Xenograft **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, AAO-HNS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15401 **Deleted from CPT**

Global: **Issue:** Xenograft **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ACS, ASPS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15420 **Deleted from CPT**

Global: **Issue:** Xenograft Skin **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS, AAD **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15421 **Deleted from CPT**

Global: **Issue:** Xenograft Skin **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** APMA, ASPS, AAD **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15570 **Formation of direct or tubed pedicle, with or without transfer; trunk**

Global: 090 **Issue:** Skin Pedicle Flaps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 10 **Specialty Developing Recommendation:** ACS, ASPS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 275

2023 Work RVU: 10.21
2023 NF PE RVU: 15.08
2023 Fac PE RVU: 9.66

RUC Recommendation: 10.00 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15572 **Formation of direct or tubed pedicle, with or without transfer; scalp, arms, or legs**

Global: 090 **Issue:** Skin Pedicle Flaps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 10 **Specialty Developing Recommendation:** ACS, ASPS, AAO-HNS **First Identified:** April 2008 **2021 Medicare Utilization:** 556

2023 Work RVU: 10.12
2023 NF PE RVU: 14.55
2023 Fac PE RVU: 10.13

RUC Recommendation: 9.94 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15574 **Formation of direct or tubed pedicle, with or without transfer; forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands or feet**

Global: 090 **Issue:** Skin Pedicle Flaps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 10 **Specialty Developing Recommendation:** ASPS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,494

2023 Work RVU: 10.70
2023 NF PE RVU: 13.97
2023 Fac PE RVU: 9.62

RUC Recommendation: 10.52 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15576 **Formation of direct or tubed pedicle, with or without transfer; eyelids, nose, ears, lips, or intraoral**

Global: 090 **Issue:** Skin Pedicle Flaps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 10 **Specialty Developing Recommendation:** ASPS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,373

2023 Work RVU: 9.37
2023 NF PE RVU: 12.89
2023 Fac PE RVU: 8.81

RUC Recommendation: 9.24 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15730 **Midface flap (ie, zygomaticofacial flap) with preservation of vascular pedicle(s)**

Global: 090 **Issue:** Muscle Flaps **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 05 **Specialty Developing Recommendation:** AAO **First Identified:** January 2017 **2021 Medicare Utilization:** 1,428

2023 Work RVU: 13.50
2023 NF PE RVU: 27.74
2023 Fac PE RVU: 12.19

RUC Recommendation: 13.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15731 **Forehead flap with preservation of vascular pedicle (eg, axial pattern flap, paramedian forehead flap)**

Global: 090 **Issue:** Muscle Flaps **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 05 **Specialty Developing Recommendation:** **First Identified:** April 2016 **2021 Medicare Utilization:** 2,090

2023 Work RVU: 14.38
2023 NF PE RVU: 17.13
2023 Fac PE RVU: 13.26

RUC Recommendation: Not part of family **Referred to CPT** September 2016 **Result:** Not Part of RAW

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15732 **Muscle, myocutaneous, or fasciocutaneous flap; head and neck (eg, temporalis, masseter muscle, sternocleidomastoid, levator scapulae)**

Global: **Issue:** Muscle Flaps **Screen:** Site of Service Anomaly / High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 05 **Specialty Developing Recommendation:** ASPS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

15733 **Muscle, myocutaneous, or fasciocutaneous flap; head and neck with named vascular pedicle (ie, buccinators, genioglossus, temporalis, masseter, sternocleidomastoid, levator scapulae)**

Global: 090 **Issue:** Muscle Flaps **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 05 **Specialty Developing Recommendation:** ASPS **First Identified:** January 2017 **2021 Medicare Utilization:** 4,590

2023 Work RVU: 15.68
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.58

RUC Recommendation: 15.68 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15734 **Muscle, myocutaneous, or fasciocutaneous flap; trunk**

Global: 090 **Issue:** Muscle Flaps **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 14 **Specialty Developing Recommendation:** **First Identified:** October 2015 **2021 Medicare Utilization:** 21,636

2023 Work RVU: 23.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.93

RUC Recommendation: 23.00 **Referred to CPT** September 2016 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15736 **Muscle, myocutaneous, or fasciocutaneous flap; upper extremity** **Global:** 090 **Issue:** Muscle Flaps **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 14 **Specialty Developing Recommendation:** ASSH, ASPS **First Identified:** January 2016 **2021 Medicare Utilization:** 1,347

2023 Work RVU: 17.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.03

RUC Recommendation: 17.04 **Referred to CPT** September 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15738 **Muscle, myocutaneous, or fasciocutaneous flap; lower extremity** **Global:** 090 **Issue:** Muscle Flaps **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 14 **Specialty Developing Recommendation:** ASPS **First Identified:** January 2016 **2021 Medicare Utilization:** 5,370

2023 Work RVU: 19.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.25

RUC Recommendation: 19.04 **Referred to CPT** September 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

15740 **Flap; island pedicle requiring identification and dissection of an anatomically named axial vessel** **Global:** 090 **Issue:** Dermatology and Plastic Surgery Procedures **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 28 **Specialty Developing Recommendation:** AAD, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,879

2023 Work RVU: 11.80
2023 NF PE RVU: 16.71
2023 Fac PE RVU: 11.52

RUC Recommendation: 11.57 **Referred to CPT** February 2009 & February 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15769 **Grafting of autologous soft tissue, other, harvested by direct excision (eg, fat, dermis, fascia)**

Global: 090 **Issue:** Tissue Grafting Procedures **Screen:** Site of Service Anomaly - 2017 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOHNS, ASPS **First Identified:** May 2018 **2021 Medicare Utilization:** 5,780

2023 Work RVU: 6.68
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.45

RUC Recommendation: Refer to CPT Assistant. 6.68.

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:**

Result: Increase

15771 **Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; 50 cc or less injectate**

Global: 090 **Issue:** Tissue Grafting Procedures **Screen:** Site of Service Anomaly - 2017 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 04 **Specialty Developing Recommendation:** ASPS **First Identified:** May 2018 **2021 Medicare Utilization:** 3,401

2023 Work RVU: 6.73
2023 NF PE RVU: 10.21
2023 Fac PE RVU: 7.21

RUC Recommendation: 6.73

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

15772 **Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; each additional 50 cc injectate, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Tissue Grafting Procedures **Screen:** Site of Service Anomaly - 2017 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 04 **Specialty Developing Recommendation:** ASPS **First Identified:** May 2018 **2021 Medicare Utilization:** 7,322

2023 Work RVU: 2.50
2023 NF PE RVU: 2.77
2023 Fac PE RVU: 1.46

RUC Recommendation: 2.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

15773 **Grafting of autologous fat harvested by liposuction technique to face, eyelids, mouth, neck, ears, orbits, genitalia, hands, and/or feet; 25 cc or less injectate**

Global: 090 **Issue:** Tissue Grafting Procedures **Screen:** Site of Service Anomaly - 2017 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 04 **Specialty Developing Recommendation:** ASPS **First Identified:** May 2018 **2021 Medicare Utilization:** 394

2023 Work RVU: 6.83
2023 NF PE RVU: 9.91
2023 Fac PE RVU: 7.01

RUC Recommendation: 6.83 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

15774 **Grafting of autologous fat harvested by liposuction technique to face, eyelids, mouth, neck, ears, orbits, genitalia, hands, and/or feet; each additional 25 cc injectate, or part thereof (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Tissue Grafting Procedures **Screen:** Site of Service Anomaly - 2017 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 04 **Specialty Developing Recommendation:** ASPS **First Identified:** May 2018 **2021 Medicare Utilization:** 75

2023 Work RVU: 2.41
2023 NF PE RVU: 2.74
2023 Fac PE RVU: 1.43

RUC Recommendation: 2.41 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

15777 **Implantation of biologic implant (eg, acellular dermal matrix) for soft tissue reinforcement (ie, breast, trunk) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chronic Wound Dermal Substitute **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACS, APMA, ASPS **First Identified:** April 2011 **2021 Medicare Utilization:** 7,275

2023 Work RVU: 3.65
2023 NF PE RVU: 2.03
2023 Fac PE RVU: 2.03

RUC Recommendation: 3.65 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

15778 **Implantation of absorbable mesh or other prosthesis for delayed closure of defect(s) (ie, external genitalia, perineum, abdominal wall) due to soft tissue infection or trauma**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 7.05
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.83

RUC Recommendation: 8.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

15823 **Blepharoplasty, upper eyelid; with excessive skin weighting down lid**

Global: 090 **Issue:** Upper Eyelid Blepharoplasty **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 33 **Specialty Developing Recommendation:** AAO **First Identified:** October 2009 **2021 Medicare Utilization:** 81,846

2023 Work RVU: 6.81
2023 NF PE RVU: 11.13
2023 Fac PE RVU: 8.97

RUC Recommendation: 6.81 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

16020 **Dressings and/or debridement of partial-thickness burns, initial or subsequent; small (less than 5% total body surface area)**

Global: 000 **Issue:** Dressings/ Debridement of Partial-Thickness Burns **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 08 **Specialty Developing Recommendation:** ASPS, AAFP, AAPMR, ACS, AAP **First Identified:** October 2009 **2021 Medicare Utilization:** 13,542

2023 Work RVU: 0.71
2023 NF PE RVU: 1.73
2023 Fac PE RVU: 0.82

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

16025 **Dressings and/or debridement of partial-thickness burns, initial or subsequent; medium (eg, whole face or whole extremity, or 5% to 10% total body surface area)**

Global: 000 **Issue:** Dressings/ Debridement of Partial-Thickness Burns **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 08 **Specialty Developing Recommendation:** ASPS, AAFP, AAPMR, ACS, AAP **First Identified:** October 2009 **2021 Medicare Utilization:** 1,828

2023 Work RVU: 1.74
2023 NF PE RVU: 2.67
2023 Fac PE RVU: 1.27

RUC Recommendation: 1.85 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

16030 **Dressings and/or debridement of partial-thickness burns, initial or subsequent; large (eg, more than 1 extremity, or greater than 10% total body surface area)**

Global: 000 **Issue:** Dressings/ Debridement of Partial-Thickness Burns **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACEP, ASPS, AAFP, AAPMR, ACS, AAP **First Identified:** February 2010 **2021 Medicare Utilization:** 1,085

2023 Work RVU: 2.08
2023 NF PE RVU: 3.41
2023 Fac PE RVU: 1.43

RUC Recommendation: CPT Assistant article published. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Oct 2012

17000 **Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses); first lesion**

Global: 010 **Issue:** Destruction of Premalignant Lesions **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 17 **Specialty Developing Recommendation:** AAD **First Identified:** October 2010 **2021 Medicare Utilization:** 5,622,795

2023 Work RVU: 0.61
2023 NF PE RVU: 1.34
2023 Fac PE RVU: 0.96

RUC Recommendation: 0.61 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

17003 **Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses); second through 14 lesions, each (list separately in addition to code for first lesion)**

Global: ZZZ **Issue:** Destruction of Premalignant Lesions **Screen:** Low Value-Billed in Multiple Units / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 17 **Specialty Developing Recommendation:** AAD

First Identified: October 2010 **2021 Medicare Utilization:** 18,009,083

2023 Work RVU: 0.04
2023 NF PE RVU: 0.16
2023 Fac PE RVU: 0.02

RUC Recommendation: 0.04

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

17004 **Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses), 15 or more lesions**

Global: 010 **Issue:** Destruction of Premalignant Lesions **Screen:** CMS High Expenditure Procedural Codes1 / Modifer -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 17 **Specialty Developing Recommendation:** AAD

First Identified: September 2011 **2021 Medicare Utilization:** 820,987

2023 Work RVU: 1.37
2023 NF PE RVU: 3.53
2023 Fac PE RVU: 1.41

RUC Recommendation: Remove from Modifier -51 Exempt List. 1.37

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

17106 **Destruction of cutaneous vascular proliferative lesions (eg, laser technique); less than 10 sq cm**

Global: 090 **Issue:** Destruction of Skin Lesions **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 11 **Specialty Developing Recommendation:** AAD

First Identified: February 2008 **2021 Medicare Utilization:** 3,465

2023 Work RVU: 3.69
2023 NF PE RVU: 6.17
2023 Fac PE RVU: 4.10

RUC Recommendation: 3.61

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

17107 **Destruction of cutaneous vascular proliferative lesions (eg, laser technique); 10.0 to 50.0 sq cm**

Global: 090 **Issue:** Destruction of Skin Lesions **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 11 **Specialty Developing Recommendation:** AAD **First Identified:** February 2008 **2021 Medicare Utilization:** 1,668

2023 Work RVU: 4.79
2023 NF PE RVU: 8.00
2023 Fac PE RVU: 5.32

RUC Recommendation: 4.68 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

17108 **Destruction of cutaneous vascular proliferative lesions (eg, laser technique); over 50.0 sq cm**

Global: 090 **Issue:** Destruction of Skin Lesions **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 11 **Specialty Developing Recommendation:** AAD **First Identified:** February 2008 **2021 Medicare Utilization:** 4,917

2023 Work RVU: 7.49
2023 NF PE RVU: 10.44
2023 Fac PE RVU: 7.16

RUC Recommendation: 6.37 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

17110 **Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; up to 14 lesions**

Global: 010 **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 2,645,400

2023 Work RVU: 0.70
2023 NF PE RVU: 2.64
2023 Fac PE RVU: 1.23

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

17111 **Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; 15 or more lesions**

Global: 010 **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:**

First Identified: April 2013

2021 Medicare Utilization: 129,756

2023 Work RVU: 0.97
2023 NF PE RVU: 2.91
2023 Fac PE RVU: 1.38

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

17250 **Chemical cauterization of granulation tissue (ie, proud flesh)**

Global: 000 **Issue:** Chemical Cauterization of Granulation Tissue **Screen:** High Volume Growth3 **Complete?** No

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:** AAFP, ACS, APMA

First Identified: October 2015

2021 Medicare Utilization: 248,217

2023 Work RVU: 0.50
2023 NF PE RVU: 2.05
2023 Fac PE RVU: 0.53

RUC Recommendation: Review in 3 years (Jan 2025).

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2016

Result:

17261 **Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 0.6 to 1.0 cm**

Global: 010 **Issue:** Destruction of Malignant Lesion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 26 **Specialty Developing Recommendation:** AAD, AAFP

First Identified: October 2009

2021 Medicare Utilization: 127,721

2023 Work RVU: 1.22
2023 NF PE RVU: 3.10
2023 Fac PE RVU: 1.23

RUC Recommendation: 1.22

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

17262 **Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), trunk, arms or legs; lesion diameter 1.1 to 2.0 cm**

Global: 010 **Issue:** Destruction of Malignant Lesion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 26 **Specialty Developing Recommendation:** AAD, AAFP **First Identified:** February 2010 **2021 Medicare Utilization:** 283,361

2023 Work RVU: 1.63
2023 NF PE RVU: 3.55
2023 Fac PE RVU: 1.47

RUC Recommendation: 1.63 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

17271 **Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm**

Global: 010 **Issue:** Destruction of Malignant Lesion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 26 **Specialty Developing Recommendation:** AAD, AAFP **First Identified:** February 2010 **2021 Medicare Utilization:** 46,244

2023 Work RVU: 1.54
2023 NF PE RVU: 3.29
2023 Fac PE RVU: 1.42

RUC Recommendation: 1.54 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

17272 **Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), scalp, neck, hands, feet, genitalia; lesion diameter 1.1 to 2.0 cm**

Global: 010 **Issue:** Destruction of Malignant Lesion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 26 **Specialty Developing Recommendation:** AAD, AAFP **First Identified:** February 2010 **2021 Medicare Utilization:** 75,889

2023 Work RVU: 1.82
2023 NF PE RVU: 3.65
2023 Fac PE RVU: 1.58

RUC Recommendation: 1.82 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

17281 **Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.6 to 1.0 cm**

Global: 010 **Issue:** Destruction of Malignant Lesion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 26 **Specialty Developing Recommendation:** AAD, AAFP **First Identified:** February 2010 **2021 Medicare Utilization:** 69,196

2023 Work RVU: 1.77
2023 NF PE RVU: 3.44
2023 Fac PE RVU: 1.55

RUC Recommendation: 1.77 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

17282 **Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 1.1 to 2.0 cm**

Global: 010 **Issue:** Destruction of Malignant Lesion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 26 **Specialty Developing Recommendation:** AAD, AAFP **First Identified:** October 2009 **2021 Medicare Utilization:** 69,607

2023 Work RVU: 2.09
2023 NF PE RVU: 3.86
2023 Fac PE RVU: 1.74

RUC Recommendation: 2.09 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

17311 **Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), head, neck, hands, feet, genitalia, or any location with surgery directly involving muscle, cartilage, bone, tendon, major nerves, or vessels; first stage, up to 5 tissue blocks**

Global: 000 **Issue:** Mohs Surgery **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAD **First Identified:** September 2011 **2021 Medicare Utilization:** 820,299

2023 Work RVU: 6.20
2023 NF PE RVU: 13.47
2023 Fac PE RVU: 3.66

RUC Recommendation: 6.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

17312 **Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), head, neck, hands, feet, genitalia, or any location with surgery directly involving muscle, cartilage, bone, tendon, major nerves, or vessels; each additional stage after the first stage, up to 5 tissue blocks (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Mohs Surgery **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAD

First Identified: September 2011 **2021 Medicare Utilization:** 483,735

2023 Work RVU: 3.30
2023 NF PE RVU: 8.69
2023 Fac PE RVU: 1.95
Result: Maintain

RUC Recommendation: 3.30

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

17313 **Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), of the trunk, arms, or legs; first stage, up to 5 tissue blocks**

Global: 000 **Issue:** Mohs Surgery **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAD

First Identified: January 2012 **2021 Medicare Utilization:** 158,672

2023 Work RVU: 5.56
2023 NF PE RVU: 12.94
2023 Fac PE RVU: 3.28
Result: Maintain

RUC Recommendation: 5.56

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

17314 **Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), of the trunk, arms, or legs; each additional stage after the first stage, up to 5 tissue blocks (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Mohs Surgery **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAD

First Identified: January 2012 **2021 Medicare Utilization:** 61,232

2023 Work RVU: 3.06
2023 NF PE RVU: 8.46
2023 Fac PE RVU: 1.81
Result: Maintain

RUC Recommendation: 3.06

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

17315 **Mohs micrographic technique, including removal of all gross tumor, surgical excision of tissue specimens, mapping, color coding of specimens, microscopic examination of specimens by the surgeon, and histopathologic preparation including routine stain(s) (eg, hematoxylin and eosin, toluidine blue), each additional block after the first 5 tissue blocks, any stage (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Mohs Surgery **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAD **First Identified:** January 2012 **2021 Medicare Utilization:** 18,666

2023 Work RVU: 0.87
2023 NF PE RVU: 1.39
2023 Fac PE RVU: 0.52
Result: Maintain

RUC Recommendation: 0.87

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

19020 **Mastotomy with exploration or drainage of abscess, deep**

Global: 090 **Issue:** Mastotomy **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,246

2023 Work RVU: 3.83
2023 NF PE RVU: 9.45
2023 Fac PE RVU: 4.70
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5, remove hospital visits

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

19081 **Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; first lesion, including stereotactic guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 58,442

2023 Work RVU: 3.29
2023 NF PE RVU: 11.55
2023 Fac PE RVU: 1.19
Result: Decrease

RUC Recommendation: 3.29

Referred to CPT October 2012
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19082 **Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; each additional lesion, including stereotactic guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 4,569

2023 Work RVU: 1.65
2023 NF PE RVU: 9.94
2023 Fac PE RVU: 0.60

RUC Recommendation: 1.65 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19083 **Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; first lesion, including ultrasound guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 113,588

2023 Work RVU: 3.10
2023 NF PE RVU: 11.77
2023 Fac PE RVU: 1.12

RUC Recommendation: 3.10 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19084 **Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; each additional lesion, including ultrasound guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 15,183

2023 Work RVU: 1.55
2023 NF PE RVU: 9.88
2023 Fac PE RVU: 0.57

RUC Recommendation: 1.55 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19085 **Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; first lesion, including magnetic resonance guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 6,597

2023 Work RVU: 3.64
2023 NF PE RVU: 19.36
2023 Fac PE RVU: 1.32

RUC Recommendation: 3.64 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19086 **Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; each additional lesion, including magnetic resonance guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 1,477

2023 Work RVU: 1.82
2023 NF PE RVU: 16.14
2023 Fac PE RVU: 0.66

RUC Recommendation: 1.82 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19102 **Biopsy of breast; percutaneous, needle core, using imaging guidance**

Global: **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19103 **Biopsy of breast; percutaneous, automated vacuum assisted or rotating biopsy device, using imaging guidance**

Global: **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

19281 **Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; first lesion, including mammographic guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 26,026

2023 Work RVU: 2.00
2023 NF PE RVU: 5.08
2023 Fac PE RVU: 0.73

RUC Recommendation: 2.00 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19282 **Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; each additional lesion, including mammographic guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 3,373

2023 Work RVU: 1.00
2023 NF PE RVU: 4.06
2023 Fac PE RVU: 0.37

RUC Recommendation: 1.00 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19283 **Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; first lesion, including stereotactic guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 3,712

2023 Work RVU: 2.00
2023 NF PE RVU: 5.64
2023 Fac PE RVU: 0.73

RUC Recommendation: 2.00 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19284 **Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; each additional lesion, including stereotactic guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 441

2023 Work RVU: 1.00
2023 NF PE RVU: 4.67
2023 Fac PE RVU: 0.36

RUC Recommendation: 1.00 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19285 **Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; first lesion, including ultrasound guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 26,948

2023 Work RVU: 1.70
2023 NF PE RVU: 9.35
2023 Fac PE RVU: 0.62

RUC Recommendation: 1.70 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19286 **Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; each additional lesion, including ultrasound guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 2,285

2023 Work RVU: 0.85
2023 NF PE RVU: 8.27
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.85 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19287 **Placement of breast localization device(s) (eg clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; first lesion, including magnetic resonance guidance**

Global: 000 **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 304

2023 Work RVU: 2.55
2023 NF PE RVU: 16.59
2023 Fac PE RVU: 0.93

RUC Recommendation: 3.02 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

19288 **Placement of breast localization device(s) (eg clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; each additional lesion, including magnetic resonance guidance (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:** 62

2023 Work RVU: 1.28
2023 NF PE RVU: 13.60
2023 Fac PE RVU: 0.47

RUC Recommendation: 1.51 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19290 **Preoperative placement of needle localization wire, breast;**

Global: **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

19291 **Preoperative placement of needle localization wire, breast; each additional lesion (List separately in addition to code for primary procedure)**

Global: **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

19295 **Image guided placement, metallic localization clip, percutaneous, during breast biopsy/aspiration (List separately in addition to code for primary procedure)**

Global: **Issue:** Breast Biopsy **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, ACS, ASBS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19303 **Mastectomy, simple, complete**

Global: 090 **Issue:** Mastectomy **Screen:** Site of Service Anomaly - 2015 / High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACS, ASBS **First Identified:** October 2015 **2021 Medicare Utilization:** 23,640

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.01
Result: Decrease

RUC Recommendation: 15.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

19307 **Mastectomy, modified radical, including axillary lymph nodes, with or without pectoralis minor muscle, but excluding pectoralis major muscle**

Global: 090 **Issue:** Modified Radical Mastectomy **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 22 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 4,668

2023 Work RVU: 17.99
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.93
Result: Decrease

RUC Recommendation: 17.99

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

19318 **Breast reduction**

Global: 090 **Issue:** Mammaplasty **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 6,789

2023 Work RVU: 16.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.73
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

19340 **Insertion of breast implant on same day of mastectomy (ie, immediate)**

Global: 090 **Issue:** Breast Implant/Expander Placement **Screen:** CMS Request / Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 05 **Specialty Developing Recommendation:** ASPS

First Identified: October 2009 **2021 Medicare Utilization:** 3,355

2023 Work RVU: 10.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.28

RUC Recommendation: 11.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

19357 **Tissue expander placement in breast reconstruction, including subsequent expansion(s)**

Global: 090 **Issue:** Breast Implant/Expander Placement **Screen:** Site of Service Anomaly / 090-Day Global Post-Operative Visits / Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 05 **Specialty Developing Recommendation:** ASPS

First Identified: September 2007 **2021 Medicare Utilization:** 5,825

2023 Work RVU: 14.84
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.12

RUC Recommendation: 15.36

Referred to CPT October 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

20000 **Deleted from CPT**

Global: **Issue:** Incision of Abcess **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, AAOS

First Identified: September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT June 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

20005 **Incision and drainage of soft tissue abscess, subfascial (ie, involves the soft tissue below the deep fascia)**

Global: **Issue:** Incision of Deep Abscess **Screen:** Site of Service Anomaly / Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** ACS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

20220 **Biopsy, bone, trocar, or needle; superficial (eg, ilium, sternum, spinous process, ribs)**

Global: 000 **Issue:** Bone Biopsy Trocar/Needle **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 22 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2018 **2021 Medicare Utilization:** 11,940

2023 Work RVU: 1.65
2023 NF PE RVU: 5.27
2023 Fac PE RVU: 0.77

RUC Recommendation: 1.93 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

20225 **Biopsy, bone, trocar, or needle; deep (eg, vertebral body, femur)**

Global: 000 **Issue:** Bone Biopsy Trocar/Needle **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 22 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2017 **2021 Medicare Utilization:** 12,681

2023 Work RVU: 2.45
2023 NF PE RVU: 8.91
2023 Fac PE RVU: 1.11

RUC Recommendation: 3.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

20240 **Biopsy, bone, open; superficial (eg, sternum, spinous process, rib, patella, olecranon process, calcaneus, tarsal, metatarsal, carpal, metacarpal, phalanx)**

Global: 000 **Issue:** Bone Biopsy Excisional **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 04 **Specialty Developing Recommendation:** AAOS, APMA **First Identified:** April 2014 **2021 Medicare Utilization:** 6,890

2023 Work RVU: 2.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.24

RUC Recommendation: 3.73 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

20245 **Biopsy, bone, open; deep (eg, humeral shaft, ischium, femoral shaft)** **Global:** 000 **Issue:** Bone Biopsy Excisional **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 04 **Specialty Developing Recommendation:** AAOS **First Identified:** January 2014 **2021 Medicare Utilization:** 4,386

2023 Work RVU: 6.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.20

RUC Recommendation: 6.50 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

20525 **Removal of foreign body in muscle or tendon sheath; deep or complicated** **Global:** 010 **Issue:** Removal of Foreign Body **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,390

2023 Work RVU: 3.54
2023 NF PE RVU: 9.82
2023 Fac PE RVU: 3.20

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

20526 **Injection, therapeutic (eg, local anesthetic, corticosteroid), carpal tunnel** **Global:** 000 **Issue:** RAW **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** July 2016 **2021 Medicare Utilization:** 96,094

2023 Work RVU: 0.94
2023 NF PE RVU: 1.34
2023 Fac PE RVU: 0.58

RUC Recommendation: Remove fromm screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

20550 **Injection(s); single tendon sheath, or ligament, aponeurosis (eg, plantar "fascia")** **Global:** 000 **Issue:** Injection of Tendon **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, AAPM&R, ACRh, APMA, ASSH **First Identified:** October 2008 **2021 Medicare Utilization:** 816,296

2023 Work RVU: 0.75
2023 NF PE RVU: 0.88
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

20551 **Injection(s); single tendon origin/insertion** **Global:** 000 **Issue:** Therapeutic Injection Carpal Tunnel **Screen:** CMS Fastest Growing / CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 10 **Specialty Developing Recommendation:** AAPMR, AAOS, ACRh, APMA, ASSH **First Identified:** October 2008 **2021 Medicare Utilization:** 136,149

2023 Work RVU: 0.75
2023 NF PE RVU: 0.88
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

20552 **Injection(s); single or multiple trigger point(s), 1 or 2 muscle(s)** **Global:** 000 **Issue:** **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 28 **Specialty Developing Recommendation:** AAPM&R, ACRh, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 293,265

2023 Work RVU: 0.66
2023 NF PE RVU: 0.84
2023 Fac PE RVU: 0.36

RUC Recommendation: 0.66 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

20553 **Injection(s); single or multiple trigger point(s), 3 or more muscles**

Global: 000 **Issue:** **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 28 **Specialty Developing Recommendation:** AAPM&R, ACRh, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 353,939

2023 Work RVU: 0.75
2023 NF PE RVU: 0.98
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

20600 **Arthrocentesis, aspiration and/or injection, small joint or bursa (eg, fingers, toes); without ultrasound guidance**

Global: 000 **Issue:** Arthrocentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 04 **Specialty Developing Recommendation:** AAFP, AAOS, ACR, ACRh, APMA, ASSH **First Identified:** February 2010 **2021 Medicare Utilization:** 429,910

2023 Work RVU: 0.66
2023 NF PE RVU: 0.84
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.66 and new PE inputs **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

20604 **Arthrocentesis, aspiration and/or injection, small joint or bursa (eg, fingers, toes); with ultrasound guidance, with permanent recording and reporting**

Global: 000 **Issue:** Arthrocentesis **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 04 **Specialty Developing Recommendation:** AAFP, AAOS, ACR, ACRh, APMA, ASSH **First Identified:** July 2013 **2021 Medicare Utilization:** 50,301

2023 Work RVU: 0.89
2023 NF PE RVU: 1.47
2023 Fac PE RVU: 0.37

RUC Recommendation: 0.89 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

20605 **Arthrocentesis, aspiration and/or injection, intermediate joint or bursa (eg, temporomandibular, acromioclavicular, wrist, elbow or ankle, olecranon bursa); without ultrasound guidance**

Global: 000 **Issue:** Arthrocentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 04 **Specialty Developing Recommendation:** AAFP, AAOS, ACR, ACRh, APMA, ASSH **First Identified:** October 2009 **2021 Medicare Utilization:** 402,457

2023 Work RVU: 0.68
2023 NF PE RVU: 0.87
2023 Fac PE RVU: 0.32

RUC Recommendation: 0.68 and new PE inputs **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

20606 **Arthrocentesis, aspiration and/or injection, intermediate joint or bursa (eg, temporomandibular, acromioclavicular, wrist, elbow or ankle, olecranon bursa); with ultrasound guidance, with permanent recording and reporting**

Global: 000 **Issue:** Arthrocentesis **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 04 **Specialty Developing Recommendation:** AAFP, AAOS, ACR, ACRh, APMA, ASSH **First Identified:** July 2013 **2021 Medicare Utilization:** 57,211

2023 Work RVU: 1.00
2023 NF PE RVU: 1.55
2023 Fac PE RVU: 0.42

RUC Recommendation: 1.00 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

20610 **Arthrocentesis, aspiration and/or injection, major joint or bursa (eg, shoulder, hip, knee, subacromial bursa); without ultrasound guidance**

Global: 000 **Issue:** Arthrocentesis **Screen:** Harvard Valued - Utilization over 100,000 / MPC List / CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 04 **Specialty Developing Recommendation:** AAFP, AAOS, ACR, ACRh, APMA, ASSH **First Identified:** February 2010 **2021 Medicare Utilization:** 5,959,151

2023 Work RVU: 0.79
2023 NF PE RVU: 1.02
2023 Fac PE RVU: 0.43

RUC Recommendation: 0.79 and new PE inputs **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

20611 **Arthrocentesis, aspiration and/or injection, major joint or bursa (eg, shoulder, hip, knee, subacromial bursa); with ultrasound guidance, with permanent recording and reporting**

Global: 000 **Issue:** Arthrocentesis **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 04 **Specialty Developing Recommendation:** AAFP, AAOS, ACR, ACRh, APMA, ASSH **First Identified:** July 2013 **2021 Medicare Utilization:** 1,095,993

2023 Work RVU: 1.10
2023 NF PE RVU: 1.72
2023 Fac PE RVU: 0.51

RUC Recommendation: 1.10 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

20612 **Aspiration and/or injection of ganglion cyst(s) any location**

Global: 000 **Issue:** RAW **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** July 2016 **2021 Medicare Utilization:** 25,152

2023 Work RVU: 0.70
2023 NF PE RVU: 1.12
2023 Fac PE RVU: 0.42

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

20680 **Removal of implant; deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, APMA **First Identified:** January 2014 **2021 Medicare Utilization:** 48,037

2023 Work RVU: 5.96
2023 NF PE RVU: 11.09
2023 Fac PE RVU: 5.58

RUC Recommendation: 5.96 and adjustments to pre-service time package 3. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

20692 **Application of a multiplane (pins or wires in more than 1 plane), unilateral, external fixation system (eg, ilizarov, monticelli type)**

Global: 090 **Issue:** RAW **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 52 **Specialty Developing Recommendation:**

First Identified: January 2014 **2021 Medicare Utilization:** 2,999

2023 Work RVU: 16.27
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.54

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

20694 **Removal, under anesthesia, of external fixation system**

Global: 090 **Issue:** External Fixation **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS

First Identified: September 2007 **2021 Medicare Utilization:** 5,650

2023 Work RVU: 4.28
2023 NF PE RVU: 7.93
2023 Fac PE RVU: 5.22

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

20700 **Manual preparation and insertion of drug-delivery device(s), deep (eg, subfascial) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Drug Delivery Implant Procedures **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, AUA

First Identified: May 2018 **2021 Medicare Utilization:** 1,045

2023 Work RVU: 1.50
2023 NF PE RVU: 0.74
2023 Fac PE RVU: 0.74

RUC Recommendation: 1.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

20701 **Removal of drug-delivery device(s), deep (eg, subfascial) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Drug Delivery Implant Procedures **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, AUA

First Identified: May 2018 **2021 Medicare Utilization:** 230

2023 Work RVU: 1.13
2023 NF PE RVU: 0.57
2023 Fac PE RVU: 0.57

RUC Recommendation: 1.13

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

20702 **Manual preparation and insertion of drug-delivery device(s), intramedullary (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Drug Delivery Implant Procedures **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, AUA **First Identified:** May 2018 **2021 Medicare Utilization:** 478

2023 Work RVU: 2.50 **2023 NF PE RVU:** 1.24 **2023 Fac PE RVU:** 1.24

RUC Recommendation: 2.50 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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20703 **Removal of drug-delivery device(s), intramedullary (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Drug Delivery Implant Procedures **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, AUA **First Identified:** May 2018 **2021 Medicare Utilization:** 94

2023 Work RVU: 1.80 **2023 NF PE RVU:** 0.90 **2023 Fac PE RVU:** 0.90

RUC Recommendation: 1.80 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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20704 **Manual preparation and insertion of drug-delivery device(s), intra-articular (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Drug Delivery Implant Procedures **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, AUA **First Identified:** May 2018 **2021 Medicare Utilization:** 390

2023 Work RVU: 2.60 **2023 NF PE RVU:** 1.27 **2023 Fac PE RVU:** 1.27

RUC Recommendation: 2.60 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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20705 **Removal of drug-delivery device(s), intra-articular (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Drug Delivery Implant Procedures **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAOS, AUA **First Identified:** May 2018 **2021 Medicare Utilization:** 118

2023 Work RVU: 2.15 **2023 NF PE RVU:** 1.12 **2023 Fac PE RVU:** 1.12

RUC Recommendation: 2.15 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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Status Report: CMS Requests and Relativity Assessment Issues

20900 **Bone graft, any donor area; minor or small (eg, dowel or button)** **Global:** 000 **Issue:** Bone Graft Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 29 **Specialty Developing Recommendation:** AOFAS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,243

2023 Work RVU: 3.00
2023 NF PE RVU: 8.24
2023 Fac PE RVU: 1.89

RUC Recommendation: 3.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

20902 **Bone graft, any donor area; major or large** **Global:** 000 **Issue:** Bone Graft Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 29 **Specialty Developing Recommendation:** AOFAS, AAOS **First Identified:** April 2008 **2021 Medicare Utilization:** 4,148

2023 Work RVU: 4.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.79

RUC Recommendation: 4.58 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

20926 **Tissue grafts, other (eg, paratenon, fat, dermis)** **Global:** **Issue:** Tissue Grafting Procedures **Screen:** CMS Fastest Growing / Site of Service Anomaly - 2017 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 04 **Specialty Developing Recommendation:** AAOS, ASPS, AANS, CNS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Deleted for 2020

21015 **Radical resection of tumor (eg, sarcoma), soft tissue of face or scalp; less than 2 cm** **Global:** 090 **Issue:** Radical Resection of Soft Tissue Tumor **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 6 **Specialty Developing Recommendation:** ACS, AAOS, AAO-HNS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 355

2023 Work RVU: 9.89
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.38

RUC Recommendation: 9.71 **Referred to CPT** June 2008 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

21025 **Excision of bone (eg, for osteomyelitis or bone abscess); mandible** **Global:** 090 **Issue:** Excision of Bone – Mandible **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 61 **Specialty Developing Recommendation:** AAOMS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,293

2023 Work RVU: 10.03
2023 NF PE RVU: 12.56
2023 Fac PE RVU: 8.63

RUC Recommendation: 10.03 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

21495 **Open treatment of hyoid fracture** **Global:** **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

21557 **Radical resection of tumor (eg, sarcoma), soft tissue of neck or anterior thorax; less than 5 cm** **Global:** 090 **Issue:** Radical Resection of Soft Tissue Tumor **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 6 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 366

2023 Work RVU: 14.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.77

RUC Recommendation: 14.57 **Referred to CPT** June 2008 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

21800 **Closed treatment of rib fracture, uncomplicated, each** **Global:** **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

21805 **Open treatment of rib fracture without fixation, each**

Global: **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

21810 **Treatment of rib fracture requiring external fixation (flail chest)**

Global: **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

21811 **Open treatment of rib fracture(s) with internal fixation, includes thoracoscopic visualization when performed, unilateral; 1-3 ribs**

Global: 000 **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 447

2023 Work RVU: 10.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.26

RUC Recommendation: 19.55 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

21812 **Open treatment of rib fracture(s) with internal fixation, includes thoracoscopic visualization when performed, unilateral; 4-6 ribs**

Global: 000 **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 537

2023 Work RVU: 13.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.27

RUC Recommendation: 25.00 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

21813 **Open treatment of rib fracture(s) with internal fixation, includes thoracoscopic visualization when performed, unilateral; 7 or more ribs**

Global: 000 **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 70

2023 Work RVU: 17.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.11

RUC Recommendation: 35.00 **Referred to CPT** October 2013 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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21820 **Closed treatment of sternum fracture**

Global: 090 **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 / Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** January 2014 **2021 Medicare Utilization:** 145

2023 Work RVU: 1.36
2023 NF PE RVU: 2.96
2023 Fac PE RVU: 2.89

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** October 2013 **Referred to CPT Asst** ☑ **Published in CPT Asst:** Jan 2018 **Result:** PE Only

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21825 **Open treatment of sternum fracture with or without skeletal fixation**

Global: 090 **Issue:** Internal Fixation of Rib Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 05 **Specialty Developing Recommendation:** STS, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 538

2023 Work RVU: 7.76
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.93

RUC Recommendation: Unrelated to the family **Referred to CPT** October 2013 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

21935 **Radical resection of tumor (eg, sarcoma), soft tissue of back or flank; less than 5 cm**

Global: 090 **Issue:** Radical Resection of Soft Tissue Tumor **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 6 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 191

2023 Work RVU: 15.72
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.23

RUC Recommendation: 15.54 **Referred to CPT** June 2008 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22214 **Osteotomy of spine, posterior or posterolateral approach, 1 vertebral segment; lumbar**

Global: 090 **Issue:** RAW **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, NASS, AANS/CNS **First Identified:** October 2008 **2021 Medicare Utilization:** 7,078

2023 Work RVU: 21.02
2023 NF PE RVU: NA
2023 Fac PE RVU: 18.38

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

22305 **Closed treatment of vertebral process fracture(s)**

Global: **Issue:** Closed treatment of vertebral process fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 23 **Specialty Developing Recommendation:** AANS/CNS, NASS **First Identified:** July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

22310 **Closed treatment of vertebral body fracture(s), without manipulation, requiring and including casting or bracing**

Global: 090 **Issue:** Closed Treatment Vertebral Fracture **Screen:** Negative IWPUT / Site of Service Anomaly - 2019 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 23 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** April 2017 **2021 Medicare Utilization:** 5,433

2023 Work RVU: 3.45
2023 NF PE RVU: 5.21
2023 Fac PE RVU: 4.79

RUC Recommendation: 3.45. Flag for Rereview **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22510 **Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; cervicothoracic**

Global: 010 **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 2,333

2023 Work RVU: 7.90
2023 NF PE RVU: 45.90
2023 Fac PE RVU: 3.81

RUC Recommendation: 8.15 **Referred to CPT** February 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22511 **Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; lumbosacral**

Global: 010 **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 2,791

2023 Work RVU: 7.33
2023 NF PE RVU: 46.28
2023 Fac PE RVU: 3.68

RUC Recommendation: 8.05 **Referred to CPT** February 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22512 **Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; each additional cervicothoracic or lumbosacral vertebral body (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 1,724

2023 Work RVU: 4.00
2023 NF PE RVU: 17.39
2023 Fac PE RVU: 1.44

RUC Recommendation: 4.00 **Referred to CPT** February 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22513 **Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; thoracic**

Global: 010 **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 20,004

2023 Work RVU: 8.65
2023 NF PE RVU: 163.54
2023 Fac PE RVU: 4.90

RUC Recommendation: 8.90 **Referred to CPT** February 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22514 **Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; lumbar**

Global: 010 **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 22,125

2023 Work RVU: 7.99
2023 NF PE RVU: 163.48
2023 Fac PE RVU: 4.66

RUC Recommendation: 8.24 **Referred to CPT** February 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22515 **Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; each additional thoracic or lumbar vertebral body (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 13,352

2023 Work RVU: 4.00
2023 NF PE RVU: 84.49
2023 Fac PE RVU: 1.67

RUC Recommendation: 4.00 **Referred to CPT** February 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22520 **Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection; thoracic**

Global: **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** CMS Request - Practice Expense Review / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

22521 **Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection; lumbar**

Global: **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Site of Service Anomaly (99238-Only); CMS Request - PE Inputs / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

22522 **Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection; each additional thoracic or lumbar vertebral body (List separately in addition to code for primary procedure)**

Global: **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22523 **Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); thoracic**

Global: **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** CMS Request: PE Review **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

22524 **Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); lumbar**

Global: **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** CMS Request: PE Review **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

22525 **Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); each additional thoracic or lumbar vertebral body (List separately in addition to code for primary procedure)**

Global: **Issue:** Percutaneous Vertebroplasty and Augementation **Screen:** CMS Request: PE Review **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:** AANS, CNS, AAOS, NASS, ACR, SIR, ASNR **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22533 **Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar**

Global: 090 **Issue:** Arthrodesis **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 51 **Specialty Developing Recommendation:** AAOS, NASS, AANS/CNS **First Identified:** October 2008 **2021 Medicare Utilization:** 626

2023 Work RVU: 24.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 18.65

RUC Recommendation: Remove from screen. CPT Assistant article published.

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Oct 2009

Result: Remove from Screen

22551 **Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below c2**

Global: 090 **Issue:** Arthrodesis **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 05 **Specialty Developing Recommendation:** NASS, AANS/CNS, AAOS **First Identified:** February 2010 **2021 Medicare Utilization:** 32,408

2023 Work RVU: 25.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 18.00

RUC Recommendation: 24.50

Referred to CPT October 2009

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

22552 **Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below c2, each additional interspace (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Arthrodesis **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 05 **Specialty Developing Recommendation:** NASS, AANS/CNS, AAOS **First Identified:** February 2010 **2021 Medicare Utilization:** 29,355

2023 Work RVU: 6.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.22

RUC Recommendation: 6.50

Referred to CPT October 2009

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

22554 **Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); cervical below c2**

Global: 090 **Issue:** Arthrodesis **Screen:** Codes Reported Together 95% or More / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** February 2008 **2021 Medicare Utilization:** 3,525

2023 Work RVU: 17.69
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.61

RUC Recommendation: Refer to CPT Assistant. 17.69 **Referred to CPT** October 2009 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:**

22558 **Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar**

Global: 090 **Issue:** Vertebral Corpectomy with Arthrodesis **Screen:** High Volume Growth2 / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** April 2013 **2021 Medicare Utilization:** 19,532

2023 Work RVU: 23.53
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.89

RUC Recommendation: Maintain **Referred to CPT** September 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

22585 **Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); each additional interspace (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Arthrodesis **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 05 **Specialty Developing Recommendation:** NASS, AANS/CNS **First Identified:** February 2010 **2021 Medicare Utilization:** 15,241

2023 Work RVU: 5.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.57

RUC Recommendation: Remove from screen **Referred to CPT** October 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22612 **Arthrodesis, posterior or posterolateral technique, single interspace; lumbar (with lateral transverse technique, when performed)**

Global: 090 **Issue:** Lumbar Arthrodesis **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 / Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** February 2010 **2021 Medicare Utilization:** 41,571

2023 Work RVU: 23.53
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.40
Result: Maintain

RUC Recommendation: Review utilization data October 2015. 23.53. Maintain work RVU and adjust the times from pre-time package 4.

Referred to CPT October 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

22614 **Arthrodesis, posterior or posterolateral technique, single interspace; each additional interspace (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Lumbar Arthrodesis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 04 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** February 2010 **2021 Medicare Utilization:** 141,438

2023 Work RVU: 6.43
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.20
Result: Decrease

RUC Recommendation: 6.43

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

22630 **Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace, lumbar;**

Global: 090 **Issue:** Lumbar Arthrodesis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 04 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** February 2010 **2021 Medicare Utilization:** 4,711

2023 Work RVU: 22.09
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.17
Result: Maintain

RUC Recommendation: 22.09

Referred to CPT October 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22632 **Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace, lumbar; each additional interspace (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Lumbar Arthrodesis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 04 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** February 2010 **2021 Medicare Utilization:** 1,744

2023 Work RVU: 5.22
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.57

RUC Recommendation: 5.22 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22633 **Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy sufficient to prepare interspace (other than for decompression), single interspace, lumbar;**

Global: 090 **Issue:** Lumbar Arthrodesis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 04 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** February 2010 **2021 Medicare Utilization:** 34,099

2023 Work RVU: 26.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 19.26

RUC Recommendation: 27.75 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

22634 **Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy sufficient to prepare interspace (other than for decompression), single interspace, lumbar; each additional interspace (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Lumbar Arthrodesis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 04 **Specialty Developing Recommendation:** AANS/CNS, AAOS, NASS **First Identified:** February 2010 **2021 Medicare Utilization:** 13,188

2023 Work RVU: 7.96
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.96

RUC Recommendation: 8.16 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22843 **Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 7 to 12 vertebral segments (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Spine Fixation Device **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** AAOS, NASS, AANS **First Identified:** October 2008 **2021 Medicare Utilization:** 9,010

2023 Work RVU: 13.44
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.70

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

22849 **Reinsertion of spinal fixation device**

Global: 090 **Issue:** RAW **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, NASS, AANS/CNS **First Identified:** October 2008 **2021 Medicare Utilization:** 3,692

2023 Work RVU: 19.17
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.45

RUC Recommendation: Maintain **Referred to CPT** June 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

22851 **Application of intervertebral biomechanical device(s) (eg, synthetic cage(s), methylmethacrylate) to vertebral defect or interspace (List separately in addition to code for primary procedure)**

Global: **Issue:** Biomechancial Device Insertion-Intervertebral, Interbody **Screen:** CMS Fastest Growing / High Volume Growth1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 06 **Specialty Developing Recommendation:** AANS/CNS, NASS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22859 **Insertion of intervertebral biomechanical device(s) (eg, synthetic cage, mesh, methylmethacrylate) to intervertebral disc space or vertebral body defect without interbody arthrodesis, each contiguous defect (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Biomechancial Device Insertion-Intervertebral, Interbody **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 06 **Specialty Developing Recommendation:** AAOS, AANS, CNS, ISASS, NASS **First Identified:** October 2015 **2021 Medicare Utilization:** 1,019

2023 Work RVU: 5.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.74
Result: Decrease

RUC Recommendation: 6.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

22867 **Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; single level**

Global: 090 **Issue:** Insertion of Interlaminar/Interspinous Device **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 26 **Specialty Developing Recommendation:** AAOS, AANS, CNS, ISASS, NASS **First Identified:** October 2015 **2021 Medicare Utilization:** 1,325

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.64
Result: Increase

RUC Recommendation: 15.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

22868 **Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; second level (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Biomechancial Device Insertion-Intervertebral, Interbody **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 06 **Specialty Developing Recommendation:** AAOS, AANS, CNS, ISASS, NASS **First Identified:** October 2015 **2021 Medicare Utilization:** 216

2023 Work RVU: 4.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.98
Result: Decrease

RUC Recommendation: 5.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

22900 **Excision, tumor, soft tissue of abdominal wall, subfascial (eg, intramuscular); less than 5 cm**

Global: 090 **Issue:** Subfascial Excision of Soft Tissue Tumor **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 5 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 459

2023 Work RVU: 8.32
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.76

RUC Recommendation: 8.21 **Referred to CPT** June 2008 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

23076 **Excision, tumor, soft tissue of shoulder area, subfascial (eg, intramuscular); less than 5 cm**

Global: 090 **Issue:** Subfascial Excision of Soft Tissue Tumor **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 5 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 529

2023 Work RVU: 7.41
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.36

RUC Recommendation: 7.28 **Referred to CPT** June 2008 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

23120 **Claviculectomy; partial**

Global: 090 **Issue:** Claviculectomy **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 30 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,394

2023 Work RVU: 7.39
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.91

RUC Recommendation: 7.23 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

23130 **Acromioplasty or acromionectomy, partial, with or without coracoacromial ligament release**

Global: 090 **Issue:** Removal of Bone **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,106

2023 Work RVU: 7.77
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.38

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

23350 **Injection procedure for shoulder arthrography or enhanced ct/mri shoulder arthrography**

Global: 000 **Issue:** Injection for Shoulder X-Ray **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 13 **Specialty Developing Recommendation:** ACR, AAOS **First Identified:** April 2011 **2021 Medicare Utilization:** 28,470

2023 Work RVU: 1.00
2023 NF PE RVU: 3.86
2023 Fac PE RVU: 0.38

RUC Recommendation: 1.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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23405 **Tenotomy, shoulder area; single tendon**

Global: 090 **Issue:** Tenotomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,822

2023 Work RVU: 8.54
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.51

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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23410 **Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; acute**

Global: 090 **Issue:** Rotator Cuff **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 12 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 2,475

2023 Work RVU: 11.39
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.05

RUC Recommendation: 11.23 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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23412 **Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; chronic**

Global: 090 **Issue:** Rotator Cuff **Screen:** Site of Service Anomaly / Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 8,050

2023 Work RVU: 11.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.35

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4. 11.77 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

23415 **Coracoacromial ligament release, with or without acromioplasty** **Global:** 090 **Issue:** Shoulder Ligament Release **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 62 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 308

2023 Work RVU: 9.23
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.00
Result: Decrease

RUC Recommendation: 9.23 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

23420 **Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)** **Global:** 090 **Issue:** Rotator Cuff **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 12 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,285

2023 Work RVU: 13.54
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.04
Result: Decrease

RUC Recommendation: 13.35 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

23430 **Tenodesis of long tendon of biceps** **Global:** 090 **Issue:** Tenodesis **Screen:** CMS Fastest Growing, Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 12 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 20,034

2023 Work RVU: 10.17
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.30
Result: Maintain

RUC Recommendation: 10.17 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

23440 **Resection or transplantation of long tendon of biceps** **Global:** 090 **Issue:** Tendon Transfer **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,186

2023 Work RVU: 10.64
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.03
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

23472 **Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement (eg, total shoulder))**

Global: 090 **Issue:** Arthroplasty **Screen:** CMS Fastest Growing / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** AAOS **First Identified:** October 2008 **2021 Medicare Utilization:** 63,266

2023 Work RVU: 22.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.78

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

23540 **Closed treatment of acromioclavicular dislocation; without manipulation**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 250

2023 Work RVU: 2.36
2023 NF PE RVU: 4.57
2023 Fac PE RVU: 4.48

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

23600 **Closed treatment of proximal humeral (surgical or anatomical neck) fracture; without manipulation**

Global: 090 **Issue:** Treatment of Humerus Fracture **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 14 **Specialty Developing Recommendation:** AAOS **First Identified:** April 2011 **2021 Medicare Utilization:** 28,693

2023 Work RVU: 3.00
2023 NF PE RVU: 6.69
2023 Fac PE RVU: 6.15

RUC Recommendation: 3.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

23625 **Closed treatment of greater humeral tuberosity fracture; with manipulation**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 136

2023 Work RVU: 4.10
2023 NF PE RVU: 7.01
2023 Fac PE RVU: 5.99

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

23650 **Closed treatment of shoulder dislocation, with manipulation; without anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 13,014

2023 Work RVU: 3.53
2023 NF PE RVU: 5.96
2023 Fac PE RVU: 4.96

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

23655 **Closed treatment of shoulder dislocation, with manipulation; requiring anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 2,615

2023 Work RVU: 4.76
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.75

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

23665 **Closed treatment of shoulder dislocation, with fracture of greater humeral tuberosity, with manipulation** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 400

2023 Work RVU: 4.66
2023 NF PE RVU: 7.74
2023 Fac PE RVU: 6.65

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

24505 **Closed treatment of humeral shaft fracture; with manipulation, with or without skeletal traction** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 696

2023 Work RVU: 5.39
2023 NF PE RVU: 8.98
2023 Fac PE RVU: 7.38

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

24600 **Treatment of closed elbow dislocation; without anesthesia**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 1,098

2023 Work RVU: 4.37
2023 NF PE RVU: 6.36
2023 Fac PE RVU: 5.25

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

24605 **Treatment of closed elbow dislocation; requiring anesthesia**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 382

2023 Work RVU: 5.64
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.80

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

25116 **Radical excision of bursa, synovia of wrist, or forearm tendon sheaths (eg, tenosynovitis, fungus, tbc, or other granulomas, rheumatoid arthritis); extensors, with or without transposition of dorsal retinaculum**

Global: 090 **Issue:** Forearm Excision **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 63 **Specialty Developing Recommendation:** ASSH, AAOS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 897

2023 Work RVU: 7.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.34

RUC Recommendation: 7.56 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

25210 **Carpectomy; 1 bone**

Global: 090 **Issue:** Carpectomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 2,946

2023 Work RVU: 6.12
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.72

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

25260 **Repair, tendon or muscle, flexor, forearm and/or wrist; primary, single, each tendon**

Global: 090 **Issue:** Tendon Repair **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 781

2023 Work RVU: 8.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.67
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

25280 **Lengthening or shortening of flexor or extensor tendon, forearm and/or wrist, single, each tendon**

Global: 090 **Issue:** Tendon Repair **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,573

2023 Work RVU: 7.39
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.40
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

25310 **Tendon transplantation or transfer, flexor or extensor, forearm and/or wrist, single; each tendon**

Global: 090 **Issue:** Forearm Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 15 **Specialty Developing Recommendation:** ASSH, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 6,429

2023 Work RVU: 8.08
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.23
Result: Decrease

RUC Recommendation: 7.94

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

25447 **Arthroplasty, interposition, intercarpal or carpometacarpal joints** **Global:** 090 **Issue:** RAW **Screen:** Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** April 2022 **2021 Medicare Utilization:** 19,236

2023 Work RVU: 11.14
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.88

RUC Recommendation: Refer to CPT for code bundling solution **Referred to CPT** May 2023 **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

25565 **Closed treatment of radial and ulnar shaft fractures; with manipulation** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 509

2023 Work RVU: 5.85
2023 NF PE RVU: 8.94
2023 Fac PE RVU: 7.24

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

25605 **Closed treatment of distal radial fracture (eg, colles or smith type) or epiphyseal separation, includes closed treatment of fracture of ulnar styloid, when performed; with manipulation** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 18,717

2023 Work RVU: 6.25
2023 NF PE RVU: 9.05
2023 Fac PE RVU: 8.13

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

25606 **Percutaneous skeletal fixation of distal radial fracture or epiphyseal separation** **Global:** 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** September 2014 **2021 Medicare Utilization:** 1,217

2023 Work RVU: 8.31
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.29

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 3.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

25607 **Open treatment of distal radial extra-articular fracture or epiphyseal separation, with internal fixation** **Global:** 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** September 2014 **2021 Medicare Utilization:** 8,346

2023 Work RVU: 9.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.96

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 3.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

25608 **Open treatment of distal radial intra-articular fracture or epiphyseal separation; with internal fixation of 2 fragments** **Global:** 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** September 2014 **2021 Medicare Utilization:** 6,610

2023 Work RVU: 11.07
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.77

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 3.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

25609 **Open treatment of distal radial intra-articular fracture or epiphyseal separation; with internal fixation of 3 or more fragments**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** January 2014 **2021 Medicare Utilization:** 18,378

2023 Work RVU: 14.38
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.55

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 3.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

25675 **Closed treatment of distal radioulnar dislocation with manipulation**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 424

2023 Work RVU: 4.89
2023 NF PE RVU: 8.15
2023 Fac PE RVU: 6.76

RUC Recommendation: PE Clinical staff pre-time revised

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Result: PE Only

26020 **Drainage of tendon sheath, digit and/or palm, each**

Global: 090 **Issue:** Tendon Sheath Procedures **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 07 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** April 2017 **2021 Medicare Utilization:** 2,089

2023 Work RVU: 6.84
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.73

RUC Recommendation: 7.79

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

26055 **Tendon sheath incision (eg, for trigger finger)**

Global: 090 **Issue:** Tendon Sheath Procedures **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 07 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** April 2017 **2021 Medicare Utilization:** 100,337

2023 Work RVU: 3.11
2023 NF PE RVU: 14.23
2023 Fac PE RVU: 5.17

RUC Recommendation: 3.75

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

26080 **Arthrotomy, with exploration, drainage, or removal of loose or foreign body; interphalangeal joint, each**

Global: 090 **Issue:** RAW **Screen:** Site of Service Anomaly / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** ASSH, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,711

2023 Work RVU: 4.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.83

RUC Recommendation: Action plan for RAW Oct 2015. Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2012

26160 **Excision of lesion of tendon sheath or joint capsule (eg, cyst, mucous cyst, or ganglion), hand or finger**

Global: 090 **Issue:** Tendon Sheath Procedures **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 07 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** April 2017 **2021 Medicare Utilization:** 16,269

2023 Work RVU: 3.57
2023 NF PE RVU: 14.45
2023 Fac PE RVU: 5.38

RUC Recommendation: 3.57 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

26356 **Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath (eg, no man's land); primary, without free graft, each tendon**

Global: 090 **Issue:** Repair Flexor Tendon **Screen:** Site of Service Anomaly (99238-Only) / 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 25 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** September 2007 **2021 Medicare Utilization:** 1,079

2023 Work RVU: 9.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.76

RUC Recommendation: 10.03 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

26357 **Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath (eg, no man's land); secondary, without free graft, each tendon**

Global: 090 **Issue:** Repair Flexor Tendon **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 25 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** April 2014 **2021 Medicare Utilization:** 74

2023 Work RVU: 11.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.71

RUC Recommendation: 11.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

26358 **Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath (eg, no man's land); secondary, with free graft (includes obtaining graft), each tendon**

Global: 090 **Issue:** Repair Flexor Tendon **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 25 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** April 2014 **2021 Medicare Utilization:** 45

2023 Work RVU: 12.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.53

RUC Recommendation: 13.10 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

26480 **Transfer or transplant of tendon, carpometacarpal area or dorsum of hand; without free graft, each tendon**

Global: 090 **Issue:** Tendon Transfer **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** October 2008 **2021 Medicare Utilization:** 10,266

2023 Work RVU: 6.90
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.76

RUC Recommendation: Refer to CPT for code bundling solution. 6.76 **Referred to CPT** May 2023 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

26700 **Closed treatment of metacarpophalangeal dislocation, single, with manipulation; without anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 528

2023 Work RVU: 3.83
2023 NF PE RVU: 5.90
2023 Fac PE RVU: 5.06

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

26750 **Closed treatment of distal phalangeal fracture, finger or thumb; without manipulation, each** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 5,602

2023 Work RVU: 1.80
2023 NF PE RVU: 3.66
2023 Fac PE RVU: 3.71

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

26755 **Closed treatment of distal phalangeal fracture, finger or thumb; with manipulation, each** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 541

2023 Work RVU: 3.23
2023 NF PE RVU: 6.01
2023 Fac PE RVU: 4.60

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

26770 **Closed treatment of interphalangeal joint dislocation, single, with manipulation; without anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 5,370

2023 Work RVU: 3.15
2023 NF PE RVU: 5.12
2023 Fac PE RVU: 4.32

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

27048 **Excision, tumor, soft tissue of pelvis and hip area, subfascial (eg, intramuscular); less than 5 cm**

Global: 090 **Issue:** Excision of Subfascial Soft Tissue Tumor Codes **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 05 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 285

2023 Work RVU: 8.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.58

RUC Recommendation: 8.74 **Referred to CPT** June 2008 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

27062 **Excision; trochanteric bursa or calcification**

Global: 090 **Issue:** Trochanteric Bursa Excision **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 32 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,724

2023 Work RVU: 5.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.89

RUC Recommendation: 5.66 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

27096 **Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or ct) including arthrography when performed**

Global: 000 **Issue:** Injection for Sacroiliac Joint **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 06 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, ASIPP, ISIS, NASS **First Identified:** October 2009 **2021 Medicare Utilization:** 438,770

2023 Work RVU: 1.48
2023 NF PE RVU: 3.25
2023 Fac PE RVU: 0.83

RUC Recommendation: 1.48 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27130 **Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft**

Global: 090 **Issue:** Hip/Knee Arthroplasty **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 11 **Specialty Developing Recommendation:** AAOS, AAHKS **First Identified:** September 2011 **2021 Medicare Utilization:** 160,657

2023 Work RVU: 19.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.85
Result: Decrease

RUC Recommendation: 19.60

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

27134 **Revision of total hip arthroplasty; both components, with or without autograft or allograft**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS, AAHKS **First Identified:** January 2014 **2021 Medicare Utilization:** 9,972

2023 Work RVU: 30.28
2023 NF PE RVU: NA
2023 Fac PE RVU: 20.40
Result: Maintain

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

27193 **Closed treatment of pelvic ring fracture, dislocation, diastasis or subluxation; without manipulation**

Global: **Issue:** Closed Treatment of Pelvic Ring Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 07 **Specialty Developing Recommendation:** AAOS **First Identified:** July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:
Result: Deleted from CPT

RUC Recommendation: Deleted from CPT

Referred to CPT October 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27194 **Closed treatment of pelvic ring fracture, dislocation, diastasis or subluxation; with manipulation, requiring more than local anesthesia**

Global: **Issue:** Closed Treatment of Pelvic Ring Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 07 **Specialty Developing Recommendation:** AAOS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

27197 **Closed treatment of posterior pelvic ring fracture(s), dislocation(s), diastasis or subluxation of the ilium, sacroiliac joint, and/or sacrum, with or without anterior pelvic ring fracture(s) and/or dislocation(s) of the pubic symphysis and/or superior/inferior rami, unilateral or bilateral; without manipulation**

Global: 000 **Issue:** Closed Treatment of Pelvic Ring Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 07 **Specialty Developing Recommendation:** AAOS **First Identified:** October 2015 **2021 Medicare Utilization:** 8,300

2023 Work RVU: 1.53
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.19

RUC Recommendation: 5.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27198 **Closed treatment of posterior pelvic ring fracture(s), dislocation(s), diastasis or subluxation of the ilium, sacroiliac joint, and/or sacrum, with or without anterior pelvic ring fracture(s) and/or dislocation(s) of the pubic symphysis and/or superior/inferior rami, unilateral or bilateral; with manipulation, requiring more than local anesthesia (ie, general anesthesia, moderate sedation, spinal/epidural)**

Global: 000 **Issue:** Closed Treatment of Pelvic Ring Fracture **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 07 **Specialty Developing Recommendation:** AAOS **First Identified:** October 2015 **2021 Medicare Utilization:** 158

2023 Work RVU: 4.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.86

RUC Recommendation: 9.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27220 **Closed treatment of acetabulum (hip socket) fracture(s); without manipulation** **Global:** 090 **Issue:** Closed Treatment Fracture - Hip **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 08 **Specialty Developing Recommendation:** AAOS **First Identified:** April 2017 **2021 Medicare Utilization:** 2,404

2023 Work RVU: 5.50
2023 NF PE RVU: 6.08
2023 Fac PE RVU: 5.89

RUC Recommendation: 6.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27230 **Closed treatment of femoral fracture, proximal end, neck; without manipulation** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 1,295

2023 Work RVU: 5.81
2023 NF PE RVU: 7.85
2023 Fac PE RVU: 7.56

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27232 **Closed treatment of femoral fracture, proximal end, neck; with manipulation, with or without skeletal traction** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 165

2023 Work RVU: 11.72
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.74

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27236 **Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic replacement** **Global:** 090 **Issue:** Open Treatment of Femoral Fracture **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2011 **2021 Medicare Utilization:** 54,867

2023 Work RVU: 17.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.60

RUC Recommendation: 17.61 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27240 **Closed treatment of intertrochanteric, peritrochanteric, or subtrochanteric femoral fracture; with manipulation, with or without skin or skeletal traction**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 216

2023 Work RVU: 13.81
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.15

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27244 **Treatment of intertrochanteric, peritrochanteric, or subtrochanteric femoral fracture; with plate/screw type implant, with or without cerclage**

Global: 090 **Issue:** Treat Thigh Fracture **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 12 **Specialty Developing Recommendation:** AAOS **First Identified:** April 2008 **2021 Medicare Utilization:** 4,207

2023 Work RVU: 18.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.92

RUC Recommendation: 18.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

27245 **Treatment of intertrochanteric, peritrochanteric, or subtrochanteric femoral fracture; with intramedullary implant, with or without interlocking screws and/or cerclage**

Global: 090 **Issue:** Treat Thigh Fracture **Screen:** High IWPUT / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 12 **Specialty Developing Recommendation:** AAOS **First Identified:** February 2008 **2021 Medicare Utilization:** 76,680

2023 Work RVU: 18.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.91

RUC Recommendation: 18.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27250 **Closed treatment of hip dislocation, traumatic; without anesthesia**

Global: 000 **Issue:** Closed Treatment of Hip Dislocation **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 18 **Specialty Developing Recommendation:** ACEP **First Identified:** September 2007 **2021 Medicare Utilization:** 2,685

2023 Work RVU: 3.82
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.77

RUC Recommendation: 3.82 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27252 **Closed treatment of hip dislocation, traumatic; requiring anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 950

2023 Work RVU: 11.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.41

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27265 **Closed treatment of post hip arthroplasty dislocation; without anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 6,754

2023 Work RVU: 5.24
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.37

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27266 **Closed treatment of post hip arthroplasty dislocation; requiring regional or general anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 4,920

2023 Work RVU: 7.78
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.34

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27279 **Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device** **Global:** 090 **Issue:** Arthodesis - Sacroiliac Joint **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 09 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** July 2017 **2021 Medicare Utilization:** 6,570

2023 Work RVU: 12.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.71

RUC Recommendation: 9.03 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27324 **Biopsy, soft tissue of thigh or knee area; deep (subfascial or intramuscular)** **Global:** 090 **Issue:** Soft Tissue Biopsy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 686

2023 Work RVU: 5.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.24

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

27369 **Injection procedure for contrast knee arthrography or contrast enhanced ct/mri knee arthrography** **Global:** 000 **Issue:** Knee Arthrography Injection **Screen:** Harvard Valued - Utilization Over 30,000-Part2 / High Volume Growth3 / CMS High Expenditure Procedural Codes2 / Different Performing Specialty from Survey4 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, AAPM&R **First Identified:** June 2017 **2021 Medicare Utilization:** 22,566

2023 Work RVU: 0.77
2023 NF PE RVU: 4.74
2023 Fac PE RVU: 0.33

RUC Recommendation: Review action plan. 0.96 **Referred to CPT** February 2018 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

27370 **Injection of contrast for knee arthrography** **Global:** **Issue:** Knee Arthrography Injection **Screen:** High Volume Growth1 / CMS Fastest Growing / High Volume Growth2 / Harvard Valued - Utilization Over 30,000-Part2 / High Volume Growth3 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 05 **Specialty Developing Recommendation:** ACR **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Clinical Examples of Radiology Bulletin #1 2010

Status Report: CMS Requests and Relativity Assessment Issues

27446 **Arthroplasty, knee, condyle and plateau; medial or lateral compartment**

Global: 090 **Issue:** Knee Arthroplasty **Screen:** CMS High Expenditure Procedural Codes1 / Harvard-Valued with Annual Allowed Charges Greater than $10 million / Site of Service Anomaly - 2020 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 18 **Specialty Developing Recommendation:** AAOS, AAHKS **First Identified:** September 2011 **2021 Medicare Utilization:** 12,587

2023 Work RVU: 17.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.79

RUC Recommendation: 17.13 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27447 **Arthroplasty, knee, condyle and plateau; medial and lateral compartments with or without patella resurfacing (total knee arthroplasty)**

Global: 090 **Issue:** Hip/Knee Arthroplasty **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 18 **Specialty Developing Recommendation:** AAOS, AAHKS **First Identified:** September 2011 **2021 Medicare Utilization:** 269,146

2023 Work RVU: 19.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.82

RUC Recommendation: 19.60 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27502 **Closed treatment of femoral shaft fracture, with manipulation, with or without skin or skeletal traction**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 369

2023 Work RVU: 11.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.10

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

27510 **Closed treatment of femoral fracture, distal end, medial or lateral condyle, with manipulation**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 309

2023 Work RVU: 9.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.81

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27550 **Closed treatment of knee dislocation; without anesthesia**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 251

2023 Work RVU: 5.98
2023 NF PE RVU: 8.55
2023 Fac PE RVU: 7.25

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27552 **Closed treatment of knee dislocation; requiring anesthesia**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 223

2023 Work RVU: 8.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.36

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27615 **Radical resection of tumor (eg, sarcoma), soft tissue of leg or ankle area; less than 5 cm**

Global: 090 **Issue:** Radical Resecion of Soft Tissue Tumor Codes **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 6 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 223

2023 Work RVU: 15.72
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.71

RUC Recommendation: 15.54 **Referred to CPT** June 2008 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27619 **Excision, tumor, soft tissue of leg or ankle area, subfascial (eg, intramuscular); less than 5 cm**

Global: 090 **Issue:** Excision of Subfascial Soft Tissue Tumor Codes **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 5 **Specialty Developing Recommendation:** ACS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 480

2023 Work RVU: 6.91
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.00

RUC Recommendation: 6.80 **Referred to CPT** June 2008 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27640 **Partial excision (craterization, saucerization, or diaphysectomy), bone (eg, osteomyelitis); tibia**

Global: 090 **Issue:** Leg Bone Resection Partial **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 19 **Specialty Developing Recommendation:** AOFAS, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,529

2023 Work RVU: 12.24
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.55

RUC Recommendation: 12.10 **Referred to CPT** June 2008 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

27641 **Partial excision (craterization, saucerization, or diaphysectomy), bone (eg, osteomyelitis); fibula**

Global: 090 **Issue:** Leg Bone Resection Partial **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 19 **Specialty Developing Recommendation:** AOFAS, AAOS **First Identified:** February 2008 **2021 Medicare Utilization:** 947

2023 Work RVU: 9.84
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.17

RUC Recommendation: 9.72 **Referred to CPT** June 2008 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

27650 **Repair, primary, open or percutaneous, ruptured achilles tendon;**

Global: 090 **Issue:** Achilles Tendon Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** 20 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** September 2007 **2021 Medicare Utilization:** 2,239

2023 Work RVU: 9.21
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.17

RUC Recommendation: 9.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27654 **Repair, secondary, achilles tendon, with or without graft**

Global: 090 **Issue:** Achilles Tendon Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 33 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 2,863

2023 Work RVU: 10.53
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.37

RUC Recommendation: 10.32 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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27685 **Lengthening or shortening of tendon, leg or ankle; single tendon (separate procedure)**

Global: 090 **Issue:** Tendon Repair **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 3,563

2023 Work RVU: 6.69
2023 NF PE RVU: 12.11
2023 Fac PE RVU: 6.39

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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27687 **Gastrocnemius recession (eg, strayer procedure)**

Global: 090 **Issue:** Tendon Repair **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 6,035

2023 Work RVU: 6.41
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.31

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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27690 **Transfer or transplant of single tendon (with muscle redirection or rerouting); superficial (eg, anterior tibial extensors into midfoot)**

Global: 090 **Issue:** Tendon Transfer **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 34 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,139

2023 Work RVU: 9.17
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.66

RUC Recommendation: 8.96 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

27691 **Transfer or transplant of single tendon (with muscle redirection or rerouting); deep (eg, anterior tibial or posterior tibial through interosseous space, flexor digitorum longus, flexor hallucis longus, or peroneal tendon to midfoot or hindfoot)**

Global: 090 **Issue:** Tendon Transfer **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 34 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 3,950

2023 Work RVU: 10.49
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.11

RUC Recommendation: 10.28 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

27752 **Closed treatment of tibial shaft fracture (with or without fibular fracture); with manipulation, with or without skeletal traction**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 995

2023 Work RVU: 6.27
2023 NF PE RVU: 8.83
2023 Fac PE RVU: 7.42

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27762 **Closed treatment of medial malleolus fracture; with manipulation, with or without skin or skeletal traction**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 377

2023 Work RVU: 5.47
2023 NF PE RVU: 8.27
2023 Fac PE RVU: 6.82

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

27792 **Open treatment of distal fibular fracture (lateral malleolus), includes internal fixation, when performed**

Global: 090 **Issue:** Treatment of Ankle Fracture **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 18 **Specialty Developing Recommendation:** AAOS, AOFAS, **First Identified:** June 2010 **2021 Medicare Utilization:** 6,357

2023 Work RVU: 8.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.10

RUC Recommendation: 9.71 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

27810 **Closed treatment of bimalleolar ankle fracture (eg, lateral and medial malleoli, or lateral and posterior malleoli or medial and posterior malleoli); with manipulation**

Global: 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 2,691

2023 Work RVU: 5.32
2023 NF PE RVU: 8.15
2023 Fac PE RVU: 6.69

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27814 **Open treatment of bimalleolar ankle fracture (eg, lateral and medial malleoli, or lateral and posterior malleoli, or medial and posterior malleoli), includes internal fixation, when performed**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AAOS **First Identified:** January 2014 **2021 Medicare Utilization:** 9,365

2023 Work RVU: 10.62
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.39

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 3. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

27818 **Closed treatment of trimalleolar ankle fracture; with manipulation** **Global:** 090 **Issue:** Treatment of Fracture **Screen:** Site of Service Anomaly (99238-Only) / Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** September 2007 **2021 Medicare Utilization:** 3,552

2023 Work RVU: 5.69
2023 NF PE RVU: 8.25
2023 Fac PE RVU: 6.61

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27825 **Closed treatment of fracture of weight bearing articular portion of distal tibia (eg, pilon or tibial plafond), with or without anesthesia; with skeletal traction and/or requiring manipulation** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 643

2023 Work RVU: 6.69
2023 NF PE RVU: 8.63
2023 Fac PE RVU: 6.98

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

27840 **Closed treatment of ankle dislocation; without anesthesia** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 1,865

2023 Work RVU: 4.77
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.10

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Status Report: CMS Requests and Relativity Assessment Issues

28001 **Incision and drainage, bursa, foot**

Global: 010 **Issue:** Treatment of Foot Infection **Screen:** 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** April 2020 **2021 Medicare Utilization:** 2,370

2023 Work RVU: 2.00
2023 NF PE RVU: 2.93
2023 Fac PE RVU: 0.67

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28002 **Incision and drainage below fascia, with or without tendon sheath involvement, foot; single bursal space**

Global: 010 **Issue:** Treatment of Foot Infection **Screen:** 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** January 2014 **2021 Medicare Utilization:** 5,947

2023 Work RVU: 2.79
2023 NF PE RVU: 4.31
2023 Fac PE RVU: 1.11

RUC Recommendation: 3.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28003 **Incision and drainage below fascia, with or without tendon sheath involvement, foot; multiple areas**

Global: 090 **Issue:** Treatment of Foot Infection **Screen:** 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** April 2020 **2021 Medicare Utilization:** 5,176

2023 Work RVU: 5.28
2023 NF PE RVU: 5.47
2023 Fac PE RVU: 1.84

RUC Recommendation: 5.28 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28111 **Ostectomy, complete excision; first metatarsal head**

Global: 090 **Issue:** Ostectomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 927

2023 Work RVU: 5.15
2023 NF PE RVU: 8.51
2023 Fac PE RVU: 3.85

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

28120 **Partial excision (craterization, saucerization, sequestrectomy, or diaphysectomy) bone (eg, osteomyelitis or bossing); talus or calcaneus**

Global: 090 **Issue:** Removal of Foot Bone **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 19 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 5,004

2023 Work RVU: 7.31
2023 NF PE RVU: 11.77
2023 Fac PE RVU: 6.58
Result: Increase

RUC Recommendation: 8.27

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

28122 **Partial excision (craterization, saucerization, sequestrectomy, or diaphysectomy) bone (eg, osteomyelitis or bossing); tarsal or metatarsal bone, except talus or calcaneus**

Global: 090 **Issue:** Removal of Foot Bone **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 19 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 13,380

2023 Work RVU: 6.76
2023 NF PE RVU: 10.11
2023 Fac PE RVU: 5.58
Result: Maintain

RUC Recommendation: 7.72

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

28124 **Partial excision (craterization, saucerization, sequestrectomy, or diaphysectomy) bone (eg, osteomyelitis or bossing); phalanx of toe**

Global: 090 **Issue:** Toe Removal **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 8,600

2023 Work RVU: 5.00
2023 NF PE RVU: 8.69
2023 Fac PE RVU: 4.49
Result: PE Only

RUC Recommendation: Remove 99238

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

28285 **Correction, hammertoe (eg, interphalangeal fusion, partial or total phalangectomy)**

Global: 090 **Issue:** Orthopaedic Surgery/Podiatry **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 31 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 55,616

2023 Work RVU: 5.62
2023 NF PE RVU: 9.80
2023 Fac PE RVU: 5.28
Result: Increase

RUC Recommendation: 5.62

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

28289 **Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint; without implant**

Global: 090 **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:** 3,943

2023 Work RVU: 6.90
2023 NF PE RVU: 12.82
2023 Fac PE RVU: 6.06

RUC Recommendation: 6.90 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28290 **Correction, hallux valgus (bunion), with or without sesamoidectomy; simple exostectomy (eg, Silver type procedure)**

Global: **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

28291 **Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint; with implant**

Global: 090 **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:** 2,438

2023 Work RVU: 8.01
2023 NF PE RVU: 11.97
2023 Fac PE RVU: 5.68

RUC Recommendation: 8.01 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

28292 **Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with resection of proximal phalanx base, when performed, any method**

Global: 090 **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:** 4,776

2023 Work RVU: 7.44
2023 NF PE RVU: 12.53
2023 Fac PE RVU: 6.23

RUC Recommendation: 7.44 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28293 **Correction, hallux valgus (bunion), with or without sesamoidectomy; resection of joint with implant**

Global: **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

28294 **Correction, hallux valgus (bunion), with or without sesamoidectomy; with tendon transplants (eg, Joplin type procedure)**

Global: **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

28295 **Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with proximal metatarsal osteotomy, any method**

Global: 090 **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:** 413

2023 Work RVU: 8.57
2023 NF PE RVU: 22.24
2023 Fac PE RVU: 8.46

RUC Recommendation: 8.57 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28296 **Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with distal metatarsal osteotomy, any method**

Global: 090 **Issue:** Bunionectomy **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** September 2007 **2021 Medicare Utilization:** 6,403

2023 Work RVU: 8.25
2023 NF PE RVU: 17.36
2023 Fac PE RVU: 6.25

RUC Recommendation: 8.25 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28297 **Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with first metatarsal and medial cuneiform joint arthrodesis, any method**

Global: 090 **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:** 2,874

2023 Work RVU: 9.29
2023 NF PE RVU: 20.28
2023 Fac PE RVU: 7.58

RUC Recommendation: 9.29 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28298 **Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with proximal phalanx osteotomy, any method**

Global: 090 **Issue:** Bunionectomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** September 2007 **2021 Medicare Utilization:** 2,722

2023 Work RVU: 7.75
2023 NF PE RVU: 16.17
2023 Fac PE RVU: 6.41

RUC Recommendation: 7.75 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

28299 **Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with double osteotomy, any method**

Global: 090 **Issue:** Bunionectomy **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 08 **Specialty Developing Recommendation:** AAOS, AOFAS, APMA **First Identified:** October 2015 **2021 Medicare Utilization:** 3,962

2023 Work RVU: 9.29
2023 NF PE RVU: 19.74
2023 Fac PE RVU: 7.32

RUC Recommendation: 9.29 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28300 **Osteotomy; calcaneus (eg, dwyer or chambers type procedure), with or without internal fixation**

Global: 090 **Issue:** Osteotomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 2,201

2023 Work RVU: 9.73
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.24

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

28310 **Osteotomy, shortening, angular or rotational correction; proximal phalanx, first toe (separate procedure)**

Global: 090 **Issue:** Osteotomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,428

2023 Work RVU: 5.57
2023 NF PE RVU: 10.00
2023 Fac PE RVU: 4.61

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

28470 **Closed treatment of metatarsal fracture; without manipulation, each**

Global: 090 **Issue:** Treatment of Metatarsal Fracture **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 15 **Specialty Developing Recommendation:** AAOS, APMA, AOFAS **First Identified:** April 2011 **2021 Medicare Utilization:** 23,583

2023 Work RVU: 2.03
2023 NF PE RVU: 4.33
2023 Fac PE RVU: 3.93

RUC Recommendation: 2.03 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

28660 **Closed treatment of interphalangeal joint dislocation; without anesthesia** **Global:** 010 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 577

2023 Work RVU: 1.28
2023 NF PE RVU: 2.26
2023 Fac PE RVU: 1.30

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT**

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2018

Result: PE Only

28725 **Arthrodesis; subtalar** **Global:** 090 **Issue:** Foot Arthrodesis **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 20 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,054

2023 Work RVU: 11.22
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.29

RUC Recommendation: 12.18 **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

28730 **Arthrodesis, midtarsal or tarsometatarsal, multiple or transverse;** **Global:** 090 **Issue:** Foot Arthrodesis **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 20 **Specialty Developing Recommendation:** AOFAS, APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 3,609

2023 Work RVU: 10.70
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.52

RUC Recommendation: 12.42 **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

28740 **Arthrodesis, midtarsal or tarsometatarsal, single joint** **Global:** 090 **Issue:** Arthrodesis **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 3,414

2023 Work RVU: 9.29
2023 NF PE RVU: 14.16
2023 Fac PE RVU: 7.91

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

28820 **Amputation, toe; metatarsophalangeal joint**

Global: 000 **Issue:** Toe Amputation **Screen:** Site of Service Anomaly - 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 11 **Specialty Developing Recommendation:** AAOS, ACS, AOFAS, APMA, SVS **First Identified:** October 2018 **2021 Medicare Utilization:** 26,361

2023 Work RVU: 3.51
2023 NF PE RVU: 4.96
2023 Fac PE RVU: 1.35

RUC Recommendation: 4.10 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

28825 **Amputation, toe; interphalangeal joint**

Global: 000 **Issue:** Toe Amputation **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 11 **Specialty Developing Recommendation:** AAOS, ACS, AOFAS, APMA, SVS **First Identified:** September 2007 **2021 Medicare Utilization:** 13,521

2023 Work RVU: 3.41
2023 NF PE RVU: 4.91
2023 Fac PE RVU: 1.32

RUC Recommendation: 4.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

29075 **Application, cast; elbow to finger (short arm)**

Global: 000 **Issue:** Application of Forearm Cast **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 16 **Specialty Developing Recommendation:** AAOS, ASSH **First Identified:** April 2011 **2021 Medicare Utilization:** 58,338

2023 Work RVU: 0.77
2023 NF PE RVU: 1.71
2023 Fac PE RVU: 0.94

RUC Recommendation: 0.77 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

29105 **Application of long arm splint (shoulder to hand)**

Global: 000 **Issue:** Application of Long Arm Splint **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 11 **Specialty Developing Recommendation:** AAOS, ACEP, ASSH **First Identified:** July 2016 **2021 Medicare Utilization:** 23,153

2023 Work RVU: 0.80
2023 NF PE RVU: 1.53
2023 Fac PE RVU: 0.29

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

29200 **Strapping; thorax**

Global: 000 **Issue:** Strapping Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 35 **Specialty Developing Recommendation:** APTA

First Identified: April 2013

2021 Medicare Utilization: 11,667

2023 Work RVU: 0.39
2023 NF PE RVU: 0.56
2023 Fac PE RVU: 0.14

RUC Recommendation: 0.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

29220 **Deleted from CPT**

Global: **Issue:** Strapping; low back **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** AAFP

First Identified: February 2008

2021 Medicare Utilization:

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2008
Referred to CPT Asst ☑ **Published in CPT Asst:** Deleted from CPT, no further action necessary

Result: Deleted from CPT

29240 **Strapping; shoulder (eg, velpeau)**

Global: 000 **Issue:** Strapping Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 35 **Specialty Developing Recommendation:** APTA

First Identified: April 2013

2021 Medicare Utilization: 16,938

2023 Work RVU: 0.39
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.13

RUC Recommendation: 0.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

29260 **Strapping; elbow or wrist**

Global: 000 **Issue:** Strapping Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 35 **Specialty Developing Recommendation:** APTA

First Identified: October 2013

2021 Medicare Utilization: 4,850

2023 Work RVU: 0.39
2023 NF PE RVU: 0.45
2023 Fac PE RVU: 0.14

RUC Recommendation: 0.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

29280 **Strapping; hand or finger**

Global: 000 **Issue:** Strapping Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 35 **Specialty Developing Recommendation:** APTA **First Identified:** October 2013 **2021 Medicare Utilization:** 3,863

2023 Work RVU: 0.39
2023 NF PE RVU: 0.46
2023 Fac PE RVU: 0.16
Result: Decrease

RUC Recommendation: 0.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

29445 **Application of rigid total contact leg cast**

Global: 000 **Issue:** Application of Rigid Leg Cast **Screen:** High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, AHKNS, AOFAS, AOA, NASS **First Identified:** October 2015 **2021 Medicare Utilization:** 27,661

2023 Work RVU: 1.78
2023 NF PE RVU: 1.85
2023 Fac PE RVU: 0.94
Result: Maintain

RUC Recommendation: 1.78

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

29520 **Strapping; hip**

Global: 000 **Issue:** Strapping Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 35 **Specialty Developing Recommendation:** APTA **First Identified:** April 2013 **2021 Medicare Utilization:** 13,493

2023 Work RVU: 0.39
2023 NF PE RVU: 0.63
2023 Fac PE RVU: 0.13
Result: Decrease

RUC Recommendation: 0.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

29530 **Strapping; knee**

Global: 000 **Issue:** Strapping Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 35 **Specialty Developing Recommendation:** APTA **First Identified:** April 2013 **2021 Medicare Utilization:** 23,640

2023 Work RVU: 0.39
2023 NF PE RVU: 0.48
2023 Fac PE RVU: 0.13
Result: Decrease

RUC Recommendation: 0.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

29540 **Strapping; ankle and/or foot**

Global: 000 **Issue:** Strapping Lower Extremity **Screen:** Harvard Valued - Utilization over 100,000 / CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 41ii **Specialty Developing Recommendation:** APMA **First Identified:** October 2009 **2021 Medicare Utilization:** 170,657

2023 Work RVU: 0.39
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.09

RUC Recommendation: 0.39 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

29550 **Strapping; toes**

Global: 000 **Issue:** Strapping Lower Extremity **Screen:** Harvard Valued - Utilization over 100,000 / CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 41ii **Specialty Developing Recommendation:** APMA **First Identified:** February 2010 **2021 Medicare Utilization:** 44,061

2023 Work RVU: 0.25
2023 NF PE RVU: 0.30
2023 Fac PE RVU: 0.06

RUC Recommendation: 0.25 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

29580 **Strapping; unna boot**

Global: 000 **Issue:** Strapping Multi Layer Compression **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 13 **Specialty Developing Recommendation:** ACS, APMA, SVS **First Identified:** July 2015 **2021 Medicare Utilization:** 222,956

2023 Work RVU: 0.55
2023 NF PE RVU: 1.27
2023 Fac PE RVU: 0.16

RUC Recommendation: 0.55 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

29581 **Application of multi-layer compression system; leg (below knee), including ankle and foot**

Global: 000 **Issue:** Strapping Multi Layer Compression **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 13 **Specialty Developing Recommendation:** ACS, APMA, SVS **First Identified:** July 2015 **2021 Medicare Utilization:** 203,402

2023 Work RVU: 0.60
2023 NF PE RVU: 2.06
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

29582 **Application of multi-layer compression system; thigh and leg, including ankle and foot, when performed**

Global: **Issue:** New Technology Review **Screen:** New Technology/New Services **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** APTA **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Aug 2016

29583 **Application of multi-layer compression system; upper arm and forearm**

Global: **Issue:** New Technology Review **Screen:** New Technology/New Services **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** APTA **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Aug 2016

Status Report: CMS Requests and Relativity Assessment Issues

29584 **Application of multi-layer compression system; upper arm, forearm, hand, and fingers**

Global: 000 **Issue:** New Technology Review **Screen:** New Technology/New Services / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:** APTA **First Identified:** October 2015 **2021 Medicare Utilization:** 3,332

2023 Work RVU: 0.35
2023 NF PE RVU: 2.09
2023 Fac PE RVU: 0.11

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Aug 2016

29590 **Denis-Browne splint strapping**

Global: **Issue:** Dennis-Browne splint revision **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 07 **Specialty Developing Recommendation:** APMA **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

29805 **Arthroscopy, shoulder, diagnostic, with or without synovial biopsy (separate procedure)**

Global: 090 **Issue:** Arthroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 51 **Specialty Developing Recommendation:** AAOS **First Identified:** NA **2021 Medicare Utilization:** 414

2023 Work RVU: 6.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.99

RUC Recommendation: No NF PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

29822 **Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])**

Global: 090 **Issue:** Shoulder Debridement **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 11 **Specialty Developing Recommendation:**

First Identified: October 2008 **2021 Medicare Utilization:** 7,439

2023 Work RVU: 7.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.94

RUC Recommendation: 7.03

Referred to CPT September 2019
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

29823 **Arthroscopy, shoulder, surgical; debridement, extensive, 3 or more discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])**

Global: 090 **Issue:** Shoulder Debridement **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million / Harvard Valued - Utilization over 30,000-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 11 **Specialty Developing Recommendation:**

First Identified: October 2012 **2021 Medicare Utilization:** 38,112

2023 Work RVU: 7.98
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.36

RUC Recommendation: 7.98

Referred to CPT September 2019
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

29824 **Arthroscopy, shoulder, surgical; distal claviculectomy including distal articular surface (mumford procedure)**

Global: 090 **Issue:** RAW **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** AAOS

First Identified: February 2010 **2021 Medicare Utilization:** 30,886

2023 Work RVU: 8.98
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.70

RUC Recommendation: 8.82

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

29826 **Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (ie, arch) release, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** RAW

Screen: Codes Reported Together 75% or More-Part1

Complete? Yes

Most Recent RUC Meeting: October 2015

Tab: 21

Specialty Developing Recommendation: AAOS

First Identified: February 2010

2021 Medicare Utilization: 64,498

2023 Work RVU: 3.00

2023 NF PE RVU: NA

2023 Fac PE RVU: 1.53

RUC Recommendation: 3.00

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

29827 **Arthroscopy, shoulder, surgical; with rotator cuff repair**

Global: 090 **Issue:** RAW

Screen: CMS Fastest Growing/ Codes Reported Together 75% or More-Part1 / Pre-Time Analysis / Codes Reported Together 75% or More-Part5

Complete? Yes

Most Recent RUC Meeting: September 2022

Tab: 13

Specialty Developing Recommendation: AAOS

First Identified: October 2008

2021 Medicare Utilization: 60,775

2023 Work RVU: 15.59

2023 NF PE RVU: NA

2023 Fac PE RVU: 13.45

RUC Recommendation: 15.59. Maintain work RVU and adjust the times from pre-time package 3.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

29828 **Arthroscopy, shoulder, surgical; biceps tenodesis**

Global: 090 **Issue:** RAW

Screen: Codes Reported Together 75% or More-Part1 / Codes Reported Together 75% or More-Part5

Complete? Yes

Most Recent RUC Meeting: September 2022

Tab: 13

Specialty Developing Recommendation: AAOS

First Identified: February 2010

2021 Medicare Utilization: 18,405

2023 Work RVU: 13.16

2023 NF PE RVU: NA

2023 Fac PE RVU: 11.81

RUC Recommendation: 13.16

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

29830 **Arthroscopy, elbow, diagnostic, with or without synovial biopsy (separate procedure)**

Global: 090 **Issue:** Arthroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 51 **Specialty Developing Recommendation:** AAOS **First Identified:** NA **2021 Medicare Utilization:** 128

2023 Work RVU: 5.88
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.82
Result: PE Only

RUC Recommendation: No NF PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

29840 **Arthroscopy, wrist, diagnostic, with or without synovial biopsy (separate procedure)**

Global: 090 **Issue:** Arthroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 51 **Specialty Developing Recommendation:** AAOS **First Identified:** NA **2021 Medicare Utilization:** 98

2023 Work RVU: 5.68
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.97
Result: PE Only

RUC Recommendation: No NF PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

29870 **Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)**

Global: 090 **Issue:** Arthroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 13 **Specialty Developing Recommendation:** AAOS **First Identified:** NA **2021 Medicare Utilization:** 488

2023 Work RVU: 5.19
2023 NF PE RVU: 10.43
2023 Fac PE RVU: 6.13
Result: PE Only

RUC Recommendation: New PE non-facility inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

29888 **Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction**

Global: 090 **Issue:** ACL Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 38 **Specialty Developing Recommendation:** AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 976

2023 Work RVU: 14.30
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.23
Result: Maintain

RUC Recommendation: 14.14 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

29900 **Arthroscopy, metacarpophalangeal joint, diagnostic, includes synovial biopsy** **Global:** 090 **Issue:** Arthroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 51 **Specialty Developing Recommendation:** AAOS **First Identified:** NA **2021 Medicare Utilization:** 2

2023 Work RVU: 5.88
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.20
Result: PE Only

RUC Recommendation: No NF PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

30140 **Submucous resection inferior turbinate, partial or complete, any method** **Global:** 000 **Issue:** Resection of Inferior Turbinate **Screen:** Harvard Valued - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 14 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:** 39,789

2023 Work RVU: 3.00
2023 NF PE RVU: 5.52
2023 Fac PE RVU: 1.89
Result: Decrease

RUC Recommendation: 3.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

30465 **Repair of nasal vestibular stenosis (eg, spreader grafting, lateral nasal wall reconstruction)** **Global:** 090 **Issue:** Repair Nasal Stenosis **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 3,079

2023 Work RVU: 12.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.96
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

30901 **Control nasal hemorrhage, anterior, simple (limited cautery and/or packing) any method**

Global: 000 **Issue:** Control Nasal Hemorrhage **Screen:** Harvard Valued - Utilization over 100,000 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 20 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2009 **2021 Medicare Utilization:** 71,838

2023 Work RVU: 1.10
2023 NF PE RVU: 3.46
2023 Fac PE RVU: 0.40

RUC Recommendation: 1.10 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

30903 **Control nasal hemorrhage, anterior, complex (extensive cautery and/or packing) any method**

Global: 000 **Issue:** Control Nasal Hemorrhage **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 20 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 38,809

2023 Work RVU: 1.54
2023 NF PE RVU: 5.64
2023 Fac PE RVU: 0.51

RUC Recommendation: 1.54 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

30905 **Control nasal hemorrhage, posterior, with posterior nasal packs and/or cautery, any method; initial**

Global: 000 **Issue:** Control Nasal Hemorrhage **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 20 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 4,037

2023 Work RVU: 1.97
2023 NF PE RVU: 8.32
2023 Fac PE RVU: 0.84

RUC Recommendation: 1.97 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

30906 **Control nasal hemorrhage, posterior, with posterior nasal packs and/or cautery, any method; subsequent**

Global: 000 **Issue:** Control Nasal Hemorrhage **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 20 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 785

2023 Work RVU: 2.45
2023 NF PE RVU: 8.45
2023 Fac PE RVU: 1.14

RUC Recommendation: 2.45 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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31231 **Nasal endoscopy, diagnostic, unilateral or bilateral (separate procedure)**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 19 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** October 2010 **2021 Medicare Utilization:** 564,818

2023 Work RVU: 1.10
2023 NF PE RVU: 4.43
2023 Fac PE RVU: 0.66

RUC Recommendation: 1.10 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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31237 **Nasal/sinus endoscopy, surgical; with biopsy, polypectomy or debridement (separate procedure)**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 19 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** September 2011 **2021 Medicare Utilization:** 115,594

2023 Work RVU: 2.60
2023 NF PE RVU: 4.75
2023 Fac PE RVU: 1.79

RUC Recommendation: 2.60 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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31238 **Nasal/sinus endoscopy, surgical; with control of nasal hemorrhage**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 19 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** January 2012 **2021 Medicare Utilization:** 26,108

2023 Work RVU: 2.74
2023 NF PE RVU: 4.41
2023 Fac PE RVU: 1.85

RUC Recommendation: 2.74 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

31239 **Nasal/sinus endoscopy, surgical; with dacryocystorhinostomy**

Global: 010 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 19 **Specialty Developing Recommendation:** AAO-HNS

First Identified: January 2012 **2021 Medicare Utilization:** 1,064

2023 Work RVU: 9.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.08

RUC Recommendation: 9.04

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

31240 **Nasal/sinus endoscopy, surgical; with concha bullosa resection**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 19 **Specialty Developing Recommendation:** AAO-HNS

First Identified: January 2012 **2021 Medicare Utilization:** 3,733

2023 Work RVU: 2.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.75

RUC Recommendation: 2.61

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

31241 **Nasal/sinus endoscopy, surgical; with ligation of sphenopalatine artery**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS

First Identified: April 2015 **2021 Medicare Utilization:** 457

2023 Work RVU: 8.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.08

RUC Recommendation: 8.51

Referred to CPT September 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

31253 **Nasal/sinus endoscopy, surgical with ethmoidectomy; total (anterior and posterior), including frontal sinus exploration, with removal of tissue from frontal sinus, when performed**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 5,994

2023 Work RVU: 9.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.59

RUC Recommendation: 9.00 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31254 **Nasal/sinus endoscopy, surgical with ethmoidectomy; partial (anterior)**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 10,087

2023 Work RVU: 4.27
2023 NF PE RVU: 8.36
2023 Fac PE RVU: 2.37

RUC Recommendation: 4.27 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31255 **Nasal/sinus endoscopy, surgical with ethmoidectomy; total (anterior and posterior)**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 7,275

2023 Work RVU: 5.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.05

RUC Recommendation: 5.75 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31256 **Nasal/sinus endoscopy, surgical, with maxillary antrostomy;**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 10,695

2023 Work RVU: 3.11
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.81

RUC Recommendation: 3.11 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31257 **Nasal/sinus endoscopy, surgical with ethmoidectomy; total (anterior and posterior), including sphenoidotomy**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 4,765

2023 Work RVU: 8.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.12

RUC Recommendation: 8.00 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31259 **Nasal/sinus endoscopy, surgical with ethmoidectomy; total (anterior and posterior), including sphenoidotomy, with removal of tissue from the sphenoid sinus**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 6,124

2023 Work RVU: 8.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.34

RUC Recommendation: 8.48 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31267 **Nasal/sinus endoscopy, surgical, with maxillary antrostomy; with removal of tissue from maxillary sinus**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 21,215

2023 Work RVU: 4.68
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.55

RUC Recommendation: 4.68 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31276 **Nasal/sinus endoscopy, surgical, with frontal sinus exploration, including removal of tissue from frontal sinus, when performed**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 11,064

2023 Work RVU: 6.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.52

RUC Recommendation: 6.75 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31287 **Nasal/sinus endoscopy, surgical, with sphenoidotomy;**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 2,334

2023 Work RVU: 3.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.00

RUC Recommendation: 3.50 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31288 **Nasal/sinus endoscopy, surgical, with sphenoidotomy; with removal of tissue from the sphenoid sinus**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 3,310

2023 Work RVU: 4.10
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.28

RUC Recommendation: 4.10 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31295 **Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 20,141

2023 Work RVU: 2.70
2023 NF PE RVU: 47.72
2023 Fac PE RVU: 1.62

RUC Recommendation: 2.70 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

31296 **Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); frontal sinus ostium**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 5,658

2023 Work RVU: 3.10
2023 NF PE RVU: 48.02
2023 Fac PE RVU: 1.80

RUC Recommendation: 3.10 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31297 **Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); sphenoid sinus ostium**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 1,340

2023 Work RVU: 2.44
2023 NF PE RVU: 47.58
2023 Fac PE RVU: 1.49

RUC Recommendation: 2.44 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31298 **Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); frontal and sphenoid sinus ostia**

Global: 000 **Issue:** Nasal/Sinus Endoscopy **Screen:** Codes Reported Together 75% or More-Part3 / PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** AAOHNS **First Identified:** April 2015 **2021 Medicare Utilization:** 14,448

2023 Work RVU: 4.50
2023 NF PE RVU: 90.47
2023 Fac PE RVU: 2.47

RUC Recommendation: 4.50 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31500 **Intubation, endotracheal, emergency procedure**

Global: 000 **Issue:** Endotracheal Intubation **Screen:** CMS High Expenditure Procedural Codes2 / Modifer -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 27 **Specialty Developing Recommendation:** ACEP, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 260,169

2023 Work RVU: 3.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.74

RUC Recommendation: 3.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Oct 2016

Status Report: CMS Requests and Relativity Assessment Issues

31551 **Laryngoplasty; for laryngeal stenosis, with graft, without indwelling stent placement, younger than 12 years of age**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU: 21.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 21.84

RUC Recommendation: 21.50 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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31552 **Laryngoplasty; for laryngeal stenosis, with graft, without indwelling stent placement, age 12 years or older**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:** 23

2023 Work RVU: 20.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 21.40

RUC Recommendation: 20.50 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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31553 **Laryngoplasty; for laryngeal stenosis, with graft, with indwelling stent placement, younger than 12 years of age**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU: 22.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 25.51

RUC Recommendation: 22.00 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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31554 **Laryngoplasty; for laryngeal stenosis, with graft, with indwelling stent placement, age 12 years or older**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:** 21

2023 Work RVU: 22.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 25.54

RUC Recommendation: 22.00 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

31571 **Laryngoscopy, direct, with injection into vocal cord(s), therapeutic; with operating microscope or telescope**

Global: 000 **Issue:** Laryngoscopy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAO-HNS

First Identified: September 2007 **2021 Medicare Utilization:** 5,072

2023 Work RVU: 4.26
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.52

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

31575 **Laryngoscopy, flexible; diagnostic**

Global: 000 **Issue:** **Screen:** MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 08 **Specialty Developing Recommendation:** AAO-HNS

First Identified: October 2010 **2021 Medicare Utilization:** 545,652

2023 Work RVU: 0.94
2023 NF PE RVU: 2.82
2023 Fac PE RVU: 0.95

RUC Recommendation: 1.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

31579 **Laryngoscopy, flexible or rigid telescopic, with stroboscopy**

Global: 000 **Issue:** Laryngoscopy **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 08 **Specialty Developing Recommendation:** AAO-HNS

First Identified: October 2008 **2021 Medicare Utilization:** 77,628

2023 Work RVU: 1.88
2023 NF PE RVU: 3.84
2023 Fac PE RVU: 1.43

RUC Recommendation: 1.94

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

31580 **Laryngoplasty; for laryngeal web, with indwelling keel or stent insertion**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** April 2014 **2021 Medicare Utilization:** 32

2023 Work RVU: 14.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 22.05

RUC Recommendation: 14.60 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31582 **Laryngoplasty; for laryngeal stenosis, with graft or core mold, including tracheotomy**

Global: **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** April 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

31584 **Laryngoplasty; with open reduction and fixation of (eg, plating) fracture, includes tracheostomy, if performed**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** April 2014 **2021 Medicare Utilization:** 14

2023 Work RVU: 17.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 22.52

RUC Recommendation: 20.00 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31587 **Laryngoplasty, cricoid split, without graft placement**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** April 2014 **2021 Medicare Utilization:** 9

2023 Work RVU: 15.27
2023 NF PE RVU: NA
2023 Fac PE RVU: 18.93

RUC Recommendation: 15.27 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31588 **Laryngoplasty, not otherwise specified (eg, for burns, reconstruction after partial laryngectomy)**

Global: **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

31591 **Laryngoplasty, medialization, unilateral**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:** 934

2023 Work RVU: 13.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.69

RUC Recommendation: 15.60 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31592 **Cricotracheal resection**

Global: 090 **Issue:** Laryngoplasty **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 09 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:** 26

2023 Work RVU: 25.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 23.52

RUC Recommendation: 25.00 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31600 **Tracheostomy, planned (separate procedure);**

Global: 000 **Issue:** Tracheostomy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 24,508

2023 Work RVU: 5.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.44

RUC Recommendation: 5.56 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31601 **Tracheostomy, planned (separate procedure); younger than 2 years**

Global: 000 **Issue:** Tracheostomy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 2

2023 Work RVU: 8.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.24
Result: Increase

RUC Recommendation: 8.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

31603 **Tracheostomy, emergency procedure; transtracheal**

Global: 000 **Issue:** Tracheostomy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 672

2023 Work RVU: 6.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.41
Result: Increase

RUC Recommendation: 6.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

31605 **Tracheostomy, emergency procedure; cricothyroid membrane**

Global: 000 **Issue:** Tracheostomy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAOHNS **First Identified:** July 2015 **2021 Medicare Utilization:** 243

2023 Work RVU: 6.45
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.12
Result: Increase

RUC Recommendation: 6.45

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

31610 **Tracheostomy, fenestration procedure with skin flaps**

Global: 090 **Issue:** Tracheostomy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 15 **Specialty Developing Recommendation:** AAOHNS, ACS **First Identified:** July 2015 **2021 Medicare Utilization:** 1,281

2023 Work RVU: 12.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.06
Result: Increase

RUC Recommendation: 12.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31611 **Construction of tracheoesophageal fistula and subsequent insertion of an alaryngeal speech prosthesis (eg, voice button, blom-singer prosthesis)**

Global: 090 **Issue:** Speech Prosthesis **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 698

2023 Work RVU: 6.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.31

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

31620 **Endobronchial ultrasound (EBUS) during bronchoscopic diagnostic or therapeutic intervention(s) (List separately in addition to code for primary procedure[s])**

Global: **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

31622 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; diagnostic, with cell washing, when performed (separate procedure)**

Global: 000 **Issue:** Bronchial Aspiration of Tracheobronchial Tree **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:** 37,398

2023 Work RVU: 2.53
2023 NF PE RVU: 4.57
2023 Fac PE RVU: 1.03

RUC Recommendation: 2.78 **Referred to CPT** October 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

31623 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with brushing or protected brushings**

Global: 000 **Issue:** Diagnostic Bronchoscopy **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 09 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2016 **2021 Medicare Utilization:** 16,722

2023 Work RVU: 2.63
2023 NF PE RVU: 5.33
2023 Fac PE RVU: 0.99

RUC Recommendation: 2.63 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31624 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with bronchial alveolar lavage**

Global: 000 **Issue:** Diagnostic Bronchoscopy **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 09 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2017 **2021 Medicare Utilization:** 91,471

2023 Work RVU: 2.63
2023 NF PE RVU: 4.72
2023 Fac PE RVU: 1.03

RUC Recommendation: 2.63 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

31625 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with bronchial or endobronchial biopsy(s), single or multiple sites**

Global: 000 **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** April 2013 **2021 Medicare Utilization:** 14,232

2023 Work RVU: 3.11
2023 NF PE RVU: 7.01
2023 Fac PE RVU: 1.14

RUC Recommendation: 3.36 **Referred to CPT** October 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

31626 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with placement of fiducial markers, single or multiple**

Global: 000 **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:** 2,033

2023 Work RVU: 3.91
2023 NF PE RVU: 19.28
2023 Fac PE RVU: 1.38

RUC Recommendation: 4.16 **Referred to CPT** October 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

31628 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transbronchial lung biopsy(s), single lobe**

Global: 000 **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:** 27,375

2023 Work RVU: 3.55
2023 NF PE RVU: 7.25
2023 Fac PE RVU: 1.27

RUC Recommendation: 3.80 **Referred to CPT** October 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31629 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transbronchial needle aspiration biopsy(s), trachea, main stem and/or lobar bronchus(i)**

Global: 000 **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:** 14,059

2023 Work RVU: 3.75
2023 NF PE RVU: 9.43
2023 Fac PE RVU: 1.33

RUC Recommendation: 4.00 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31632 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transbronchial lung biopsy(s), each additional lobe (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:** 3,750

2023 Work RVU: 1.03
2023 NF PE RVU: 0.79
2023 Fac PE RVU: 0.31

RUC Recommendation: 1.03 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

31633 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transbronchial needle aspiration biopsy(s), each additional lobe (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** April 2013 **2021 Medicare Utilization:** 991

2023 Work RVU: 1.32
2023 NF PE RVU: 0.93
2023 Fac PE RVU: 0.39

RUC Recommendation: 1.32 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31645 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with therapeutic aspiration of tracheobronchial tree, initial**

Global: 000 **Issue:** Bronchial Aspiration of Tracheobronchial Tree **Screen:** Harvard Valued - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 08 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2015 **2021 Medicare Utilization:** 30,095

2023 Work RVU: 2.88
2023 NF PE RVU: 4.98
2023 Fac PE RVU: 1.13

RUC Recommendation: 2.88 **Referred to CPT** May 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31646 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with therapeutic aspiration of tracheobronchial tree, subsequent, same hospital stay**

Global: 000 **Issue:** Bronchial Aspiration of Tracheobronchial Tree **Screen:** Harvard Valued - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 08 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2015 **2021 Medicare Utilization:** 3,677

2023 Work RVU: 2.78
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.09

RUC Recommendation: 2.78 **Referred to CPT** May 2016 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

31652 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with endobronchial ultrasound (ebus) guided transtracheal and/or transbronchial sampling (eg, aspiration[s]/biopsy[ies]), one or two mediastinal and/or hilar lymph node stations or structures**

Global: 000 **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ATS, ACCP **First Identified:** October 2014 **2021 Medicare Utilization:** 23,016

2023 Work RVU: 4.46
2023 NF PE RVU: 32.84
2023 Fac PE RVU: 1.55

RUC Recommendation: 5.00 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

31653 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with endobronchial ultrasound (ebus) guided transtracheal and/or transbronchial sampling (eg, aspiration[s]/biopsy[ies]), 3 or more mediastinal and/or hilar lymph node stations or structures**

Global: 000 **Issue:** Endobronchial Ultrasound - EBUS **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ATS, ACCP **First Identified:** October 2014 **2021 Medicare Utilization:** 13,844

2023 Work RVU: 4.96
2023 NF PE RVU: 33.78
2023 Fac PE RVU: 1.70

RUC Recommendation: 5.50 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

31654 **Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transendoscopic endobronchial ultrasound (ebus) during bronchoscopic diagnostic or therapeutic intervention(s) for peripheral lesion(s) (list separately in addition to code for primary procedure[s])**

Global: ZZZ **Issue:** Bronchial Aspiration of Tracheobronchial Tree **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 05 **Specialty Developing Recommendation:** ATS, ACCP **First Identified:** October 2014 **2021 Medicare Utilization:** 9,856

2023 Work RVU: 1.40
2023 NF PE RVU: 2.06
2023 Fac PE RVU: 0.42

RUC Recommendation: 1.70 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

32201 **Pneumonostomy; with percutaneous drainage of abscess or cyst**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

32405 **Biopsy, lung or mediastinum, percutaneous needle**

Global: **Issue:** Lung Biopsy-CT Guidance Bundle **Screen:** Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 05 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

32408 **Core needle biopsy, lung or mediastinum, percutaneous, including imaging guidance, when performed**

Global: 000 **Issue:** Lung Biopsy-CT Guidance Bundle **Screen:** Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 05 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** April 2019 **2021 Medicare Utilization:** 58,727

2023 Work RVU: 3.18
2023 NF PE RVU: 22.45
2023 Fac PE RVU: 0.99

RUC Recommendation: 4.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

32420 **Pneumocentesis, puncture of lung for aspiration**

Global: **Issue:** Thoracentesis with Tube Insertion **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 17 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR, SCCM, STS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

32421 **Thoracentesis, puncture of pleural cavity for aspiration, initial or subsequent**

Global: **Issue:** Thoracentesis with Tube Insertion **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 17 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR, SCCM, STS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

32422 **Thoracentesis with insertion of tube, includes water seal (eg, for pneumothorax), when performed (separate procedure)**

Global: **Issue:** Thoracentesis with Tube Insertion **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 17 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR, SCCM, STS **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

32440 **Removal of lung, pneumonectomy;**

Global: 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** ACCP, ATS, ACR, ACS, SIR, SCCM, STS **First Identified:** November 2011 **2021 Medicare Utilization:** 143

2023 Work RVU: 27.28
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.36

RUC Recommendation: No reliable way to determine incremental difference between open thoracotomy to thoracoscopic procedures. **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

32480 **Removal of lung, other than pneumonectomy; single lobe (lobectomy)** **Global:** 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** ACCP, ATS, ACR, ACS, SIR, SCCM, STS **First Identified:** November 2011 **2021 Medicare Utilization:** 2,971

2023 Work RVU: 25.82
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.62

RUC Recommendation: No reliable way to determine incremental difference between open thoracotomy to thoracoscopic procedures.

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

32482 **Removal of lung, other than pneumonectomy; 2 lobes (bilobectomy)** **Global:** 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** ACCP, ATS, ACR, ACS, SIR, SCCM, STS **First Identified:** November 2011 **2021 Medicare Utilization:** 203

2023 Work RVU: 27.44
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.59

RUC Recommendation: No reliable way to determine incremental difference between open thoracotomy to thoracoscopic procedures.

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

32491 **Removal of lung, other than pneumonectomy; with resection-plication of emphysematous lung(s) (bullous or non-bullous) for lung volume reduction, sternal split or transthoracic approach, includes any pleural procedure, when performed** **Global:** 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** ACCP, ATS, ACR, ACS, SIR, SCCM, STS **First Identified:** November 2011 **2021 Medicare Utilization:** 13

2023 Work RVU: 25.24
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.07

RUC Recommendation: Request further information from CMS

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

32551 **Tube thoracostomy, includes connection to drainage system (eg, water seal), when performed, open (separate procedure)**

Global: 000 **Issue:** Chest Tube Thoracostomy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACCP, ATS, ACR, ACS, SIR, SCCM, STS **First Identified:** April 2011 **2021 Medicare Utilization:** 35,767

2023 Work RVU: 3.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.01

RUC Recommendation: 3.50 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

32554 **Thoracentesis, needle or catheter, aspiration of the pleural space; without imaging guidance**

Global: 000 **Issue:** Chest Tube Interventions **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 04 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 10,084

2023 Work RVU: 1.82
2023 NF PE RVU: 5.01
2023 Fac PE RVU: 0.58

RUC Recommendation: 1.82 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

32555 **Thoracentesis, needle or catheter, aspiration of the pleural space; with imaging guidance**

Global: 000 **Issue:** Chest Tube Interventions **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 04 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 207,406

2023 Work RVU: 2.27
2023 NF PE RVU: 7.02
2023 Fac PE RVU: 0.74

RUC Recommendation: 2.27 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

32556 **Pleural drainage, percutaneous, with insertion of indwelling catheter; without imaging guidance**

Global: 000 **Issue:** Chest Tube Interventions **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 04 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 5,041

2023 Work RVU: 2.50
2023 NF PE RVU: 19.48
2023 Fac PE RVU: 0.80

RUC Recommendation: 2.50 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

32557 **Pleural drainage, percutaneous, with insertion of indwelling catheter; with imaging guidance**

Global: 000 **Issue:** Chest Tube Interventions **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 04 **Specialty Developing Recommendation:** ACCP, ACR, ATS, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 34,801

2023 Work RVU: 3.12
2023 NF PE RVU: 16.65
2023 Fac PE RVU: 0.96

RUC Recommendation: 3.62 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

32663 **Thoracoscopy, surgical; with lobectomy (single lobe)**

Global: 090 **Issue:** RAW review **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** STS **First Identified:** October 2008 **2021 Medicare Utilization:** 8,161

2023 Work RVU: 24.64
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.58

RUC Recommendation: No reliable way to determine incremental difference between open thoracotomy to thoracoscopic procedures. **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

33010 **Pericardiocentesis; initial**

Global: **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

33011 **Pericardiocentesis; subsequent**

Global: **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33015 **Tube pericardiostomy**

Global: **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:** ACC **First Identified:** April 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

33016 **Pericardiocentesis, including imaging guidance, when performed**

Global: 000 **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 4,359

2023 Work RVU: 4.40
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.52

RUC Recommendation: 5.00 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

33017 **Pericardial drainage with insertion of indwelling catheter, percutaneous, including fluoroscopy and/or ultrasound guidance, when performed; 6 years and older without congenital cardiac anomaly**

Global: 000 **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 3,366

2023 Work RVU: 4.62
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.60

RUC Recommendation: 5.50 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33018 **Pericardial drainage with insertion of indwelling catheter, percutaneous, including fluoroscopy and/or ultrasound guidance, when performed; birth through 5 years of age or any age with congenital cardiac anomaly**

Global: 000 **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 6

2023 Work RVU: 5.40
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.84

RUC Recommendation: 6.00

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

33019 **Pericardial drainage with insertion of indwelling catheter, percutaneous, including ct guidance**

Global: 000 **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 273

2023 Work RVU: 4.29
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.39

RUC Recommendation: 5.00

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

33020 **Pericardiotomy for removal of clot or foreign body (primary procedure)**

Global: 090 **Issue:** Pericardiotomy **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 10 **Specialty Developing Recommendation:** AATS, STS

First Identified: April 2018 **2021 Medicare Utilization:** 147

2023 Work RVU: 14.31
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.64

RUC Recommendation: 14.31

Referred to CPT May 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

33025 **Creation of pericardial window or partial resection for drainage**

Global: 090 **Issue:** Pericardiotomy **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 10 **Specialty Developing Recommendation:** AATS, STS

First Identified: April 2017 **2021 Medicare Utilization:** 3,881

2023 Work RVU: 13.20
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.39

RUC Recommendation: 13.20

Referred to CPT May 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

33207 **Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 9,413

2023 Work RVU: 7.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.61

RUC Recommendation: 8.05 **Referred to CPT** February 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33208 **Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 91,848

2023 Work RVU: 8.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.90

RUC Recommendation: 8.77 **Referred to CPT** February 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33212 **Insertion of pacemaker pulse generator only; with existing single lead**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 206

2023 Work RVU: 5.01
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.37

RUC Recommendation: 5.26 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33213 **Insertion of pacemaker pulse generator only; with existing dual leads**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: October 2008

2021 Medicare Utilization: 974

2023 Work RVU: 5.28

2023 NF PE RVU: NA

2023 Fac PE RVU: 3.49

RUC Recommendation: 5.53

Referred to CPT February 2011

Result: Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

33221 **Insertion of pacemaker pulse generator only; with existing multiple leads**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: April 2011

2021 Medicare Utilization: 223

2023 Work RVU: 5.55

2023 NF PE RVU: NA

2023 Fac PE RVU: 3.88

RUC Recommendation: 5.80

Referred to CPT February 2011

Result: Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

33227 **Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: April 2011

2021 Medicare Utilization: 2,926

2023 Work RVU: 5.25

2023 NF PE RVU: NA

2023 Fac PE RVU: 3.62

RUC Recommendation: 5.50

Referred to CPT February 2011

Result: Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33228 **Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC **First Identified:** April 2011 **2021 Medicare Utilization:** 30,687

2023 Work RVU: 5.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.75

RUC Recommendation: 5.77 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

33229 **Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC **First Identified:** April 2011 **2021 Medicare Utilization:** 6,002

2023 Work RVU: 5.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.01

RUC Recommendation: 6.04 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

33230 **Insertion of implantable defibrillator pulse generator only; with existing dual leads**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC **First Identified:** April 2011 **2021 Medicare Utilization:** 97

2023 Work RVU: 6.07
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.95

RUC Recommendation: 6.32 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33231 **Insertion of implantable defibrillator pulse generator only; with existing multiple leads**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: April 2011

2021 Medicare Utilization: 94

2023 Work RVU: 6.34

2023 NF PE RVU: NA

2023 Fac PE RVU: 4.11

RUC Recommendation: 6.59

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

33233 **Removal of permanent pacemaker pulse generator only**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: February 2010

2021 Medicare Utilization: 7,684

2023 Work RVU: 3.14

2023 NF PE RVU: NA

2023 Fac PE RVU: 3.09

RUC Recommendation: 3.39

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

33240 **Insertion of implantable defibrillator pulse generator only; with existing single lead**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: February 2010

2021 Medicare Utilization: 137

2023 Work RVU: 5.80

2023 NF PE RVU: NA

2023 Fac PE RVU: 3.73

RUC Recommendation: 6.06

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

33241 **Removal of implantable defibrillator pulse generator only**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: February 2010

2021 Medicare Utilization: 5,020

2023 Work RVU: 3.04

2023 NF PE RVU: NA

2023 Fac PE RVU: 2.66

RUC Recommendation: 3.29

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

33249 **Insertion or replacement of permanent implantable defibrillator system, with transvenous lead(s), single or dual chamber**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: February 2010

2021 Medicare Utilization: 32,852

2023 Work RVU: 14.92

2023 NF PE RVU: NA

2023 Fac PE RVU: 8.77

RUC Recommendation: 15.17

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

33262 **Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; single lead system**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: April 2011

2021 Medicare Utilization: 2,438

2023 Work RVU: 5.81

2023 NF PE RVU: NA

2023 Fac PE RVU: 3.94

RUC Recommendation: 6.06

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

33263 **Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; dual lead system**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: April 2011

2021 Medicare Utilization: 6,255

2023 Work RVU: 6.08

2023 NF PE RVU: NA

2023 Fac PE RVU: 4.04

RUC Recommendation: 6.33

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

33264 **Removal of implantable defibrillator pulse generator with replacement of implantable defibrillator pulse generator; multiple lead system**

Global: 090 **Issue:** Pacemaker or Pacing Carioverter - Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 04 **Specialty Developing Recommendation:** ACC

First Identified: April 2011

2021 Medicare Utilization: 12,407

2023 Work RVU: 6.35

2023 NF PE RVU: NA

2023 Fac PE RVU: 4.21

RUC Recommendation: 6.60

Referred to CPT February 2011

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

33282 **Implantation of patient-activated cardiac event recorder**

Global: **Issue:** Implantation and Removal of Patient Activated Cardiac Event Recorder **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 20 **Specialty Developing Recommendation:**

First Identified: October 2012

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: 3.50

Referred to CPT February 2017

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

33284 **Removal of an implantable, patient-activated cardiac event recorder**

Global: **Issue:** Implantation and Removal of Patient Activated Cardiac Event Recorder **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 20 **Specialty Developing Recommendation:**

First Identified: October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: 3.00 **Referred to CPT** February 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

33405 **Replacement, aortic valve, open, with cardiopulmonary bypass; with prosthetic valve other than homograft or stentless valve**

Global: 090 **Issue:** Valve Replacement and CABG Procedures **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 40 **Specialty Developing Recommendation:** STS

First Identified: September 2011 **2021 Medicare Utilization:** 12,360

2023 Work RVU: 41.32
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.59

RUC Recommendation: 41.32 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33430 **Replacement, mitral valve, with cardiopulmonary bypass**

Global: 090 **Issue:** Valve Replacement and CABG Procedures **Screen:** High IWPUT / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 40 **Specialty Developing Recommendation:** STS

First Identified: February 2008 **2021 Medicare Utilization:** 6,313

2023 Work RVU: 50.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 19.32

RUC Recommendation: 50.93 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33533 **Coronary artery bypass, using arterial graft(s); single arterial graft**

Global: 090 **Issue:** Valve Replacement and CABG Procedures **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 40 **Specialty Developing Recommendation:** STS

First Identified: September 2011 **2021 Medicare Utilization:** 47,131

2023 Work RVU: 33.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.26

RUC Recommendation: 34.98

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

33620 **Application of right and left pulmonary artery bands (eg, hybrid approach stage 1)**

Global: 090 **Issue:** New Technology Review **Screen:** New Technology/New Services / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** STS

First Identified: January 2015 **2021 Medicare Utilization:** 93

2023 Work RVU: 30.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.13

RUC Recommendation: CPT Article published July 2016. Maintain, CPT Assistant addressed issues identified.

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2016

Result: Maintain

33621 **Transthoracic insertion of catheter for stent placement with catheter removal and closure (eg, hybrid approach stage 1)**

Global: 090 **Issue:** New Technology Review **Screen:** New Technology/New Services / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** STS

First Identified: January 2015 **2021 Medicare Utilization:** 1

2023 Work RVU: 16.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.27

RUC Recommendation: CPT Article published July 2016. Maintain, CPT Assistant addressed issues identified.

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2016

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

33622 **Reconstruction of complex cardiac anomaly (eg, single ventricle or hypoplastic left heart) with palliation of single ventricle with aortic outflow obstruction and aortic arch hypoplasia, creation of cavopulmonary anastomosis, and removal of right and left pulmonary bands (eg, hybrid approach stage 2, norwood, bidirectional glenn, pulmonary artery debanding)**

Global: 090 **Issue:** New Technology Review **Screen:** New Technology/New Services / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** STS

First Identified: January 2015 **2021 Medicare Utilization:** 2

2023 Work RVU: 64.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 21.01

RUC Recommendation: CPT Article published July 2016. Maintain, CPT Assistant addressed issues identified.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2016

33741 **Transcatheter atrial septostomy (tas) for congenital cardiac anomalies to create effective atrial flow, including all imaging guidance by the proceduralist, when performed, any method (eg, rashkind, sang-park, balloon, cutting balloon, blade)**

Global: 000 **Issue:** Atrial Septostomy **Screen:** CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 13 **Specialty Developing Recommendation:**

First Identified: September 2019 **2021 Medicare Utilization:** 61

2023 Work RVU: 14.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.77

RUC Recommendation: 14.00

Referred to CPT September 2019

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33745 **Transcatheter intracardiac shunt (tis) creation by stent placement for congenital cardiac anomalies to establish effective intracardiac flow, including all imaging guidance by the proceduralist, when performed, left and right heart diagnostic cardiac catheterization for congenital cardiac anomalies, and target zone angioplasty, when performed (eg, atrial septum, fontan fenestration, right ventricular outflow tract, mustard/senning/warden baffles); initial intracardiac shunt**

Global: 000 **Issue:** Atrial Septostomy **Screen:** CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 13 **Specialty Developing Recommendation:**

First Identified: September 2019 **2021 Medicare Utilization:** 6

2023 Work RVU: 20.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.82

RUC Recommendation: 20.00

Referred to CPT September 2019

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33746 **Transcatheter intracardiac shunt (tis) creation by stent placement for congenital cardiac anomalies to establish effective intracardiac flow, including all imaging guidance by the proceduralist, when performed, left and right heart diagnostic cardiac catheterization for congenital cardiac anomalies, and target zone angioplasty, when performed (eg, atrial septum, fontan fenestration, right ventricular outflow tract, mustard/senning/warden baffles); each additional intracardiac shunt location (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Atrial Septostomy **Screen:** CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 13 **Specialty Developing Recommendation:** **First Identified:** September 2019 **2021 Medicare Utilization:**

2023 Work RVU: 8.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.73

RUC Recommendation: 10.50 **Referred to CPT** September 2019 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33863 **Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, bentall)**

Global: 090 **Issue:** Aortic Graft **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** STS, AATS **First Identified:** February 2008 **2021 Medicare Utilization:** 1,778

2023 Work RVU: 58.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 19.50

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

33945 **Heart transplant, with or without recipient cardiectomy**

Global: 090 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 707

2023 Work RVU: 89.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 32.10

RUC Recommendation: 16.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33946 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; initiation, veno-venous** **Global:** XXX **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI, ACCP **First Identified:** November 2014 **2021 Medicare Utilization:** 528

2023 Work RVU: 6.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.81

RUC Recommendation: 6.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33947 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; initiation, veno-arterial** **Global:** XXX **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI, ACCP **First Identified:** November 2013 **2021 Medicare Utilization:** 1,277

2023 Work RVU: 6.63
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.99

RUC Recommendation: 6.63 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33948 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; daily management, each day, veno-venous** **Global:** XXX **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI, ACCP **First Identified:** November 2013 **2021 Medicare Utilization:** 7,608

2023 Work RVU: 4.73
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.44

RUC Recommendation: 4.73 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33949 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; daily management, each day, veno-arterial** **Global:** XXX **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI, ACCP **First Identified:** November 2013 **2021 Medicare Utilization:** 5,339

2023 Work RVU: 4.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.40

RUC Recommendation: 4.60 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33951 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), percutaneous, birth through 5 years of age (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2013 **2021 Medicare Utilization:**

2023 Work RVU: 8.15
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.35

RUC Recommendation: 8.15 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33952 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2013 **2021 Medicare Utilization:** 1,382

2023 Work RVU: 8.15
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.54

RUC Recommendation: 8.43 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33953 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), open, birth through 5 years of age**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2013 **2021 Medicare Utilization:** 1

2023 Work RVU: 9.11
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.61

RUC Recommendation: 9.83 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33954 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), open, 6 years and older**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 235

2023 Work RVU: 9.11
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.69

RUC Recommendation: 9.43 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33956 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of central cannula(e) by sternotomy or thoracotomy, 6 years and older**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 387

2023 Work RVU: 16.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.65

RUC Recommendation: 16.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33957 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), percutaneous, birth through 5 years of age (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 3.51
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.07

RUC Recommendation: 4.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33958 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 74

2023 Work RVU: 3.51
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.07

RUC Recommendation: 4.05 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33959 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), open, birth through 5 years of age (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 4.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.33

RUC Recommendation: 4.69 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33960 **Prolonged extracorporeal circulation for cardiopulmonary insufficiency; initial day**

Global: **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI, ACCP **First Identified:** July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33961 **Prolonged extracorporeal circulation for cardiopulmonary insufficiency; each subsequent day**

Global: **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI, ACCP **First Identified:** July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

33962 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), open, 6 years and older (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 18

2023 Work RVU: 4.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.33

RUC Recommendation: 4.73 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33963 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition of central cannula(e) by sternotomy or thoracotomy, birth through 5 years of age (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 9.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.58

RUC Recommendation: 9.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33964 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition central cannula(e) by sternotomy or thoracotomy, 6 years and older (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 10

2023 Work RVU: 9.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.72

RUC Recommendation: 9.50 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33965 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), percutaneous, birth through 5 years of age**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 3.51
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.07

RUC Recommendation: 3.51 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33966 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 434

2023 Work RVU: 4.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.42

RUC Recommendation: 4.50 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33969 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), open, birth through 5 years of age**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 5.22
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.54

RUC Recommendation: 6.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33984 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), open, 6 years and older**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 431

2023 Work RVU: 5.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.55

RUC Recommendation: 6.38 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33985 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of central cannula(e) by sternotomy or thoracotomy, birth through 5 years of age**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 9.89
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.83

RUC Recommendation: 9.89 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33986 **Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of central cannula(e) by sternotomy or thoracotomy, 6 years and older**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 208

2023 Work RVU: 10.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.97

RUC Recommendation: 10.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33987 **Arterial exposure with creation of graft conduit (eg, chimney graft) to facilitate arterial perfusion for ecmo/ecls (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 48

2023 Work RVU: 4.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.10

RUC Recommendation: 4.08 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

33988 **Insertion of left heart vent by thoracic incision (eg, sternotomy, thoracotomy) for ecmo/ecls**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2014 **2021 Medicare Utilization:** 34

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.23

RUC Recommendation: 15.00 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33989 **Removal of left heart vent by thoracic incision (eg, sternotomy, thoracotomy) for ecmo/ecls**

Global: 000 **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** November 2013 **2021 Medicare Utilization:** 17

2023 Work RVU: 9.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.72

RUC Recommendation: 9.50 **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

34701 **Endovascular repair of infrarenal aorta by deployment of an aorto-aortic tube endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the aortic bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the aortic bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 657

2023 Work RVU: 23.71
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.85

RUC Recommendation: 23.71 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

34702 **Endovascular repair of infrarenal aorta by deployment of an aorto-aortic tube endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the aortic bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the aortic bifurcation; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 76

2023 Work RVU: 36.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.32

RUC Recommendation: 36.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34703 **Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-uni-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 673

2023 Work RVU: 26.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.30
Result: Decrease

RUC Recommendation: 26.52

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34704 **Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-uni-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 96

2023 Work RVU: 45.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.15
Result: Decrease

RUC Recommendation: 45.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34705 **Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 10,394

2023 Work RVU: 29.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.97
Result: Decrease

RUC Recommendation: 29.58

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34706 **Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 545

2023 Work RVU: 45.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.60
Result: Decrease

RUC Recommendation: 45.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34707 **Endovascular repair of iliac artery by deployment of an ilio-iliac tube endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and all endograft extension(s) proximally to the aortic bifurcation and distally to the iliac bifurcation, and treatment zone angioplasty/stenting, when performed, unilateral; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, arteriovenous malformation)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 424

2023 Work RVU: 22.28
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.53
Result: Decrease

RUC Recommendation: 22.28

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34708 **Endovascular repair of iliac artery by deployment of an ilio-iliac tube endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and all endograft extension(s) proximally to the aortic bifurcation and distally to the iliac bifurcation, and treatment zone angioplasty/stenting, when performed, unilateral; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, arteriovenous malformation, traumatic disruption)**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 72

2023 Work RVU: 36.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.59
Result: Decrease

RUC Recommendation: 36.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34709 **Placement of extension prosthesis(es) distal to the common iliac artery(ies) or proximal to the renal artery(ies) for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, penetrating ulcer, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed, per vessel treated (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 2,426

2023 Work RVU: 6.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.35
Result: Decrease

RUC Recommendation: 6.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34710 **Delayed placement of distal or proximal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, endoleak, or endograft migration, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed; initial vessel treated**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 1,068

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.68
Result: Decrease

RUC Recommendation: 15.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34711 **Delayed placement of distal or proximal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, endoleak, or endograft migration, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed; each additional vessel treated (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 306

2023 Work RVU: 6.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.16
Result: Decrease

RUC Recommendation: 6.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34712 **Transcatheter delivery of enhanced fixation device(s) to the endograft (eg, anchor, screw, tack) and all associated radiological supervision and interpretation**

Global: 090 **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 838

2023 Work RVU: 12.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.37
Result: Decrease

RUC Recommendation: 12.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34713 **Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 french or larger), including ultrasound guidance, when performed, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 14,992

2023 Work RVU: 2.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.50
Result: Decrease

RUC Recommendation: 2.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34714 **Open femoral artery exposure with creation of conduit for delivery of endovascular prosthesis or for establishment of cardiopulmonary bypass, by groin incision, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 503

2023 Work RVU: 5.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.36
Result: Decrease

RUC Recommendation: 5.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34715 **Open axillary/subclavian artery exposure for delivery of endovascular prosthesis by infraclavicular or supraclavicular incision, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 201

2023 Work RVU: 6.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.27
Result: Decrease

RUC Recommendation: 6.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

34716 **Open axillary/subclavian artery exposure with creation of conduit for delivery of endovascular prosthesis or for establishment of cardiopulmonary bypass, by infraclavicular or supraclavicular incision, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS, ACS **First Identified:** January 2017 **2021 Medicare Utilization:** 1,218

2023 Work RVU: 7.19
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.99
Result: Decrease

RUC Recommendation: 7.19

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34800 **Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using aorto-aortic tube prosthesis**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** AAOHNS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

34802 **Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using modular bifurcated prosthesis (1 docking limb)**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Pre-Time Analysis / Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

34803 **Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using modular bifurcated prosthesis (2 docking limbs)**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34804 **Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using unibody bifurcated prosthesis**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

34805 **Endovascular repair of infrarenal abdominal aortic aneurysm or dissection; using aorto-uniiliac or aorto-unifemoral prosthesis**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

34806 **Transcatheter placement of wireless physiologic sensor in aneurysmal sac during endovascular repair, including radiological supervision and interpretation, instrument calibration, and collection of pressure data (List separately in addition to code for primary procedure)**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

34812 **Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2014 **2021 Medicare Utilization:** 5,856

2023 Work RVU: 4.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.88

RUC Recommendation: 4.13 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

34820 **Open iliac artery exposure for delivery of endovascular prosthesis or iliac occlusion during endovascular therapy, by abdominal or retroperitoneal incision, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:** 68

2023 Work RVU: 7.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.10

RUC Recommendation: 7.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

34825 **Placement of proximal or distal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, or dissection; initial vessel**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Pre-Time Analysis / Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34826 **Placement of proximal or distal extension prosthesis for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, or dissection; each additional vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

34833 **Open iliac artery exposure with creation of conduit for delivery of endovascular prosthesis or for establishment of cardiopulmonary bypass, by abdominal or retroperitoneal incision, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:** 26

2023 Work RVU: 8.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.28

RUC Recommendation: 8.16 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

34834 **Open brachial artery exposure for delivery of endovascular prosthesis, unilateral (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:** 397

2023 Work RVU: 2.65
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.47

RUC Recommendation: 2.65 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

34900 **Endovascular repair of iliac artery (eg, aneurysm, pseudoaneurysm, arteriovenous malformation, trauma) using ilio-iliac tube endoprosthesis**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35301 **Thromboendarterectomy, including patch graft, if performed; carotid, vertebral, subclavian, by neck incision**

Global: 090 **Issue:** Thromboendarterectomy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 21 **Specialty Developing Recommendation:** SVS **First Identified:** September 2011 **2021 Medicare Utilization:** 25,815

2023 Work RVU: 21.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.64

RUC Recommendation: 21.16 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

35450 **Transluminal balloon angioplasty, open; renal or other visceral artery**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35452 **Transluminal balloon angioplasty, open; aortic**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35454 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35456 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35458 **Transluminal balloon angioplasty, open; brachiocephalic trunk or branches, each vessel**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35459 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35460 **Transluminal balloon angioplasty, open; venous**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35470 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35471 **Transluminal balloon angioplasty, percutaneous; renal or visceral artery**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35472 **Transluminal balloon angioplasty, percutaneous; aortic**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** Removed from CPT referral **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35473 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35474 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35475 **Transluminal balloon angioplasty, percutaneous; brachiocephalic trunk or branches, each vessel**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part3 / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35476 **Transluminal balloon angioplasty, percutaneous; venous**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35490 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35491 **Deleted from CPT**

Global: **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35492 **Deleted from CPT** **Global:** **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

35493 **Deleted from CPT** **Global:** **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

35494 **Deleted from CPT** **Global:** **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

35495 **Deleted from CPT** **Global:** **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35701 **Exploration not followed by surgical repair, artery; neck (eg, carotid, subclavian)** **Global:** 090 **Issue:** Exploration of Artery **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 06 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** January 2018 **2021 Medicare Utilization:** 709

2023 Work RVU: 7.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.28

RUC Recommendation: 7.50 **Referred to CPT** September 2018 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

35702 **Exploration not followed by surgical repair, artery; upper extremity (eg, axillary, brachial, radial, ulnar)** **Global:** 090 **Issue:** Exploration of Artery **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 408

2023 Work RVU: 7.12
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.40

RUC Recommendation: 7.12 **Referred to CPT** September 2018 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

35703 **Exploration not followed by surgical repair, artery; lower extremity (eg, common femoral, deep femoral, superficial femoral, popliteal, tibial, peroneal)** **Global:** 090 **Issue:** Exploration of Artery **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 600

2023 Work RVU: 7.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.00

RUC Recommendation: 7.50 **Referred to CPT** September 2018 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

35721 **Exploration (not followed by surgical repair), with or without lysis of artery; femoral artery** **Global:** **Issue:** Exploration of Artery **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 06 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** January 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

35741 **Exploration (not followed by surgical repair), with or without lysis of artery; popliteal artery**

Global: **Issue:** Exploration of Artery **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 06 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** January 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

35761 **Exploration (not followed by surgical repair), with or without lysis of artery; other vessels**

Global: **Issue:** Exploration of Artery **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 06 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** April 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

36000 **Introduction of needle or intracatheter, vein**

Global: XXX **Issue:** Introduction of Needle or Intracatheter **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC, AUR, AAP, AAFP, ACRh **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU: 0.18
2023 NF PE RVU: 0.71
2023 Fac PE RVU: 0.07

RUC Recommendation: CMS consider a bundled status for this code **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

36010 **Introduction of catheter, superior or inferior vena cava**

Global: XXX **Issue:** Introduction of Catheter **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 13,444

2023 Work RVU: 2.18
2023 NF PE RVU: 13.73
2023 Fac PE RVU: 0.60

RUC Recommendation: Remove from re-review. **Referred to CPT** February 2011 **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36140 **Introduction of needle or intracatheter, upper or lower extremity artery**

Global: XXX **Issue:** Introduction of Needle or Intracatheter **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** SVS, SIR, ACR, ACRO **First Identified:** April 2011 **2021 Medicare Utilization:** 17,255

2023 Work RVU: 1.76
2023 NF PE RVU: 13.23
2023 Fac PE RVU: 0.49

RUC Recommendation: Remove from re-review **Referred to CPT** **Result:** Remove from Screen
Referred to CPT Asst ☐ **Published in CPT Asst:**

36145 **Deleted from CPT**

Global: **Issue:** Arteriovenous Shunt Imaging **Screen:** Codes Reported Together 95% or More / Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 9 **Specialty Developing Recommendation:** **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

36147 **Introduction of needle and/or catheter, arteriovenous shunt created for dialysis (graft/fistula); initial access with complete radiological evaluation of dialysis access, including fluoroscopy, image documentation and report (includes access of shunt, injection[s] of contrast, and all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava)**

Global: **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36148 **Introduction of needle and/or catheter, arteriovenous shunt created for dialysis (graft/fistula); additional access for therapeutic intervention (List separately in addition to code for primary procedure)**

Global: **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

36215 **Selective catheter placement, arterial system; each first order thoracic or brachiocephalic branch, within a vascular family**

Global: 000 **Issue:** Selective Catheter Placement **Screen:** Codes Reported Together 75% or More-Part1 / Harvard-Valued Annual Allowed Charges Greater than $10 million / Harvard Valued - Utilization greater than 30,000-Part2 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 23 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 35,641

2023 Work RVU: 4.17
2023 NF PE RVU: 26.35
2023 Fac PE RVU: 1.45

RUC Recommendation: 4.17 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36216 **Selective catheter placement, arterial system; initial second order thoracic or brachiocephalic branch, within a vascular family**

Global: 000 **Issue:** Selective Catheter Placement **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 23 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 3,582

2023 Work RVU: 5.27
2023 NF PE RVU: 25.69
2023 Fac PE RVU: 1.62

RUC Recommendation: 5.27 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36217 **Selective catheter placement, arterial system; initial third order or more selective thoracic or brachiocephalic branch, within a vascular family**

Global: 000 **Issue:** Selective Catheter Placement **Screen:** Harvard Valued - Utilization over 30,000 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 23 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** April 2011 **2021 Medicare Utilization:** 3,614

2023 Work RVU: 6.29
2023 NF PE RVU: 45.90
2023 Fac PE RVU: 2.00

RUC Recommendation: 6.29 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

36218 **Selective catheter placement, arterial system; additional second order, third order, and beyond, thoracic or brachiocephalic branch, within a vascular family (list in addition to code for initial second or third order vessel as appropriate)**

Global: ZZZ **Issue:** Selective Catheter Placement **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 23 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** July 2015 **2021 Medicare Utilization:** 1,887

2023 Work RVU: 1.01
2023 NF PE RVU: 5.04
2023 Fac PE RVU: 0.32

RUC Recommendation: 1.01 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

36221 **Non-selective catheter placement, thoracic aorta, with angiography of the extracranial carotid, vertebral, and/or intracranial vessels, unilateral or bilateral, and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed**

Global: 000 **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 14 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 1,470

2023 Work RVU: 3.92
2023 NF PE RVU: 24.97
2023 Fac PE RVU: 1.06

RUC Recommendation: 4.51 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36222 **Selective catheter placement, common carotid or innominate artery, unilateral, any approach, with angiography of the ipsilateral extracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed**

Global: 000 **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 14 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 5,479

2023 Work RVU: 5.28
2023 NF PE RVU: 30.04
2023 Fac PE RVU: 1.81

RUC Recommendation: 6.00 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36223 **Selective catheter placement, common carotid or innominate artery, unilateral, any approach, with angiography of the ipsilateral intracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the extracranial carotid and cervicocerebral arch, when performed**

Global: 000 **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 / PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 26,058

2023 Work RVU: 5.75
2023 NF PE RVU: 42.03
2023 Fac PE RVU: 2.31

RUC Recommendation: 6.50 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36224 **Selective catheter placement, internal carotid artery, unilateral, with angiography of the ipsilateral intracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the extracranial carotid and cervicocerebral arch, when performed**

Global: 000 **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 / PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 33,880

2023 Work RVU: 6.25
2023 NF PE RVU: 53.21
2023 Fac PE RVU: 2.74

RUC Recommendation: 7.55 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36225 **Selective catheter placement, subclavian or innominate artery, unilateral, with angiography of the ipsilateral vertebral circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed**

Global: 000 **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 14 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 9,808

2023 Work RVU: 5.75
2023 NF PE RVU: 39.29
2023 Fac PE RVU: 2.23

RUC Recommendation: 6.50 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36226 **Selective catheter placement, vertebral artery, unilateral, with angiography of the ipsilateral vertebral circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed**

Global: 000 **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 14 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 28,735

2023 Work RVU: 6.25
2023 NF PE RVU: 51.54
2023 Fac PE RVU: 2.71

RUC Recommendation: 7.55 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36227 **Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 14 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 15,752

2023 Work RVU: 2.09
2023 NF PE RVU: 4.52
2023 Fac PE RVU: 0.86

RUC Recommendation: 2.32 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36228 **Selective catheter placement, each intracranial branch of the internal carotid or vertebral arteries, unilateral, with angiography of the selected vessel circulation and all associated radiological supervision and interpretation (eg, middle cerebral artery, posterior inferior cerebellar artery) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cervicocerebral Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 14 **Specialty Developing Recommendation:** AAN, AANS, ACC, ACR, ASN, CNS, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 2,216

2023 Work RVU: 4.25
2023 NF PE RVU: 32.30
2023 Fac PE RVU: 1.73

RUC Recommendation: 4.25 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36245 **Selective catheter placement, arterial system; each first order abdominal, pelvic, or lower extremity artery branch, within a vascular family**

Global: XXX **Issue:** Selective Catheter Placement **Screen:** Harvard Valued - Utilization over 100,000 / Codes Reported Together 75% or More-Part1 / Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 22 **Specialty Developing Recommendation:** ACC, ACR, SIR, SCAI, SVS **First Identified:** October 2009 **2021 Medicare Utilization:** 33,918

2023 Work RVU: 4.65
2023 NF PE RVU: 31.96
2023 Fac PE RVU: 1.42

RUC Recommendation: 4.90 **Referred to CPT** February 2010 and February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36246 **Selective catheter placement, arterial system; initial second order abdominal, pelvic, or lower extremity artery branch, within a vascular family**

Global: 000 **Issue:** Vascular Injection Procedures **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 27 **Specialty Developing Recommendation:** SVS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 29,820

2023 Work RVU: 5.02
2023 NF PE RVU: 19.05
2023 Fac PE RVU: 1.33

RUC Recommendation: 5.27 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36247 **Selective catheter placement, arterial system; initial third order or more selective abdominal, pelvic, or lower extremity artery branch, within a vascular family**

Global: 000 **Issue:** Vascular Injection Procedures **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 27 **Specialty Developing Recommendation:** SVS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 60,496

2023 Work RVU: 6.04
2023 NF PE RVU: 35.71
2023 Fac PE RVU: 1.64

RUC Recommendation: 7.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

36248 **Selective catheter placement, arterial system; additional second order, third order, and beyond, abdominal, pelvic, or lower extremity artery branch, within a vascular family (list in addition to code for initial second or third order vessel as appropriate)**

Global: ZZZ **Issue:** Catheter Placement **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 40 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2008 **2021 Medicare Utilization:** 27,375

2023 Work RVU: 1.01
2023 NF PE RVU: 2.38
2023 Fac PE RVU: 0.28

RUC Recommendation: Remove from screen **Referred to CPT** February 2010 **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

36251 **Selective catheter placement (first-order), main renal artery and any accessory renal artery(s) for renal angiography, including arterial puncture and catheter placement(s), fluoroscopy, contrast injection(s), image postprocessing, permanent recording of images, and radiological supervision and interpretation, including pressure gradient measurements when performed, and flush aortogram when performed; unilateral**

Global: 000 **Issue:** Renal Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 11 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2011 **2021 Medicare Utilization:** 3,041

2023 Work RVU: 5.10
2023 NF PE RVU: 32.77
2023 Fac PE RVU: 1.48

RUC Recommendation: 5.45 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36252 **Selective catheter placement (first-order), main renal artery and any accessory renal artery(s) for renal angiography, including arterial puncture and catheter placement(s), fluoroscopy, contrast injection(s), image postprocessing, permanent recording of images, and radiological supervision and interpretation, including pressure gradient measurements when performed, and flush aortogram when performed; bilateral**

Global: 000 **Issue:** Renal Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 11 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2011 **2021 Medicare Utilization:** 5,249

2023 Work RVU: 6.74
2023 NF PE RVU: 33.54
2023 Fac PE RVU: 2.21

RUC Recommendation: 7.38 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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36253 **Superselective catheter placement (one or more second order or higher renal artery branches) renal artery and any accessory renal artery(s) for renal angiography, including arterial puncture, catheterization, fluoroscopy, contrast injection(s), image postprocessing, permanent recording of images, and radiological supervision and interpretation, including pressure gradient measurements when performed, and flush aortogram when performed; unilateral**

Global: 000 **Issue:** Renal Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 11 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2011 **2021 Medicare Utilization:** 1,747

2023 Work RVU: 7.30
2023 NF PE RVU: 52.46
2023 Fac PE RVU: 2.13

RUC Recommendation: 7.55 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

36254 **Superselective catheter placement (one or more second order or higher renal artery branches) renal artery and any accessory renal artery(s) for renal angiography, including arterial puncture, catheterization, fluoroscopy, contrast injection(s), image postprocessing, permanent recording of images, and radiological supervision and interpretation, including pressure gradient measurements when performed, and flush aortogram when performed; bilateral**

Global: 000 **Issue:** Renal Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 11 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2011 **2021 Medicare Utilization:** 246

2023 Work RVU: 7.90
2023 NF PE RVU: 50.03
2023 Fac PE RVU: 2.55

RUC Recommendation: 8.15 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

36410 **Venipuncture, age 3 years or older, necessitating the skill of a physician or other qualified health care professional (separate procedure), for diagnostic or therapeutic purposes (not to be used for routine venipuncture)**

Global: XXX **Issue:** Venipunture **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 36 **Specialty Developing Recommendation:** ACP **First Identified:** October 2009 **2021 Medicare Utilization:** 145,136

2023 Work RVU: 0.18
2023 NF PE RVU: 0.32
2023 Fac PE RVU: 0.07

RUC Recommendation: 0.18 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

36475 **Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; first vein treated**

Global: 000 **Issue:** Endovenous Ablation **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 38 **Specialty Developing Recommendation:** ACC, ACR, ACS, SCAI, SIR, SVS **First Identified:** April 2013 **2021 Medicare Utilization:** 87,983

2023 Work RVU: 5.30
2023 NF PE RVU: 26.06
2023 Fac PE RVU: 1.72

RUC Recommendation: 5.30 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36476 **Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; subsequent vein(s) treated in a single extremity, each through separate access sites (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovenous Ablation **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 38 **Specialty Developing Recommendation:** ACC, ACR, ACS, SCAI, SIR, SVS **First Identified:** October 2013 **2021 Medicare Utilization:** 5,789

2023 Work RVU: 2.65
2023 NF PE RVU: 5.30
2023 Fac PE RVU: 0.71

RUC Recommendation: 2.65 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36478 **Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; first vein treated**

Global: 000 **Issue:** Endovenous Ablation **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 38 **Specialty Developing Recommendation:** ACC, ACR, ACS, SCAI, SIR, SVS **First Identified:** April 2013 **2021 Medicare Utilization:** 34,994

2023 Work RVU: 5.30
2023 NF PE RVU: 23.11
2023 Fac PE RVU: 1.76

RUC Recommendation: 5.30 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36479 **Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; subsequent vein(s) treated in a single extremity, each through separate access sites (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovenous Ablation **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 38 **Specialty Developing Recommendation:** ACC, ACR, ACS, SCAI, SIR, SVS **First Identified:** April 2013 **2021 Medicare Utilization:** 3,879

2023 Work RVU: 2.65
2023 NF PE RVU: 5.79
2023 Fac PE RVU: 0.77

RUC Recommendation: 2.65 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36481 **Percutaneous portal vein catheterization by any method**

Global: 000 **Issue:** Interventional Radiology Procedures **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 21 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** NA **2021 Medicare Utilization:** 675

2023 Work RVU: 6.73
2023 NF PE RVU: 45.04
2023 Fac PE RVU: 2.08

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36511 **Therapeutic apheresis; for white blood cells**

Global: 000 **Issue:** Therapeutic Apheresis **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: January 2017 **2021 Medicare Utilization:** 332

2023 Work RVU: 2.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.10

RUC Recommendation: 2.00. Refer to CPT Assistant.

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2018

Result: Increase

36512 **Therapeutic apheresis; for red blood cells**

Global: 000 **Issue:** Therapeutic Apheresis **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: January 2017 **2021 Medicare Utilization:** 2,850

2023 Work RVU: 2.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.01

RUC Recommendation: 2.00. Refer to CPT Assistant.

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2018

Result: Increase

36513 **Therapeutic apheresis; for platelets**

Global: 000 **Issue:** Therapeutic Apheresis **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: January 2017 **2021 Medicare Utilization:** 229

2023 Work RVU: 2.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.93

RUC Recommendation: 2.00. Refer to CPT Assistant.

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2018

Result: Increase

36514 **Therapeutic apheresis; for plasma pheresis**

Global: 000 **Issue:** Therapeutic Apheresis **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: January 2017 **2021 Medicare Utilization:** 23,495

2023 Work RVU: 1.81
2023 NF PE RVU: 14.91
2023 Fac PE RVU: 0.79

RUC Recommendation: 1.81. Refer to CPT Assistant

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2018

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

36515 **Therapeutic apheresis; with extracorporeal immunoadsorption and plasma reinfusion**

Global: **Issue:** Therapeutic Apheresis **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2018

Result: Deleted from CPT

36516 **Therapeutic apheresis; with extracorporeal immunoadsorption, selective adsorption or selective filtration and plasma reinfusion**

Global: 000 **Issue:** Therapeutic Apheresis **Screen:** CMS Fastest Growing / CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: October 2008 **2021 Medicare Utilization:** 1,064

2023 Work RVU: 1.56
2023 NF PE RVU: 50.95
2023 Fac PE RVU: 0.65

RUC Recommendation: 1.56. Refer to CPT Assistant

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2009

Result: Increase

36522 **Photopheresis, extracorporeal**

Global: 000 **Issue:** Therapeutic Apheresis **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 12 **Specialty Developing Recommendation:** CAP, RPA

First Identified: January 2017 **2021 Medicare Utilization:** 7,845

2023 Work RVU: 1.75
2023 NF PE RVU: 38.81
2023 Fac PE RVU: 0.96

RUC Recommendation: 1.75. Refer to CPT Assistant

Referred to CPT September 2016
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2018

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

36555 **Insertion of non-tunneled centrally inserted central venous catheter; younger than 5 years of age**

Global: 000 **Issue:** Insertion of Catheter **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 16 **Specialty Developing Recommendation:** ACR, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 25

2023 Work RVU: 1.93
2023 NF PE RVU: 3.58
2023 Fac PE RVU: 0.39

RUC Recommendation: 1.93 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36556 **Insertion of non-tunneled centrally inserted central venous catheter; age 5 years or older**

Global: 000 **Issue:** Insertion of Catheter **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 16 **Specialty Developing Recommendation:** ACR, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 388,031

2023 Work RVU: 1.75
2023 NF PE RVU: 4.44
2023 Fac PE RVU: 0.51

RUC Recommendation: 1.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36568 **Insertion of peripherally inserted central venous catheter (picc), without subcutaneous port or pump, without imaging guidance; younger than 5 years of age**

Global: 000 **Issue:** PICC Line Procedures **Screen:** Identified in RUC review of other services **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2016 **2021 Medicare Utilization:**

2023 Work RVU: 2.11
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.35

RUC Recommendation: 2.11 **Referred to CPT** September 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36569 **Insertion of peripherally inserted central venous catheter (picc), without subcutaneous port or pump, without imaging guidance; age 5 years or older**

Global: 000 **Issue:** PICC Line Procedures **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** July 2015 **2021 Medicare Utilization:** 10,837

2023 Work RVU: 1.90
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.59

RUC Recommendation: 1.90. **Referred to CPT** September 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36572 **Insertion of peripherally inserted central venous catheter (picc), without subcutaneous port or pump, including all imaging guidance, image documentation, and all associated radiological supervision and interpretation required to perform the insertion; younger than 5 years of age**

Global: 000 **Issue:** PICC Line Procedures **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** September 2017 **2021 Medicare Utilization:** 26

2023 Work RVU: 1.82
2023 NF PE RVU: 9.26
2023 Fac PE RVU: 0.34

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36573 **Insertion of peripherally inserted central venous catheter (picc), without subcutaneous port or pump, including all imaging guidance, image documentation, and all associated radiological supervision and interpretation required to perform the insertion; age 5 years or older**

Global: 000 **Issue:** PICC Line Procedures **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** September 2017 **2021 Medicare Utilization:** 68,123

2023 Work RVU: 1.70
2023 NF PE RVU: 9.70
2023 Fac PE RVU: 0.59

RUC Recommendation: 1.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36584 **Replacement, complete, of a peripherally inserted central venous catheter (picc), without subcutaneous port or pump, through same venous access, including all imaging guidance, image documentation, and all associated radiological supervision and interpretation required to perform the replacement**

Global: 000 **Issue:** PICC Line Procedures **Screen:** Identified in RUC review of other services **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2016 **2021 Medicare Utilization:** 3,205

2023 Work RVU: 1.20
2023 NF PE RVU: 8.52
2023 Fac PE RVU: 0.40

RUC Recommendation: 1.47 **Referred to CPT** September 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36620 **Arterial catheterization or cannulation for sampling, monitoring or transfusion (separate procedure); percutaneous**

Global: 000 **Issue:** Insertion of Catheter **Screen:** CMS High Expenditure Procedural Codes2 / Codes Reported Together 75%or More-Part4 / Modifier -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** ACR, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 549,202

2023 Work RVU: 1.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.21

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36818 **Arteriovenous anastomosis, open; by upper arm cephalic vein transposition**

Global: 090 **Issue:** Arteriovenous Anastomosis **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 10 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** November 2012 **2021 Medicare Utilization:** 3,491

2023 Work RVU: 12.39
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.81

RUC Recommendation: 13.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36819 **Arteriovenous anastomosis, open; by upper arm basilic vein transposition** **Global:** 090 **Issue:** Arteriovenous Anastomosis **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 10 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** November 2012 **2021 Medicare Utilization:** 5,100

2023 Work RVU: 13.29
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.86

RUC Recommendation: 15.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

36820 **Arteriovenous anastomosis, open; by forearm vein transposition** **Global:** 090 **Issue:** Arteriovenous Anastomosis **Screen:** Site of Service Anomaly / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 10 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** September 2007 **2021 Medicare Utilization:** 993

2023 Work RVU: 13.07
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.00

RUC Recommendation: 13.99 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36821 **Arteriovenous anastomosis, open; direct, any site (eg, cimino type) (separate procedure)** **Global:** 090 **Issue:** Arteriovenous Anastomosis **Screen:** Site of Service Anomaly / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 10 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** September 2007 **2021 Medicare Utilization:** 23,830

2023 Work RVU: 11.90
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.59

RUC Recommendation: 11.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36822 **Insertion of cannula(s) for prolonged extracorporeal circulation for cardiopulmonary insufficiency (ECMO) (separate procedure)**

Global: **Issue:** ECMO-ECLS **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 11 **Specialty Developing Recommendation:** STS, AAP, ACC, SCAI **First Identified:** February 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

36825 **Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft**

Global: 090 **Issue:** Arteriovenous Anastomosis **Screen:** Site of Service Anomaly / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 10 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,393

2023 Work RVU: 14.17
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.63

RUC Recommendation: 15.93 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

36830 **Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft (eg, biological collagen, thermoplastic graft)**

Global: 090 **Issue:** Arteriovenous Anastomosis **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 10 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** November 2012 **2021 Medicare Utilization:** 14,683

2023 Work RVU: 12.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.59

RUC Recommendation: 11.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36834 **Deleted from CPT**

Global: **Issue:** Aneurysm Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AVA, ACS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

36870 **Thrombectomy, percutaneous, arteriovenous fistula, autogenous or nonautogenous graft (includes mechanical thrombus extraction and intra-graft thrombolysis)**

Global: **Issue:** Dialysis Circuit -1 **Screen:** Site of Service Anomaly (99238-Only) / CMS High Expenditure Procedural Codes / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

36901 **Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report;**

Global: 000 **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 48,016

2023 Work RVU: 3.36
2023 NF PE RVU: 17.35
2023 Fac PE RVU: 1.04

RUC Recommendation: 3.36 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36902 **Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report; with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty**

Global: 000 **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 145,675

2023 Work RVU: 4.83
2023 NF PE RVU: 30.80
2023 Fac PE RVU: 1.46

RUC Recommendation: 4.83 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36903 **Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report; with transcatheter placement of intravascular stent(s), peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis segment**

Global: 000 **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 14,972

2023 Work RVU: 6.39
2023 NF PE RVU: 121.63
2023 Fac PE RVU: 1.80

RUC Recommendation: 6.39 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36904 **Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s);**

Global: 000 **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 2,803

2023 Work RVU: 7.50
2023 NF PE RVU: 45.92
2023 Fac PE RVU: 2.15

RUC Recommendation: 7.50 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

36905 **Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty**

Global: 000 **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 28,025

2023 Work RVU: 9.00
2023 NF PE RVU: 58.42
2023 Fac PE RVU: 2.69

RUC Recommendation: 9.00 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36906 **Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transcatheter placement of intravascular stent(s), peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis circuit**

Global: 000 **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 10,192

2023 Work RVU: 10.42
2023 NF PE RVU: 151.66
2023 Fac PE RVU: 2.97
Result: Decrease

RUC Recommendation: 10.42 **Referred to CPT** October 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

36907 **Transluminal balloon angioplasty, central dialysis segment, performed through dialysis circuit, including all imaging and radiological supervision and interpretation required to perform the angioplasty (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 51,014

2023 Work RVU: 3.00
2023 NF PE RVU: 14.32
2023 Fac PE RVU: 0.82
Result: Decrease

RUC Recommendation: 3.00 **Referred to CPT** October 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

36908 **Transcatheter placement of intravascular stent(s), central dialysis segment, performed through dialysis circuit, including all imaging and radiological supervision and interpretation required to perform the stenting, and all angioplasty in the central dialysis segment (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 3,740

2023 Work RVU: 4.25
2023 NF PE RVU: 37.75
2023 Fac PE RVU: 1.09
Result: Decrease

RUC Recommendation: 4.25 **Referred to CPT** October 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

36909 **Dialysis circuit permanent vascular embolization or occlusion (including main circuit or any accessory veins), endovascular, including all imaging and radiological supervision and interpretation necessary to complete the intervention (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 4,288

2023 Work RVU: 4.12
2023 NF PE RVU: 52.90
2023 Fac PE RVU: 1.09

RUC Recommendation: 4.12 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37183 **Revision of transvenous intrahepatic portosystemic shunt(s) (tips) (includes venous access, hepatic and portal vein catheterization, portography with hemodynamic evaluation, intrahepatic tract recannulization/dilatation, stent placement and all associated imaging guidance and documentation)**

Global: 000 **Issue:** Interventional Radiology Procedures **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 21 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** NA **2021 Medicare Utilization:** 832

2023 Work RVU: 7.74
2023 NF PE RVU: 168.49
2023 Fac PE RVU: 2.38

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

37191 **Insertion of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed**

Global: 000 **Issue:** IVC Transcatheter Procedure **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2011 **2021 Medicare Utilization:** 22,544

2023 Work RVU: 4.46
2023 NF PE RVU: 56.27
2023 Fac PE RVU: 1.36

RUC Recommendation: 4.71 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37192 **Repositioning of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed**

Global: 000 **Issue:** IVC Transcatheter Procedure **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2011 **2021 Medicare Utilization:** 22

2023 Work RVU: 7.10
2023 NF PE RVU: 29.62
2023 Fac PE RVU: 1.20

RUC Recommendation: 8.00 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37193 **Retrieval (removal) of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed**

Global: 000 **Issue:** IVC Transcatheter Procedure **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2011 **2021 Medicare Utilization:** 6,002

2023 Work RVU: 7.10
2023 NF PE RVU: 37.06
2023 Fac PE RVU: 1.99

RUC Recommendation: 8.00 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37201 **Transcatheter therapy, infusion for thrombolysis other than coronary**

Global: **Issue:** Bundle Thrombolysis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37203 **Transcatheter retrieval, percutaneous, of intravascular foreign body (eg, fractured venous or arterial catheter)**

Global: **Issue:** Transcatheter Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 07 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37204 **Transcatheter occlusion or embolization (eg, for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method, non-central nervous system, non-head or neck**

Global: **Issue:** Embolization and Occlusion Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 08 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37205 **Transcatheter placement of an intravascular stent(s) (except coronary, carotid, vertebral, iliac, and lower extremity arteries), percutaneous; initial vessel**

Global: **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37206 **Transcatheter placement of an intravascular stent(s) (except coronary, carotid, vertebral, iliac, and lower extremity arteries), percutaneous; each additional vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37207 **Transcatheter placement of an intravascular stent(s) (except coronary, carotid, vertebral, iliac and lower extremity arteries), open; initial vessel**

Global: **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37208 **Transcatheter placement of an intravascular stent(s) (except coronary, carotid, vertebral, iliac and lower extremity arteries), open; each additional vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 07 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37209 **Exchange of a previously placed intravascular catheter during thrombolytic therapy**

Global: **Issue:** Bundle Thrombolysis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37210 **Uterine fibroid embolization (UFE, embolization of the uterine arteries to treat uterine fibroids, leiomyomata), percutaneous approach inclusive of vascular access, vessel selection, embolization, and all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the procedure**

Global: **Issue:** Embolization and Occlusion Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 08 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37211 **Transcatheter therapy, arterial infusion for thrombolysis other than coronary or intracranial, any method, including radiological supervision and interpretation, initial treatment day**

Global: 000 **Issue:** Bundle Thrombolysis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 8,940

2023 Work RVU: 7.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.10

RUC Recommendation: 8.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37212 **Transcatheter therapy, venous infusion for thrombolysis, any method, including radiological supervision and interpretation, initial treatment day**

Global: 000 **Issue:** Bundle Thrombolysis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 1,794

2023 Work RVU: 6.81
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.89

RUC Recommendation: 7.06 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37213 **Transcatheter therapy, arterial or venous infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, continued treatment on subsequent day during course of thrombolytic therapy, including follow-up catheter contrast injection, position change, or exchange, when performed;**

Global: 000 **Issue:** Bundle Thrombolysis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 1,435

2023 Work RVU: 4.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.18

RUC Recommendation: 5.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37214 **Transcatheter therapy, arterial or venous infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, continued treatment on subsequent day during course of thrombolytic therapy, including follow-up catheter contrast injection, position change, or exchange, when performed; cessation of thrombolysis including removal of catheter and vessel closure by any method**

Global: 000 **Issue:** Bundle Thrombolysis **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 4,081

2023 Work RVU: 2.49
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.64

RUC Recommendation: 3.04 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37220 **Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 11,391

2023 Work RVU: 7.90
2023 NF PE RVU: 65.92
2023 Fac PE RVU: 2.02

RUC Recommendation: Refer to CPT. 8.15 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37221 **Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 29,005

2023 Work RVU: 9.75
2023 NF PE RVU: 81.05
2023 Fac PE RVU: 2.43

RUC Recommendation: Refer to CPT. 10.00 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37222 **Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 3,143

2023 Work RVU: 3.73
2023 NF PE RVU: 13.95
2023 Fac PE RVU: 0.86

RUC Recommendation: Refer to CPT. 3.73 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37223 **Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 4,297

2023 Work RVU: 4.25
2023 NF PE RVU: 33.20
2023 Fac PE RVU: 0.95

RUC Recommendation: Refer to CPT. 4.25 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37224 **Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal angioplasty**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 29,781

2023 Work RVU: 8.75
2023 NF PE RVU: 77.46
2023 Fac PE RVU: 2.24

RUC Recommendation: Refer to CPT. 9.00 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37225 **Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with atherectomy, includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 / PE Screen - High Cost Supplies **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 40,461

2023 Work RVU: 11.75
2023 NF PE RVU: 250.10
2023 Fac PE RVU: 3.15

RUC Recommendation: Refer to CPT. **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37226 **Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 20,103

2023 Work RVU: 10.24
2023 NF PE RVU: 233.49
2023 Fac PE RVU: 2.57

RUC Recommendation: Refer to CPT. 10.49 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37227 **Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 / PE Screen - High Cost Supplies **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 20,679

2023 Work RVU: 14.25
2023 NF PE RVU: 321.29
2023 Fac PE RVU: 3.58

RUC Recommendation: Refer to CPT. 14.50 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37228 **Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal angioplasty**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 30,844

2023 Work RVU: 10.75
2023 NF PE RVU: 112.07
2023 Fac PE RVU: 2.66

RUC Recommendation: Refer to CPT. 11.00 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37229 **Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 / PE Screen - High Cost Supplies / High Volume Growth5 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 38,048

2023 Work RVU: 13.80
2023 NF PE RVU: 252.05
2023 Fac PE RVU: 3.61

RUC Recommendation: Refer to CPT. 14.05 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37230 **Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 2,410

2023 Work RVU: 13.55
2023 NF PE RVU: 252.54
2023 Fac PE RVU: 3.68

RUC Recommendation: Refer to CPT. 13.80 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37231 **Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed**

Global: 000 **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 3,084

2023 Work RVU: 14.75
2023 NF PE RVU: 337.92
2023 Fac PE RVU: 3.95

RUC Recommendation: Refer to CPT. 15.00 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37232 **Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal angioplasty (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 14,007

2023 Work RVU: 4.00
2023 NF PE RVU: 19.89
2023 Fac PE RVU: 0.99

RUC Recommendation: Refer to CPT. 4.00 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37233 **Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 8,996

2023 Work RVU: 6.50
2023 NF PE RVU: 23.60
2023 Fac PE RVU: 1.63

RUC Recommendation: Refer to CPT. 6.50 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37234 **Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 353

2023 Work RVU: 5.50
2023 NF PE RVU: 102.90
2023 Fac PE RVU: 1.53

RUC Recommendation: Refer to CPT. 5.50 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37235 **Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Endovascular Revascularization **Screen:** High Volume Growth1 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 468

2023 Work RVU: 7.80
2023 NF PE RVU: 110.58
2023 Fac PE RVU: 1.92

RUC Recommendation: Refer to CPT. 7.80 **Referred to CPT** February 2024 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37236 **Transcatheter placement of an intravascular stent(s) (except lower extremity artery(s) for occlusive disease, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; initial artery**

Global: 000 **Issue:** Transcatheter Placement of Intravascular Stent **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 09 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2013 **2021 Medicare Utilization:** 10,944

2023 Work RVU: 8.75
2023 NF PE RVU: 72.21
2023 Fac PE RVU: 2.23

RUC Recommendation: 9.00 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37237 **Transcatheter placement of an intravascular stent(s) (except lower extremity artery(s) for occlusive disease, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; each additional artery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Transcatheter Placement of Intravascular Stent **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 09 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2013 **2021 Medicare Utilization:** 1,315

2023 Work RVU: 4.25
2023 NF PE RVU: 33.77
2023 Fac PE RVU: 0.95

RUC Recommendation: 4.25 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37238 **Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; initial vein**

Global: 000 **Issue:** Transcatheter Placement of Intravascular Stent **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 09 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2013 **2021 Medicare Utilization:** 10,623

2023 Work RVU: 6.04
2023 NF PE RVU: 96.87
2023 Fac PE RVU: 1.72

RUC Recommendation: 6.29 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37239 **Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; each additional vein (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Transcatheter Placement of Intravascular Stent **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 09 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2013 **2021 Medicare Utilization:** 3,979

2023 Work RVU: 2.97
2023 NF PE RVU: 48.12
2023 Fac PE RVU: 0.82

RUC Recommendation: 3.34 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37241 **Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; venous, other than hemorrhage (eg, congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles)**

Global: 000 **Issue:** Embolization and Occlusion Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 08 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 1,680

2023 Work RVU: 8.75
2023 NF PE RVU: 130.77
2023 Fac PE RVU: 2.45

RUC Recommendation: 9.00 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37242 **Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; arterial, other than hemorrhage or tumor (eg, congenital or acquired arterial malformations, arteriovenous malformations, arteriovenous fistulas, aneurysms, pseudoaneurysms)**

Global: 000 **Issue:** Embolization and Occlusion Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 08 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 8,142

2023 Work RVU: 9.80
2023 NF PE RVU: 203.70
2023 Fac PE RVU: 2.56

RUC Recommendation: 11.98 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37243 **Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; for tumors, organ ischemia, or infarction**

Global: 000 **Issue:** Embolization and Occlusion Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 08 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 13,902

2023 Work RVU: 11.74
2023 NF PE RVU: 248.20
2023 Fac PE RVU: 3.37

RUC Recommendation: 14.00 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37244 **Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; for arterial or venous hemorrhage or lymphatic extravasation**

Global: 000 **Issue:** Embolization and Occlusion Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 08 **Specialty Developing Recommendation:** SVS, ACS, SIR, ACR, ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 13,555

2023 Work RVU: 13.75
2023 NF PE RVU: 184.06
2023 Fac PE RVU: 4.07

RUC Recommendation: 14.00 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37246 **Transluminal balloon angioplasty (except lower extremity artery(ies) for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same artery; initial artery**

Global: 000 **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 6,890

2023 Work RVU: 7.00
2023 NF PE RVU: 46.47
2023 Fac PE RVU: 1.86

RUC Recommendation: 7.00 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37247 **Transluminal balloon angioplasty (except lower extremity artery(ies) for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same artery; each additional artery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 736

2023 Work RVU: 3.50
2023 NF PE RVU: 12.75
2023 Fac PE RVU: 0.80

RUC Recommendation: 3.50 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37248 **Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; initial vein**

Global: 000 **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 13,541

2023 Work RVU: 6.00
2023 NF PE RVU: 34.02
2023 Fac PE RVU: 1.78

RUC Recommendation: 6.00 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37249 **Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; each additional vein (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2015 **2021 Medicare Utilization:** 3,775

2023 Work RVU: 2.97
2023 NF PE RVU: 9.78
2023 Fac PE RVU: 0.75

RUC Recommendation: 2.97 **Referred to CPT** October 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37250 **Intravascular ultrasound (non-coronary vessel) during diagnostic evaluation and/or therapeutic intervention; initial vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Intravascular Ultrasound **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 07 **Specialty Developing Recommendation:** ACC, SCAI, SIR, SVS **First Identified:** July 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37251 **Intravascular ultrasound (non-coronary vessel) during diagnostic evaluation and/or therapeutic intervention; each additional vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Intravascular Ultrasound **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 07 **Specialty Developing Recommendation:** ACC,SCAI, SIR, SVS **First Identified:** July 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37252 **Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; initial noncoronary vessel (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Intravascular Ultrasound **Screen:** Final Rule for 2015 / Work Neutrality (CPT 2016) **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 14 **Specialty Developing Recommendation:** ACC,SCAI, SIR, SVS **First Identified:** July 2014 **2021 Medicare Utilization:** 70,937

2023 Work RVU: 1.80
2023 NF PE RVU: 26.58
2023 Fac PE RVU: 0.45

RUC Recommendation: 1.80 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37253 **Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Intravascular Ultrasound **Screen:** Final Rule for 2015 / Work Neutrality (CPT 2016) **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 14 **Specialty Developing Recommendation:** ACC,SCAI, SIR, SVS **First Identified:** July 2014 **2021 Medicare Utilization:** 107,202

2023 Work RVU: 1.44
2023 NF PE RVU: 3.42
2023 Fac PE RVU: 0.36

RUC Recommendation: 1.44 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

37609 **Ligation or biopsy, temporal artery**

Global: 010 **Issue:** Ligation **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** SVS, ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 11,304

2023 Work RVU: 3.05
2023 NF PE RVU: 5.69
2023 Fac PE RVU: 2.40

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37619 **Ligation of inferior vena cava**

Global: 090 **Issue:** Ligation of Inferior Vena Cava **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 13 **Specialty Developing Recommendation:** ACS, SVS **First Identified:** February 2011 **2021 Medicare Utilization:** 24

2023 Work RVU: 30.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.82

RUC Recommendation: 37.60 **Referred to CPT** February 2011 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

37620 **Interruption, partial or complete, of inferior vena cava by suture, ligation, plication, clip, extravascular, intravascular (umbrella device)**

Global: **Issue:** Major Vein Revision **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

37760 **Ligation of perforator veins, subfascial, radical (linton type), including skin graft, when performed, open,1 leg**

Global: 090 **Issue:** Perorator Vein Ligation **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 10 **Specialty Developing Recommendation:** SVS, ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 54

2023 Work RVU: 10.78
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.50

RUC Recommendation: 10.69 **Referred to CPT** February 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

37761 **Ligation of perforator vein(s), subfascial, open, including ultrasound guidance, when performed, 1 leg**

Global: 090 **Issue:** Perforator Vein Ligation **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 10 **Specialty Developing Recommendation:** SVS, ACS **First Identified:** April 2009 **2021 Medicare Utilization:** 209

2023 Work RVU: 9.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.64

RUC Recommendation: 9.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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37765 **Stab phlebectomy of varicose veins, 1 extremity; 10-20 stab incisions**

Global: 010 **Issue:** Stab Phlebectomy of Varicose Veins **Screen:** High Volume Growth1 / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 12 **Specialty Developing Recommendation:** ACS, SIR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:** 10,418

2023 Work RVU: 4.80
2023 NF PE RVU: 6.80
2023 Fac PE RVU: 2.10

RUC Recommendation: 4.80 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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37766 **Stab phlebectomy of varicose veins, 1 extremity; more than 20 incisions**

Global: 010 **Issue:** Stab Phlebectomy of Varicose Veins **Screen:** High Volume Growth1 / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 12 **Specialty Developing Recommendation:** ACS, SIR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:** 8,063

2023 Work RVU: 6.00
2023 NF PE RVU: 7.56
2023 Fac PE RVU: 2.45

RUC Recommendation: 6.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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37785 **Ligation, division, and/or excision of varicose vein cluster(s), 1 leg**

Global: 090 **Issue:** Ligation **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** APMA, SVS, ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 797

2023 Work RVU: 3.93
2023 NF PE RVU: 5.60
2023 Fac PE RVU: 2.67

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

38220 **Diagnostic bone marrow; aspiration(s)**

Global: XXX **Issue:** Diagnostic Bone Marrow Aspiration and Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 06 **Specialty Developing Recommendation:** ASCO, ASH, CAP ASBMT **First Identified:** February 2016 **2021 Medicare Utilization:** 4,593

2023 Work RVU: 1.20
2023 NF PE RVU: 3.34
2023 Fac PE RVU: 0.70

RUC Recommendation: 1.20 **Referred to CPT** February 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

38221 **Diagnostic bone marrow; biopsy(ies)**

Global: XXX **Issue:** Diagnostic Bone Marrow Aspiration and Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 06 **Specialty Developing Recommendation:** ASCO, ASH, CAP ASBMT **First Identified:** July 2015 **2021 Medicare Utilization:** 7,932

2023 Work RVU: 1.28
2023 NF PE RVU: 3.44
2023 Fac PE RVU: 0.69

RUC Recommendation: 1.28 **Referred to CPT** February 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

38222 **Diagnostic bone marrow; biopsy(ies) and aspiration(s)**

Global: XXX **Issue:** Diagnostic Bone Marrow Aspiration and Biopsy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 06 **Specialty Developing Recommendation:** ASCO, ASH, CAP ASBMT **First Identified:** February 2016 **2021 Medicare Utilization:** 119,073

2023 Work RVU: 1.44
2023 NF PE RVU: 3.67
2023 Fac PE RVU: 0.67

RUC Recommendation: 1.44 **Referred to CPT** February 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

38505 **Biopsy or excision of lymph node(s); by needle, superficial (eg, cervical, inguinal, axillary)**

Global: 000 **Issue:** Needle Biopsy of Lymph Nodes **Screen:** Harvard Valued - Utilization over 30,000-Part4 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2019 **2021 Medicare Utilization:** 35,811

2023 Work RVU: 1.59
2023 NF PE RVU: 3.54
2023 Fac PE RVU: 0.78

RUC Recommendation: 1.59 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

38542 **Dissection, deep jugular node(s)**

Global: 090 **Issue:** Jugular Node Dissection **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 40 **Specialty Developing Recommendation:** ACS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 513

2023 Work RVU: 7.95
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.41

RUC Recommendation: 7.85 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

38570 **Laparoscopy, surgical; with retroperitoneal lymph node sampling (biopsy), single or multiple**

Global: 010 **Issue:** Laparoscopy Lymphadenectomy **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 12 **Specialty Developing Recommendation:** AUA **First Identified:** January 2014 **2021 Medicare Utilization:** 6,701

2023 Work RVU: 8.49
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.41

RUC Recommendation: 9.34 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

38571 **Laparoscopy, surgical; with bilateral total pelvic lymphadenectomy**

Global: 010 **Issue:** Laparoscopy Lymphadenectomy **Screen:** CMS Fastest Growing / 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 12 **Specialty Developing Recommendation:** AUA **First Identified:** October 2008 **2021 Medicare Utilization:** 17,578

2023 Work RVU: 12.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.04

RUC Recommendation: 12.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

38572 **Laparoscopy, surgical; with bilateral total pelvic lymphadenectomy and peri-aortic lymph node sampling (biopsy), single or multiple**

Global: 010 **Issue:** Laparoscopy Lymphadenectomy **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 12 **Specialty Developing Recommendation:** ACOG **First Identified:** January 2014 **2021 Medicare Utilization:** 1,653

2023 Work RVU: 15.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.88

RUC Recommendation: 15.60 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

38792 **Injection procedure; radioactive tracer for identification of sentinel node**

Global: 000 **Issue:** Radioactive Tracer **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 23 **Specialty Developing Recommendation:** **First Identified:** April 2017 **2021 Medicare Utilization:** 29,868

2023 Work RVU: 0.65
2023 NF PE RVU: 1.74
2023 Fac PE RVU: 0.23

RUC Recommendation: 0.65 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

39400 **Mediastinoscopy, includes biopsy(ies), when performed**

Global: **Issue:** Mediastinoscopy with Biopsy **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 08 **Specialty Developing Recommendation:** STS **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

39401 **Mediastinoscopy; includes biopsy(ies) of mediastinal mass (eg, lymphoma), when performed**

Global: 000 **Issue:** Mediastinoscopy with Biopsy **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 08 **Specialty Developing Recommendation:** STS **First Identified:** October 2014 **2021 Medicare Utilization:** 290

2023 Work RVU: 5.44
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.34

RUC Recommendation: 5.44 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

39402 **Mediastinoscopy; with lymph node biopsy(ies) (eg, lung cancer staging)**

Global: 000 **Issue:** Mediastinoscopy with Biopsy **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 08 **Specialty Developing Recommendation:** STS **First Identified:** October 2014 **2021 Medicare Utilization:** 2,748

2023 Work RVU: 7.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.86

RUC Recommendation: 7.50 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

33276

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

33277

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

33278

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:**

First Identified: January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

33279

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:**

First Identified: January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

33280

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:**

First Identified: January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

33281

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:**

First Identified: January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

Status Report: CMS Requests and Relativity Assessment Issues

33287 **Global:** **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:
Result:

RUC Recommendation: Review action Plan **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

33288 **Global:** **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:
Result:

RUC Recommendation: Review action Plan **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

40490 **Biopsy of lip** **Global:** 000 **Issue:** Biopsy of Lip **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 21 **Specialty Developing Recommendation:** AAO-HNS, AAD **First Identified:** April 2011 **2021 Medicare Utilization:** 28,071

2023 Work RVU: 1.22
2023 NF PE RVU: 2.34
2023 Fac PE RVU: 0.71
Result: Maintain

RUC Recommendation: 1.22 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

40650 **Repair lip, full thickness; vermilion only** **Global:** 090 **Issue:** PE Subcommittee **Screen:** Emergent Procedures **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 46 **Specialty Developing Recommendation:** AAOS, ACEP, and orthopaedic subspecialties **First Identified:** October 2015 **2021 Medicare Utilization:** 357

2023 Work RVU: 3.78
2023 NF PE RVU: 10.00
2023 Fac PE RVU: 4.94
Result: PE Only

RUC Recommendation: PE Clinical staff pre-time revised **Referred to CPT** **Referred to CPT Asst** ☑ **Published in CPT Asst:** Nov 2016

Status Report: CMS Requests and Relativity Assessment Issues

40800 **Drainage of abscess, cyst, hematoma, vestibule of mouth; simple** **Global:** 010 **Issue:** RAW **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 52 **Specialty Developing Recommendation:** **First Identified:** January 2014 **2021 Medicare Utilization:** 2,825

2023 Work RVU: 1.23
2023 NF PE RVU: 4.73
2023 Fac PE RVU: 2.19

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

40801 **Drainage of abscess, cyst, hematoma, vestibule of mouth; complicated** **Global:** 010 **Issue:** Ostectomy **Screen:** Site of Service Anomaly (99238-Only) / 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** APMA, AAOS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,435

2023 Work RVU: 2.63
2023 NF PE RVU: 5.81
2023 Fac PE RVU: 3.00

RUC Recommendation: Maintain. Reduced 99238 to 0.5 **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

40808 **Biopsy, vestibule of mouth** **Global:** 010 **Issue:** Biopsy of Mouth Lesion **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAOHNS, AAOMS **First Identified:** April 2017 **2021 Medicare Utilization:** 9,052

2023 Work RVU: 1.05
2023 NF PE RVU: 3.93
2023 Fac PE RVU: 1.48

RUC Recommendation: 1.05 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

40812 **Excision of lesion of mucosa and submucosa, vestibule of mouth; with simple repair**

Global: 010 **Issue:** RAW **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 52 **Specialty Developing Recommendation:**

First Identified: January 2014 **2021 Medicare Utilization:** 7,021

2023 Work RVU: 2.37
2023 NF PE RVU: 5.84
2023 Fac PE RVU: 2.87

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

40820 **Destruction of lesion or scar of vestibule of mouth by physical methods (eg, laser, thermal, cryo, chemical)**

Global: 010 **Issue:** RAW **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 52 **Specialty Developing Recommendation:**

First Identified: January 2014 **2021 Medicare Utilization:** 1,357

2023 Work RVU: 1.34
2023 NF PE RVU: 6.31
2023 Fac PE RVU: 3.50

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

41530 **Submucosal ablation of the tongue base, radiofrequency, 1 or more sites, per session**

Global: 000 **Issue:** Submucosal ablation of tongue base **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 26 **Specialty Developing Recommendation:** AAO-HNS

First Identified: July 2014 **2021 Medicare Utilization:** 142

2023 Work RVU: 3.50
2023 NF PE RVU: 23.82
2023 Fac PE RVU: 7.39

RUC Recommendation: 3.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

42145 **Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty)**

Global: 090 **Issue:** Palatopharyngoplasty **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 41 **Specialty Developing Recommendation:** AAO-HNS

First Identified: September 2007 **2021 Medicare Utilization:** 373

2023 Work RVU: 9.78
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.53

RUC Recommendation: 9.63

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

42415 **Excision of parotid tumor or parotid gland; lateral lobe, with dissection and preservation of facial nerve**

Global: 090 **Issue:** Excise Parotid Gland/Lesion **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 27 **Specialty Developing Recommendation:** ACS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,761

2023 Work RVU: 17.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.08

RUC Recommendation: 18.12 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

42420 **Excision of parotid tumor or parotid gland; total, with dissection and preservation of facial nerve**

Global: 090 **Issue:** Excise Parotid Gland/Lesion **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 27 **Specialty Developing Recommendation:** ACS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,333

2023 Work RVU: 19.53
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.18

RUC Recommendation: 21.00 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

42440 **Excision of submandibular (submaxillary) gland**

Global: 090 **Issue:** Submandibular Gland Excision **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 64 **Specialty Developing Recommendation:** AAO-HNS, ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,573

2023 Work RVU: 6.14
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.48

RUC Recommendation: 7.13 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43191 **Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 2,355

2023 Work RVU: 2.49
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.77

RUC Recommendation: 2.78 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43192 **Esophagoscopy, rigid, transoral; with directed submucosal injection(s), any substance**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 241

2023 Work RVU: 2.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.86
Result: Increase

RUC Recommendation: 3.21

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

43193 **Esophagoscopy, rigid, transoral; with biopsy, single or multiple**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 203

2023 Work RVU: 2.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.85
Result: Increase

RUC Recommendation: 3.36

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

43194 **Esophagoscopy, rigid, transoral; with removal of foreign body(s)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 100

2023 Work RVU: 3.51
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.63
Result: Increase

RUC Recommendation: 3.99

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

43195 **Esophagoscopy, rigid, transoral; with balloon dilation (less than 30 mm diameter)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 560

2023 Work RVU: 3.07
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.00
Result: Increase

RUC Recommendation: 3.21

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43196 **Esophagoscopy, rigid, transoral; with insertion of guide wire followed by dilation over guide wire**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 377

2023 Work RVU: 3.31
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.06

RUC Recommendation: 3.36 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

43197 **Esophagoscopy, flexible, transnasal; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES, AGA **First Identified:** September 2011 **2021 Medicare Utilization:** 980

2023 Work RVU: 1.52
2023 NF PE RVU: 4.02
2023 Fac PE RVU: 0.68

RUC Recommendation: 1.59 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43198 **Esophagoscopy, flexible, transnasal; with biopsy, single or multiple**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, ASGE, SAGES, AGA **First Identified:** September 2011 **2021 Medicare Utilization:** 279

2023 Work RVU: 1.82
2023 NF PE RVU: 4.33
2023 Fac PE RVU: 0.85

RUC Recommendation: 1.89 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43200 **Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 4,084

2023 Work RVU: 1.42
2023 NF PE RVU: 6.32
2023 Fac PE RVU: 0.95

RUC Recommendation: 1.59 **Referred to CPT** May 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43201 **Esophagoscopy, flexible, transoral; with directed submucosal injection(s), any substance** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 182

2023 Work RVU: 1.72
2023 NF PE RVU: 5.87
2023 Fac PE RVU: 1.08

RUC Recommendation: 1.90 **Referred to CPT** May 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43202 **Esophagoscopy, flexible, transoral; with biopsy, single or multiple** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,889

2023 Work RVU: 1.72
2023 NF PE RVU: 8.83
2023 Fac PE RVU: 1.08

RUC Recommendation: 1.89 **Referred to CPT** May 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43204 **Esophagoscopy, flexible, transoral; with injection sclerosis of esophageal varices** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 11

2023 Work RVU: 2.33
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.37

RUC Recommendation: 2.89 **Referred to CPT** May 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43205 **Esophagoscopy, flexible, transoral; with band ligation of esophageal varices** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 84

2023 Work RVU: 2.44
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.42

RUC Recommendation: 3.00 **Referred to CPT** May 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43206 **Esophagoscopy, flexible, transoral; with optical endomicroscopy** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 20

2023 Work RVU: 2.29
2023 NF PE RVU: 6.54
2023 Fac PE RVU: 1.35

RUC Recommendation: 2.39 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43211 **Esophagoscopy, flexible, transoral; with endoscopic mucosal resection** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 87

2023 Work RVU: 4.20
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.20

RUC Recommendation: 4.58 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43212 **Esophagoscopy, flexible, transoral; with placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 524

2023 Work RVU: 3.40
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.60

RUC Recommendation: 3.73 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43213 **Esophagoscopy, flexible, transoral; with dilation of esophagus, by balloon or dilator, retrograde (includes fluoroscopic guidance, when performed)** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 236

2023 Work RVU: 4.63
2023 NF PE RVU: 32.10
2023 Fac PE RVU: 2.30

RUC Recommendation: 5.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43214 **Esophagoscopy, flexible, transoral; with dilation of esophagus with balloon (30 mm diameter or larger) (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 182

2023 Work RVU: 3.40
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.83

RUC Recommendation: 3.78 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43215 **Esophagoscopy, flexible, transoral; with removal of foreign body(s)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 776

2023 Work RVU: 2.44
2023 NF PE RVU: 9.04
2023 Fac PE RVU: 1.34

RUC Recommendation: 2.60 **Referred to CPT** May 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43216 **Esophagoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 117

2023 Work RVU: 2.30
2023 NF PE RVU: 9.78
2023 Fac PE RVU: 1.34

RUC Recommendation: 2.40 **Referred to CPT** May 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43217 **Esophagoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 28

2023 Work RVU: 2.80
2023 NF PE RVU: 9.54
2023 Fac PE RVU: 1.57

RUC Recommendation: 2.90 **Referred to CPT** May 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43219 **Esophagoscopy, rigid or flexible; with insertion of plastic tube or stent** **Global:** **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2012 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

43220 **Esophagoscopy, flexible, transoral; with transendoscopic balloon dilation (less than 30 mm diameter)** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,733

2023 Work RVU: 2.00
2023 NF PE RVU: 25.01
2023 Fac PE RVU: 1.20

RUC Recommendation: 2.10 **Referred to CPT** May 2012 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

43226 **Esophagoscopy, flexible, transoral; with insertion of guide wire followed by passage of dilator(s) over guide wire** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AAO-HNS, AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,295

2023 Work RVU: 2.24
2023 NF PE RVU: 9.06
2023 Fac PE RVU: 1.25

RUC Recommendation: 2.34 **Referred to CPT** May 2012 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

43227 **Esophagoscopy, flexible, transoral; with control of bleeding, any method** **Global:** 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 147

2023 Work RVU: 2.89
2023 NF PE RVU: 14.68
2023 Fac PE RVU: 1.59

RUC Recommendation: 3.26 **Referred to CPT** May 2012 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43228 **Esophagoscopy, rigid or flexible; with ablation of tumor(s), polyp(s), or other lesion(s), not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique**

Global: **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43229 **Esophagoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,325

2023 Work RVU: 3.49
2023 NF PE RVU: 17.53
2023 Fac PE RVU: 1.85

RUC Recommendation: 3.72 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43231 **Esophagoscopy, flexible, transoral; with endoscopic ultrasound examination**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 552

2023 Work RVU: 2.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.53

RUC Recommendation: 3.19 **Referred to CPT** May 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43232 **Esophagoscopy, flexible, transoral; with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s)**

Global: 000 **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 278

2023 Work RVU: 3.59
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.82

RUC Recommendation: 3.83 **Referred to CPT** May 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43233 **Esophagogastroduodenoscopy, flexible, transoral; with dilation of esophagus with balloon (30 mm diameter or larger) (includes fluoroscopic guidance, when performed)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** October 2012 **2021 Medicare Utilization:** 1,202

2023 Work RVU: 4.07
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.05

RUC Recommendation: 4.45 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43234 **Upper gastrointestinal endoscopy, simple primary examination (eg, with small diameter flexible endoscope) (separate procedure)**

Global: **Issue:** Esophagoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43235 **Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**

Global: 000 **Issue:** EGD **Screen:** MPC List / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** October 2010 **2021 Medicare Utilization:** 260,048

2023 Work RVU: 2.09
2023 NF PE RVU: 6.31
2023 Fac PE RVU: 1.25

RUC Recommendation: 2.26 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43236 **Esophagogastroduodenoscopy, flexible, transoral; with directed submucosal injection(s), any substance**

Global: 000 **Issue:** EGD **Screen:** CMS Fastest Growing / MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** October 2008 **2021 Medicare Utilization:** 14,280

2023 Work RVU: 2.39
2023 NF PE RVU: 9.42
2023 Fac PE RVU: 1.38

RUC Recommendation: 2.57 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Apr 2009 and Jun 2010

43237 **Esophagogastroduodenoscopy, flexible, transoral; with endoscopic ultrasound examination limited to the esophagus, stomach or duodenum, and adjacent structures**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 18,750

2023 Work RVU: 3.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.87

RUC Recommendation: 3.85 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43238 **Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s), (includes endoscopic ultrasound examination limited to the esophagus, stomach or duodenum, and adjacent structures)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 15,422

2023 Work RVU: 4.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.17

RUC Recommendation: 4.50 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43239 **Esophagogastroduodenoscopy, flexible, transoral; with biopsy, single or multiple**

Global: 000 **Issue:** EGD with Biopsy **Screen:** MPC List / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, SAGES **First Identified:** October 2010 **2021 Medicare Utilization:** 1,250,880

2023 Work RVU: 2.39
2023 NF PE RVU: 8.66
2023 Fac PE RVU: 1.38

RUC Recommendation: 2.39 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43240 **Esophagogastroduodenoscopy, flexible, transoral; with transmural drainage of pseudocyst (includes placement of transmural drainage catheter[s]/stent[s], when performed, and endoscopic ultrasound, when performed)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,060

2023 Work RVU: 7.15
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.49

RUC Recommendation: 7.25 **Referred to CPT** February 2013 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

43241 **Esophagogastroduodenoscopy, flexible, transoral; with insertion of intraluminal tube or catheter**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 4,394

2023 Work RVU: 2.49
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.37

RUC Recommendation: 2.59 **Referred to CPT** October 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43242 **Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s) (includes endoscopic ultrasound examination of the esophagus, stomach, and either the duodenum or a surgically altered stomach where the jejunum is examined distal to the anastomosis)**

Global: 000 **Issue:** EGD **Screen:** CMS Fastest Growing / MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** October 2008 **2021 Medicare Utilization:** 23,927

2023 Work RVU: 4.73
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.43

RUC Recommendation: 5.39 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2009

43243 **Esophagogastroduodenoscopy, flexible, transoral; with injection sclerosis of esophageal/gastric varices**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 407

2023 Work RVU: 4.27
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.15

RUC Recommendation: 4.37 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43244 **Esophagogastroduodenoscopy, flexible, transoral; with band ligation of esophageal/gastric varices**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 18,874

2023 Work RVU: 4.40
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.28

RUC Recommendation: 4.50 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43245 **Esophagogastroduodenoscopy, flexible, transoral; with dilation of gastric/duodenal stricture(s) (eg, balloon, bougie)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 12,832

2023 Work RVU: 3.08
2023 NF PE RVU: 14.43
2023 Fac PE RVU: 1.65

RUC Recommendation: 3.18 **Referred to CPT** October 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43246 **Esophagogastroduodenoscopy, flexible, transoral; with directed placement of percutaneous gastrostomy tube**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 62,104

2023 Work RVU: 3.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.79

RUC Recommendation: 4.32 **Referred to CPT** October 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43247 **Esophagogastroduodenoscopy, flexible, transoral; with removal of foreign body(s)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 24,338

2023 Work RVU: 3.11
2023 NF PE RVU: 8.02
2023 Fac PE RVU: 1.68

RUC Recommendation: 3.27 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43248 **Esophagogastroduodenoscopy, flexible, transoral; with insertion of guide wire followed by passage of dilator(s) through esophagus over guide wire**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 91,867

2023 Work RVU: 2.91
2023 NF PE RVU: 9.17
2023 Fac PE RVU: 1.61

RUC Recommendation: 3.01 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43249 **Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic balloon dilation of esophagus (less than 30 mm diameter)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 115,128

2023 Work RVU: 2.67
2023 NF PE RVU: 29.69
2023 Fac PE RVU: 1.50

RUC Recommendation: 2.77 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43250 **Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 3,098

2023 Work RVU: 2.97
2023 NF PE RVU: 10.19
2023 Fac PE RVU: 1.60

RUC Recommendation: 3.07 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43251 **Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 37,007

2023 Work RVU: 3.47
2023 NF PE RVU: 11.03
2023 Fac PE RVU: 1.86

RUC Recommendation: 3.57 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43253 **Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic ultrasound-guided transmural injection of diagnostic or therapeutic substance(s) (eg, anesthetic, neurolytic agent) or fiducial marker(s) (includes endoscopic ultrasound examination of the esophagus, stomach, and either the duodenum or a surgically altered stomach where the jejunum is examined distal to the anastomosis)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** February 2012 **2021 Medicare Utilization:** 2,054

2023 Work RVU: 4.73
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.42

RUC Recommendation: 5.39 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43254 **Esophagogastroduodenoscopy, flexible, transoral; with endoscopic mucosal resection**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** October 2012 **2021 Medicare Utilization:** 5,572

2023 Work RVU: 4.87
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.48

RUC Recommendation: 5.25 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43255 **Esophagogastroduodenoscopy, flexible, transoral; with control of bleeding, any method**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 56,328

2023 Work RVU: 3.56
2023 NF PE RVU: 14.92
2023 Fac PE RVU: 1.90

RUC Recommendation: 4.20 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43256 **Upper gastrointestinal endoscopy including esophagus, stomach, and either the duodenum and/or jejunum as appropriate; with transendoscopic stent placement (includes predilation)**

Global: **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43257 **Esophagogastroduodenoscopy, flexible, transoral; with delivery of thermal energy to the muscle of lower esophageal sphincter and/or gastric cardia, for treatment of gastroesophageal reflux disease**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 111

2023 Work RVU: 4.15
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.11

RUC Recommendation: 4.25 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43258 **Upper gastrointestinal endoscopy including esophagus, stomach, and either the duodenum and/or jejunum as appropriate; with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique**

Global: **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43259 **Esophagogastroduodenoscopy, flexible, transoral; with endoscopic ultrasound examination, including the esophagus, stomach, and either the duodenum or a surgically altered stomach where the jejunum is examined distal to the anastomosis**

Global: 000 **Issue:** EGD **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 11 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** October 2008 **2021 Medicare Utilization:** 30,363

2023 Work RVU: 4.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.12

RUC Recommendation: 4.74 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2009

43260 **Endoscopic retrograde cholangiopancreatography (ercp); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 3,868

2023 Work RVU: 5.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.91

RUC Recommendation: 5.95 **Referred to CPT** February 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43261 **Endoscopic retrograde cholangiopancreatography (ercp); with biopsy, single or multiple**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 6,723

2023 Work RVU: 6.15
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.04

RUC Recommendation: 6.25 **Referred to CPT** January 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43262 **Endoscopic retrograde cholangiopancreatography (ercp); with sphincterotomy/papillotomy**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 26,342

2023 Work RVU: 6.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.20

RUC Recommendation: 6.60 **Referred to CPT** January 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43263 **Endoscopic retrograde cholangiopancreatography (ercp); with pressure measurement of sphincter of oddi**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 35

2023 Work RVU: 6.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.21

RUC Recommendation: 7.28 **Referred to CPT** February 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

43264 **Endoscopic retrograde cholangiopancreatography (ercp); with removal of calculi/debris from biliary/pancreatic duct(s)**

Global: 000 **Issue:** ERCP **Screen:** Harvard Valued - Utilization over 30,000 / MPC List / Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** April 2011 **2021 Medicare Utilization:** 53,429

2023 Work RVU: 6.63
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.25

RUC Recommendation: 6.73 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43265 **Endoscopic retrograde cholangiopancreatography (ercp); with destruction of calculi, any method (eg, mechanical, electrohydraulic, lithotripsy)**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 2,356

2023 Work RVU: 7.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.82

RUC Recommendation: 8.03 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43266 **Esophagogastroduodenoscopy, flexible, transoral; with placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** October 2012 **2021 Medicare Utilization:** 5,790

2023 Work RVU: 3.92
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.95

RUC Recommendation: 4.40 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43267 **Endoscopic retrograde cholangiopancreatography (ERCP); with endoscopic retrograde insertion of nasobiliary or nasopancreatic drainage tube**

Global: **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43268 **Endoscopic retrograde cholangiopancreatography (ERCP); with endoscopic retrograde insertion of tube or stent into bile or pancreatic duct**

Global: **Issue:** ERCP **Screen:** Harvard Valued - Utilization over 30,000 / MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43269 **Endoscopic retrograde cholangiopancreatography (ERCP); with endoscopic retrograde removal of foreign body and/or change of tube or stent**

Global: **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43270 **Esophagogastroduodenoscopy, flexible, transoral; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)**

Global: 000 **Issue:** EGD **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** October 2012 **2021 Medicare Utilization:** 18,701

2023 Work RVU: 4.01
2023 NF PE RVU: 17.55
2023 Fac PE RVU: 2.10

RUC Recommendation: 4.39 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43271 **Endoscopic retrograde cholangiopancreatography (ERCP); with endoscopic retrograde balloon dilation of ampulla, biliary and/or pancreatic duct(s)**

Global: **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43272 **Endoscopic retrograde cholangiopancreatography (ERCP); with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique**

Global: **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43273 **Endoscopic cannulation of papilla with direct visualization of pancreatic/common bile duct(s) (list separately in addition to code(s) for primary procedure)**

Global: ZZZ **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 7,580

2023 Work RVU: 2.24
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.98

RUC Recommendation: 2.24 **Referred to CPT** February 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43274 **Endoscopic retrograde cholangiopancreatography (ercp); with placement of endoscopic stent into biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 40,976

2023 Work RVU: 8.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.07

RUC Recommendation: 8.74 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43275 **Endoscopic retrograde cholangiopancreatography (ercp); with removal of foreign body(s) or stent(s) from biliary/pancreatic duct(s)**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 13,323

2023 Work RVU: 6.86
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.35

RUC Recommendation: 6.96 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

43276 **Endoscopic retrograde cholangiopancreatography (ercp); with removal and exchange of stent(s), biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent exchanged**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 15,625

2023 Work RVU: 8.84
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.23

RUC Recommendation: 9.10 **Referred to CPT** February 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

43277 **Endoscopic retrograde cholangiopancreatography (ercp); with trans-endoscopic balloon dilation of biliary/pancreatic duct(s) or of ampulla (sphincteroplasty), including sphincterotomy, when performed, each duct**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 6,066

2023 Work RVU: 6.90
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.38

RUC Recommendation: 7.11 **Referred to CPT** February 2013
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

43278 **Endoscopic retrograde cholangiopancreatography (ercp); with ablation of tumor(s), polyp(s), or other lesion(s), including pre- and post-dilation and guide wire passage, when performed**

Global: 000 **Issue:** ERCP **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 12 **Specialty Developing Recommendation:** AGA, ASGE, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 453

2023 Work RVU: 7.92
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.82

RUC Recommendation: 8.08 **Referred to CPT** February 2013
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

43450 **Dilation of esophagus, by unguided sound or bougie, single or multiple passes**

Global: 000 **Issue:** Dilation of Esophagus **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 17 **Specialty Developing Recommendation:** AGA, ASGE, SAGES, AAO-HNS **First Identified:** September 2011 **2021 Medicare Utilization:** 57,300

2023 Work RVU: 1.28
2023 NF PE RVU: 4.19
2023 Fac PE RVU: 0.91

RUC Recommendation: 1.30 **Referred to CPT**
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

43453 **Dilation of esophagus, over guide wire**

Global: 000 **Issue:** Dilation of Esophagus **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 17 **Specialty Developing Recommendation:** AGA, ASGE, SAGES, AAO-HNS **First Identified:** September 2011 **2021 Medicare Utilization:** 1,120

2023 Work RVU: 1.41
2023 NF PE RVU: 22.69
2023 Fac PE RVU: 0.95

RUC Recommendation: 1.51 **Referred to CPT** May 2012
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

43456 **Dilation of esophagus, by balloon or dilator, retrograde** **Global:** **Issue:** Dilation of Esophagus **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 17 **Specialty Developing Recommendation:** AGA, ASGE, SAGES, AAO-HNS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43458 **Dilation of esophagus with balloon (30 mm diameter or larger) for achalasia** **Global:** **Issue:** Dilation of Esophagus **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 17 **Specialty Developing Recommendation:** AGA, ASGE, SAGES, AAO-HNS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43760 **Change of gastrostomy tube, percutaneous, without imaging or endoscopic guidance** **Global:** **Issue:** Gastrostomy Tube Replacement **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 11 **Specialty Developing Recommendation:** ACEP, ACG, ACS, AGA, ASGE **First Identified:** July 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

43762 **Replacement of gastrostomy tube, percutaneous, includes removal, when performed, without imaging or endoscopic guidance; not requiring revision of gastrostomy tract** **Global:** 000 **Issue:** Gastrostomy Tube Replacement **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:** ACEP, ACG, ACS, AGA, ASGE **First Identified:** September 2017 **2021 Medicare Utilization:** 45,559

2023 Work RVU: 0.75
2023 NF PE RVU: 5.98
2023 Fac PE RVU: 0.22

RUC Recommendation: 0.75. CPT Assistant article **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** June 2022

Status Report: CMS Requests and Relativity Assessment Issues

43763 **Replacement of gastrostomy tube, percutaneous, includes removal, when performed, without imaging or endoscopic guidance; requiring revision of gastrostomy tract**

Global: 000 **Issue:** Gastrostomy Tube Replacement **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:** ACEP, ACG, ACS, AGA, ASGE **First Identified:** September 2017 **2021 Medicare Utilization:** 2,014

2023 Work RVU: 1.41
2023 NF PE RVU: 8.48
2023 Fac PE RVU: 0.91

RUC Recommendation: 1.41. CPT Assistant article.

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:** June 2022

Result: Decrease

44143 **Colectomy, partial; with end colostomy and closure of distal segment (hartmann type procedure)**

Global: 090 **Issue:** RAW **Screen:** High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** **First Identified:** October 2015 **2021 Medicare Utilization:** 8,737

2023 Work RVU: 27.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.02

RUC Recommendation: 99214 visit appropriate. Remove from screen.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

44205 **Laparoscopy, surgical; colectomy, partial, with removal of terminal ileum with ileocolostomy**

Global: 090 **Issue:** Laproscopic Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACS, ASCRS **First Identified:** October 2008 **2021 Medicare Utilization:** 10,846

2023 Work RVU: 22.95
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.96

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

44207 **Laparoscopy, surgical; colectomy, partial, with anastomosis, with coloproctostomy (low pelvic anastomosis)**

Global: 090 **Issue:** Laproscopic Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACS, ASCRS **First Identified:** February 2008 **2021 Medicare Utilization:** 8,667

2023 Work RVU: 31.92
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.50

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

44380 **Ileoscopy, through stoma; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**

Global: 000 **Issue:** Ileoscopy
Ileoscopy
Screen: MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 04 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 1,658

2023 Work RVU: 0.87
2023 NF PE RVU: 4.91
2023 Fac PE RVU: 0.70

RUC Recommendation: 0.97 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

44381 **Ileoscopy, through stoma; with transendoscopic balloon dilation**

Global: 000 **Issue:** Ileoscopy
Screen: MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 04 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** May 2013 **2021 Medicare Utilization:** 146

2023 Work RVU: 1.38
2023 NF PE RVU: 28.25
2023 Fac PE RVU: 0.93

RUC Recommendation: 1.48 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

44382 **Ileoscopy, through stoma; with biopsy, single or multiple**

Global: 000 **Issue:** Ileoscopy
Ileoscopy
Ileoscopy
Ileoscopy
Screen: MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 04 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 1,313

2023 Work RVU: 1.17
2023 NF PE RVU: 7.68
2023 Fac PE RVU: 0.85

RUC Recommendation: 1.27 **Referred to CPT** May 2013 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

44383 **Ileoscopy, through stoma; with transendoscopic stent placement (includes predilation)**

Global: **Issue:** Ileoscopy
Screen: MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 04 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2013 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

44384 **Ileoscopy, through stoma; with placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)** **Global:** 000 **Issue:** Ileoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 04 **Specialty Developing Recommendation:** AGA, ASGE, ACG **First Identified:** May 2013 **2021 Medicare Utilization:** 87

2023 Work RVU: 2.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.34

RUC Recommendation: 3.11 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44385 **Endoscopic evaluation of small intestinal pouch (eg, kock pouch, ileal reservoir [s or j]); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)** **Global:** 000 **Issue:** Pouchoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 05 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 985

2023 Work RVU: 1.20
2023 NF PE RVU: 5.12
2023 Fac PE RVU: 0.78

RUC Recommendation: 1.30 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44386 **Endoscopic evaluation of small intestinal pouch (eg, kock pouch, ileal reservoir [s or j]); with biopsy, single or multiple** **Global:** 000 **Issue:** Pouchoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 05 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,889

2023 Work RVU: 1.50
2023 NF PE RVU: 7.69
2023 Fac PE RVU: 0.94

RUC Recommendation: 1.60 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44388 **Colonoscopy through stoma; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)** **Global:** 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 3,361

2023 Work RVU: 2.72
2023 NF PE RVU: 6.36
2023 Fac PE RVU: 1.47

RUC Recommendation: 2.82 **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

44389 **Colonoscopy through stoma; with biopsy, single or multiple**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 2,299

2023 Work RVU: 3.02
2023 NF PE RVU: 8.97
2023 Fac PE RVU: 1.62

RUC Recommendation: 3.12 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44390 **Colonoscopy through stoma; with removal of foreign body(s)**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 19

2023 Work RVU: 3.74
2023 NF PE RVU: 7.96
2023 Fac PE RVU: 1.99

RUC Recommendation: 3.82 **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

44391 **Colonoscopy through stoma; with control of bleeding, any method**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 151

2023 Work RVU: 4.12
2023 NF PE RVU: 14.64
2023 Fac PE RVU: 2.14

RUC Recommendation: 4.22 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44392 **Colonoscopy through stoma; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 198

2023 Work RVU: 3.53
2023 NF PE RVU: 7.55
2023 Fac PE RVU: 1.78

RUC Recommendation: 3.63 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

44393 **Colonoscopy through stoma; with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique**

Global: **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

44394 **Colonoscopy through stoma; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 1,817

2023 Work RVU: 4.03
2023 NF PE RVU: 8.60
2023 Fac PE RVU: 2.05

RUC Recommendation: 4.13 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44397 **Colonoscopy through stoma; with transendoscopic stent placement (includes predilation)**

Global: **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

44401 **Colonoscopy through stoma; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre-and post-dilation and guide wire passage, when performed)**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** September 2011 **2021 Medicare Utilization:** 49

2023 Work RVU: 4.34
2023 NF PE RVU: 66.98
2023 Fac PE RVU: 2.26

RUC Recommendation: 4.44 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44402 **Colonoscopy through stoma; with endoscopic stent placement (including pre- and post-dilation and guide wire passage, when performed)**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:** 3

2023 Work RVU: 4.70
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.42

RUC Recommendation: 4.96 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44403 **Colonoscopy through stoma; with endoscopic mucosal resection**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:** 71

2023 Work RVU: 5.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.77

RUC Recommendation: 5.81 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44404 **Colonoscopy through stoma; with directed submucosal injection(s), any substance**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:** 189

2023 Work RVU: 3.02
2023 NF PE RVU: 9.26
2023 Fac PE RVU: 1.63

RUC Recommendation: 3.13 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

44405 **Colonoscopy through stoma; with transendoscopic balloon dilation** **Global:** 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:** 50

2023 Work RVU: 3.23
2023 NF PE RVU: 13.13
2023 Fac PE RVU: 1.77

RUC Recommendation: 3.33 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44406 **Colonoscopy through stoma; with endoscopic ultrasound examination, limited to the sigmoid, descending, transverse, or ascending colon and cecum and adjacent structures** **Global:** 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU: 4.10
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.15

RUC Recommendation: 4.41 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44407 **Colonoscopy through stoma; with transendoscopic ultrasound guided intramural or transmural fine needle aspiration/biopsy(s), includes endoscopic ultrasound examination limited to the sigmoid, descending, transverse, or ascending colon and cecum and adjacent structures** **Global:** 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:** 1

2023 Work RVU: 4.96
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.53

RUC Recommendation: 5.06 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

44408 **Colonoscopy through stoma; with decompression (for pathologic distention) (eg, volvulus, megacolon), including placement of decompression tube, when performed**

Global: 000 **Issue:** Colonoscopy through stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** ASCRS, ACS, SAGES, AGA, ASGE, ACG **First Identified:** January 2014 **2021 Medicare Utilization:** 49

2023 Work RVU: 4.14
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.17

RUC Recommendation: 4.24 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

44901 **Incision and drainage of appendiceal abscess; percutaneous**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

44970 **Laparoscopy, surgical, appendectomy**

Global: 090 **Issue:** Laproscopic Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACS **First Identified:** October 2008 **2021 Medicare Utilization:** 20,349

2023 Work RVU: 9.45
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.32

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

45170 **Deleted from CPT**

Global: **Issue:** Rectal Tumor Excision **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 11 **Specialty Developing Recommendation:** ACS, ASCRS, ASGS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45171 **Excision of rectal tumor, transanal approach; not including muscularis propria (ie, partial thickness)**

Global: 090 **Issue:** Rectal Tumor Excision **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 11 **Specialty Developing Recommendation:** ACS, ASCRS, ASGS **First Identified:** September 2007 **2021 Medicare Utilization:** 2,123

2023 Work RVU: 8.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.86

RUC Recommendation: 8.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45172 **Excision of rectal tumor, transanal approach; including muscularis propria (ie, full thickness)**

Global: 090 **Issue:** Rectal Tumor Excision **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 11 **Specialty Developing Recommendation:** ACS, ASCRS, ASGS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,697

2023 Work RVU: 12.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.41

RUC Recommendation: 12.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45300 **Proctosigmoidoscopy, rigid; diagnostic, with or without collection of specimen(s) by brushing or washing (separate procedure)**

Global: 000 **Issue:** Diagnostic Proctosigmoidoscopy - Rigid **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 13 **Specialty Developing Recommendation:** ACS, ASCRS, SAGES **First Identified:** July 2016 **2021 Medicare Utilization:** 17,629

2023 Work RVU: 0.80
2023 NF PE RVU: 2.95
2023 Fac PE RVU: 0.51

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45330 **Sigmoidoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)**

Global: 000 **Issue:** Flexible Sigmoidoscopy **Screen:** Harvard Valued - Utilization over 30,000 / MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** April 2011 **2021 Medicare Utilization:** 42,359

2023 Work RVU: 0.84
2023 NF PE RVU: 4.64
2023 Fac PE RVU: 0.70

RUC Recommendation: 0.84 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45331 **Sigmoidoscopy, flexible; with biopsy, single or multiple**

Global: 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 30,301

2023 Work RVU: 1.14
2023 NF PE RVU: 7.35
2023 Fac PE RVU: 0.84

RUC Recommendation: 1.14 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45332 **Sigmoidoscopy, flexible; with removal of foreign body(s)**

Global: 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 294

2023 Work RVU: 1.76
2023 NF PE RVU: 6.34
2023 Fac PE RVU: 1.09

RUC Recommendation: 1.85 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45333 **Sigmoidoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps**

Global: 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 599

2023 Work RVU: 1.55
2023 NF PE RVU: 8.15
2023 Fac PE RVU: 0.98

RUC Recommendation: 1.65 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45334 **Sigmoidoscopy, flexible; with control of bleeding, any method** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 3,059

2023 Work RVU: 2.00
2023 NF PE RVU: 12.63
2023 Fac PE RVU: 1.21

RUC Recommendation: 2.10 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45335 **Sigmoidoscopy, flexible; with directed submucosal injection(s), any substance** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 2,601

2023 Work RVU: 1.04
2023 NF PE RVU: 7.62
2023 Fac PE RVU: 0.79

RUC Recommendation: 1.15 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45337 **Sigmoidoscopy, flexible; with decompression (for pathologic distention) (eg, volvulus, megacolon), including placement of decompression tube, when performed** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,627

2023 Work RVU: 2.10
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.99

RUC Recommendation: 2.20 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45338 **Sigmoidoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 4,646

2023 Work RVU: 2.05
2023 NF PE RVU: 6.69
2023 Fac PE RVU: 1.22

RUC Recommendation: 2.15 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45339 **Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique**

Global: **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

45340 **Sigmoidoscopy, flexible; with transendoscopic balloon dilation** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,089

2023 Work RVU: 1.25
2023 NF PE RVU: 12.39
2023 Fac PE RVU: 0.88

RUC Recommendation: 1.35 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45341 **Sigmoidoscopy, flexible; with endoscopic ultrasound examination** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 09 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES, ACS **First Identified:** September 2011 **2021 Medicare Utilization:** 1,969

2023 Work RVU: 2.12
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.26

RUC Recommendation: 2.43 **Referred to CPT** October 2013 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

45342 **Sigmoidoscopy, flexible; with transendoscopic ultrasound guided intramural or transmural fine needle aspiration/biopsy(s)** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 09 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES, ACS **First Identified:** September 2011 **2021 Medicare Utilization:** 427

2023 Work RVU: 2.98
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.64

RUC Recommendation: 3.08 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45345 **Sigmoidoscopy, flexible; with transendoscopic stent placement (includes predilation)** **Global:** **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2013 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

45346 **Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** May 2013 **2021 Medicare Utilization:** 873

2023 Work RVU: 2.81
2023 NF PE RVU: 66.30
2023 Fac PE RVU: 1.56

RUC Recommendation: 2.97 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45347 **Sigmoidoscopy, flexible; with placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 06 **Specialty Developing Recommendation:** ACG, ACS, AGA, ASGE, ASCRS, SAGES **First Identified:** May 2013 **2021 Medicare Utilization:** 544

2023 Work RVU: 2.72
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.48

RUC Recommendation: 2.98 **Referred to CPT** May 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45349 **Sigmoidoscopy, flexible; with endoscopic mucosal resection** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 13 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 593

2023 Work RVU: 3.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.88

RUC Recommendation: 3.83 **Referred to CPT** October 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45350 **Sigmoidoscopy, flexible; with band ligation(s) (eg, hemorrhoids)** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 13 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 1,082

2023 Work RVU: 1.68
2023 NF PE RVU: 18.38
2023 Fac PE RVU: 1.06

RUC Recommendation: 1.78 **Referred to CPT** October 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45355 **Colonoscopy, rigid or flexible, transabdominal via colotomy, single or multiple** **Global:** **Issue:** Colonoscopy via stoma **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 08 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES, ACS **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

45378 **Colonoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)** **Global:** 000 **Issue:** Colonoscopy **Screen:** CMS High Expenditure Procedural Codes1 / MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 274,243

2023 Work RVU: 3.26
2023 NF PE RVU: 6.51
2023 Fac PE RVU: 1.74

RUC Recommendation: 3.36 **Referred to CPT** October 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

45379 **Colonoscopy, flexible; with removal of foreign body(s)** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 832

2023 Work RVU: 4.28
2023 NF PE RVU: 8.24
2023 Fac PE RVU: 2.19

RUC Recommendation: 4.37 **Referred to CPT** October 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45380 **Colonoscopy, flexible; with biopsy, single or multiple** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** October 2010 **2021 Medicare Utilization:** 945,436

2023 Work RVU: 3.56
2023 NF PE RVU: 9.04
2023 Fac PE RVU: 1.89

RUC Recommendation: 3.66 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45381 **Colonoscopy, flexible; with directed submucosal injection(s), any substance** **Global:** 000 **Issue:** Colonoscopy **Screen:** CMS Fastest Growing / MPC List / Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 31 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** October 2008 **2021 Medicare Utilization:** 68,743

2023 Work RVU: 3.56
2023 NF PE RVU: 9.32
2023 Fac PE RVU: 1.89

RUC Recommendation: 3.67 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Jun 2010

45382 **Colonoscopy, flexible; with control of bleeding, any method** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 21,414

2023 Work RVU: 4.66
2023 NF PE RVU: 14.83
2023 Fac PE RVU: 2.38

RUC Recommendation: 4.76 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45383 **Colonoscopy, flexible, proximal to splenic flexure; with ablation of tumor(s), polyp(s), or other lesion(s) not amenable to removal by hot biopsy forceps, bipolar cautery or snare technique**

Global: **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

45384 **Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps**

Global: 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 50,668

2023 Work RVU: 4.07
2023 NF PE RVU: 10.03
2023 Fac PE RVU: 2.03

RUC Recommendation: 4.17 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45385 **Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique**

Global: 000 **Issue:** Colonoscopy **Screen:** MPC List / Codes Reported Together 75%or More-Part4 / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 13 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES **First Identified:** October 2010 **2021 Medicare Utilization:** 934,122

2023 Work RVU: 4.57
2023 NF PE RVU: 8.49
2023 Fac PE RVU: 2.33

RUC Recommendation: 4.57 **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45386 **Colonoscopy, flexible; with transendoscopic balloon dilation** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 1,954

2023 Work RVU: 3.77
2023 NF PE RVU: 14.15
2023 Fac PE RVU: 1.97

RUC Recommendation: 3.87 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45387 **Colonoscopy, flexible, proximal to splenic flexure; with transendoscopic stent placement (includes predilation)** **Global:** **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

45388 **Colonoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** January 2014 **2021 Medicare Utilization:** 20,440

2023 Work RVU: 4.88
2023 NF PE RVU: 68.72
2023 Fac PE RVU: 2.43

RUC Recommendation: 4.98 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45389 **Colonoscopy, flexible; with endoscopic stent placement (includes pre- and post-dilation and guide wire passage, when performed)** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** January 2014 **2021 Medicare Utilization:** 410

2023 Work RVU: 5.24
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.62

RUC Recommendation: 5.50 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45390 **Colonoscopy, flexible; with endoscopic mucosal resection** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** January 2014 **2021 Medicare Utilization:** 23,949

2023 Work RVU: 6.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.99

RUC Recommendation: 6.35 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45391 **Colonoscopy, flexible; with endoscopic ultrasound examination limited to the rectum, sigmoid, descending, transverse, or ascending colon and cecum, and adjacent structures** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 724

2023 Work RVU: 4.64
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.38

RUC Recommendation: 4.95 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45392 **Colonoscopy, flexible; with transendoscopic ultrasound guided intramural or transmural fine needle aspiration/biopsy(s), includes endoscopic ultrasound examination limited to the rectum, sigmoid, descending, transverse, or ascending colon and cecum, and adjacent structures** **Global:** 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 98

2023 Work RVU: 5.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.77

RUC Recommendation: 5.60 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

45393 **Colonoscopy, flexible; with decompression (for pathologic distention) (eg, volvulus, megacolon), including placement of decompression tube, when performed**

Global: 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** January 2014 **2021 Medicare Utilization:** 2,146

2023 Work RVU: 4.68
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.11

RUC Recommendation: 4.78 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

45398 **Colonoscopy, flexible; with band ligation(s) (eg, hemorrhoids)**

Global: 000 **Issue:** Colonoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 10 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** January 2014 **2021 Medicare Utilization:** 3,354

2023 Work RVU: 4.20
2023 NF PE RVU: 20.11
2023 Fac PE RVU: 2.09

RUC Recommendation: 4.30 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

46020 **Placement of seton**

Global: 010 **Issue:** Placement/Removal of Seton **Screen:** 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 16 **Specialty Developing Recommendation:** ACS, ASCRS (col) **First Identified:** October 2019 **2021 Medicare Utilization:** 1,233

2023 Work RVU: 1.86
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.26

RUC Recommendation: 3.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

46030 **Removal of anal seton, other marker**

Global: 010 **Issue:** Placement/ Removal of Seton **Screen:** 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 16 **Specialty Developing Recommendation:** ACS, ASCRS (col) **First Identified:** April 2020 **2021 Medicare Utilization:** 275

2023 Work RVU: 1.48
2023 NF PE RVU: 6.00
2023 Fac PE RVU: 0.86

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

46200 **Fissurectomy, including sphincterotomy, when performed** **Global:** 090 **Issue:** Fissurectomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 819

2023 Work RVU: 3.59
2023 NF PE RVU: 10.13
2023 Fac PE RVU: 5.96

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

46500 **Injection of sclerosing solution, hemorrhoids** **Global:** 010 **Issue:** Hemorrhoid Injection **Screen:** 010-Day Global Post-Operative Visits / Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 24 **Specialty Developing Recommendation:** ACS, ASCRS (colon) **First Identified:** January 2014 **2021 Medicare Utilization:** 12,072

2023 Work RVU: 1.74
2023 NF PE RVU: 7.49
2023 Fac PE RVU: 3.55

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

47011 **Hepatotomy; for percutaneous drainage of abscess or cyst, 1 or 2 stages** **Global:** **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47135 **Liver allotransplantation, orthotopic, partial or whole, from cadaver or living donor, any age**

Global: 090 **Issue:** Liver Allotransplantation **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACS, ASTS **First Identified:** January 2014 **2021 Medicare Utilization:** 1,428

2023 Work RVU: 90.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 48.20

RUC Recommendation: 91.78 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47136 **Liver allotransplantation; heterotopic, partial or whole, from cadaver or living donor, any age**

Global: **Issue:** RAW **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 52 **Specialty Developing Recommendation:** ACS, ASTS **First Identified:** April 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

47382 **Ablation, 1 or more liver tumor(s), percutaneous, radiofrequency**

Global: 010 **Issue:** Interventional Radiology Procedures **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** NA **2021 Medicare Utilization:** 2,774

2023 Work RVU: 14.97
2023 NF PE RVU: 94.51
2023 Fac PE RVU: 5.07

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47490 **Cholecystostomy, percutaneous, complete procedure, including imaging guidance, catheter placement, cholecystogram when performed, and radiological supervision and interpretation**

Global: 010 **Issue:** Cholecystostomy **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 04 **Specialty Developing Recommendation:** ACR

First Identified: October 2008 **2021 Medicare Utilization:** 12,398

2023 Work RVU: 4.76
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.61

RUC Recommendation: 4.76

Referred to CPT June 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

47500 **Injection procedure for percutaneous transhepatic cholangiography**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR

First Identified: October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

47505 **Injection procedure for cholangiography through an existing catheter (eg, percutaneous transhepatic or T-tube)**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR

First Identified: October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

47510 **Introduction of percutaneous transhepatic catheter for biliary drainage**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

47511 **Introduction of percutaneous transhepatic stent for internal and external biliary drainage**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

47525 **Change of percutaneous biliary drainage catheter**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47530 **Revision and/or reinsertion of transhepatic tube**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

47531 **Injection procedure for cholangiography, percutaneous, complete diagnostic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation; existing access**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 6,974

2023 Work RVU: 1.30
2023 NF PE RVU: 11.44
2023 Fac PE RVU: 0.63

RUC Recommendation: 1.30 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47532 **Injection procedure for cholangiography, percutaneous, complete diagnostic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation; new access (eg, percutaneous transhepatic cholangiogram)**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 473

2023 Work RVU: 4.25
2023 NF PE RVU: 20.64
2023 Fac PE RVU: 1.45

RUC Recommendation: 4.50 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47533 **Placement of biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; external**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 1,343

2023 Work RVU: 5.38
2023 NF PE RVU: 29.34
2023 Fac PE RVU: 1.77

RUC Recommendation: 5.63 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47534 **Placement of biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; internal-external**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 4,199

2023 Work RVU: 7.60
2023 NF PE RVU: 30.28
2023 Fac PE RVU: 2.41

RUC Recommendation: 7.85 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47535 **Conversion of external biliary drainage catheter to internal-external biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 387

2023 Work RVU: 3.95
2023 NF PE RVU: 22.51
2023 Fac PE RVU: 1.36

RUC Recommendation: 4.20 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47536 **Exchange of biliary drainage catheter (eg, external, internal-external, or conversion of internal-external to external only), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 13,465

2023 Work RVU: 2.61
2023 NF PE RVU: 16.39
2023 Fac PE RVU: 0.96

RUC Recommendation: 2.86 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47537 **Removal of biliary drainage catheter, percutaneous, requiring fluoroscopic guidance (eg, with concurrent indwelling biliary stents), including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 2,032

2023 Work RVU: 1.84
2023 NF PE RVU: 12.89
2023 Fac PE RVU: 0.79

RUC Recommendation: 1.85 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47538 **Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation; existing access**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 892

2023 Work RVU: 4.75
2023 NF PE RVU: 109.05
2023 Fac PE RVU: 1.60

RUC Recommendation: 5.00 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47539 **Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation; new access, without placement of separate biliary drainage catheter**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 128

2023 Work RVU: 8.75
2023 NF PE RVU: 117.69
2023 Fac PE RVU: 2.68

RUC Recommendation: 9.00 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47540 **Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation; new access, with placement of separate biliary drainage catheter (eg, external or internal-external)**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 196

2023 Work RVU: 9.03
2023 NF PE RVU: 118.57
2023 Fac PE RVU: 2.83

RUC Recommendation: 9.28 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47541 **Placement of access through the biliary tree and into small bowel to assist with an endoscopic biliary procedure (eg, rendezvous procedure), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation, new access**

Global: 000 **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 171

2023 Work RVU: 6.75
2023 NF PE RVU: 27.62
2023 Fac PE RVU: 2.32

RUC Recommendation: 7.00 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47542 **Balloon dilation of biliary duct(s) or of ampulla (sphincteroplasty), percutaneous, including imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation, each duct (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 1,076

2023 Work RVU: 2.85
2023 NF PE RVU: 11.93
2023 Fac PE RVU: 0.82

RUC Recommendation: 2.85 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47543 **Endoluminal biopsy(ies) of biliary tree, percutaneous, any method(s) (eg, brush, forceps, and/or needle), including imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation, single or multiple (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 591

2023 Work RVU: 3.00
2023 NF PE RVU: 8.52
2023 Fac PE RVU: 0.88

RUC Recommendation: 3.00 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47544 **Removal of calculi/debris from biliary duct(s) and/or gallbladder, percutaneous, including destruction of calculi by any method (eg, mechanical, electrohydraulic, lithotripsy) when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:** 309

2023 Work RVU: 3.28
2023 NF PE RVU: 21.69
2023 Fac PE RVU: 0.93

RUC Recommendation: 3.28 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47560 **Laparoscopy, surgical; with guided transhepatic cholangiography, without biopsy**

Global: **Issue:** RAW **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:**

First Identified: July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:
Result: Maintain

RUC Recommendation: Deleted from CPT

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

47562 **Laparoscopy, surgical; cholecystectomy**

Global: 090 **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2014 / Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** ACS

First Identified: September 2011 **2021 Medicare Utilization:** 81,342

2023 Work RVU: 10.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.73
Result: Maintain

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 3.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

47563 **Laparoscopy, surgical; cholecystectomy with cholangiography**

Global: 090 **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:**

First Identified: September 2011 **2021 Medicare Utilization:** 33,213

2023 Work RVU: 11.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.24
Result: Maintain

RUC Recommendation: No further action. 12.11

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

47600 **Cholecystectomy;**

Global: 090 **Issue:** Cholecystectomy **Screen:** CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 36 **Specialty Developing Recommendation:** ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 6,202

2023 Work RVU: 17.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.28

RUC Recommendation: 20.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

47605 **Cholecystectomy; with cholangiography**

Global: 090 **Issue:** Cholecystectomy **Screen:** CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 36 **Specialty Developing Recommendation:** ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 920

2023 Work RVU: 18.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.71

RUC Recommendation: 21.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

48102 **Biopsy of pancreas, percutaneous needle**

Global: 010 **Issue:** Percutaneous Needle Biopsy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** SIR **First Identified:** September 2007 **2021 Medicare Utilization:** 692

2023 Work RVU: 4.70
2023 NF PE RVU: 10.35
2023 Fac PE RVU: 1.76

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

48511 **External drainage, pseudocyst of pancreas; percutaneous**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49021 **Drainage of peritoneal abscess or localized peritonitis, exclusive of appendiceal abscess; percutaneous**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49041 **Drainage of subdiaphragmatic or subphrenic abscess; percutaneous**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49061 **Drainage of retroperitoneal abscess; percutaneous**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49080 **Peritoneocentesis, abdominal paracentesis, or peritoneal lavage (diagnostic or therapeutic); initial**

Global: **Issue:** Peritoneocentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 5 **Specialty Developing Recommendation:** ACR, AGA, ASGE, AUR, SIR **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49081 **Peritoneocentesis, abdominal paracentesis, or peritoneal lavage (diagnostic or therapeutic); subsequent**

Global: **Issue:** Peritoneocentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 5 **Specialty Developing Recommendation:** ACR, AGA, ASGE, AUR, SIR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49082 **Abdominal paracentesis (diagnostic or therapeutic); without imaging guidance** **Global:** 000 **Issue:** Abdominal Paracentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 05 **Specialty Developing Recommendation:** ACR, ACS, AGA, ASGE, SIR **First Identified:** February 2010 **2021 Medicare Utilization:** 9,742

2023 Work RVU: 1.24
2023 NF PE RVU: 4.95
2023 Fac PE RVU: 0.73

RUC Recommendation: 1.35 **Referred to CPT** June 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49083 **Abdominal paracentesis (diagnostic or therapeutic); with imaging guidance** **Global:** 000 **Issue:** Abdominal Paracentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 05 **Specialty Developing Recommendation:** ACR, ACS, AGA, ASGE, SIR **First Identified:** February 2010 **2021 Medicare Utilization:** 249,031

2023 Work RVU: 2.00
2023 NF PE RVU: 6.66
2023 Fac PE RVU: 0.93

RUC Recommendation: 2.00 **Referred to CPT** June 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49084 **Peritoneal lavage, including imaging guidance, when performed** **Global:** 000 **Issue:** Abdominal Paracentesis **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 05 **Specialty Developing Recommendation:** ACR, ACS, AGA, ASGE, SIR **First Identified:** February 2010 **2021 Medicare Utilization:** 1,488

2023 Work RVU: 2.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.74

RUC Recommendation: 2.50 **Referred to CPT** June 2010 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49405 **Image-guided fluid collection drainage by catheter (eg, abscess, hematoma, seroma, lymphocele, cyst); visceral (eg, kidney, liver, spleen, lung/mediastinum), percutaneous**

Global: 000 **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:** 5,284

2023 Work RVU: 4.00
2023 NF PE RVU: 22.45
2023 Fac PE RVU: 1.30

RUC Recommendation: 4.25 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49406 **Image-guided fluid collection drainage by catheter (eg, abscess, hematoma, seroma, lymphocele, cyst); peritoneal or retroperitoneal, percutaneous**

Global: 000 **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:** 30,720

2023 Work RVU: 4.00
2023 NF PE RVU: 22.46
2023 Fac PE RVU: 1.30

RUC Recommendation: 4.25 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49407 **Image-guided fluid collection drainage by catheter (eg, abscess, hematoma, seroma, lymphocele, cyst); peritoneal or retroperitoneal, transvaginal or transrectal**

Global: 000 **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** January 2012 **2021 Medicare Utilization:** 170

2023 Work RVU: 4.25
2023 NF PE RVU: 17.98
2023 Fac PE RVU: 1.33

RUC Recommendation: 4.50 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49418 **Insertion of tunneled intraperitoneal catheter (eg, dialysis, intraperitoneal chemotherapy instillation, management of ascites), complete procedure, including imaging guidance, catheter placement, contrast injection when performed, and radiological supervision and interpretation, percutaneous**

Global: 000 **Issue:** Intraperitoneal Catheter Codes **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 11 **Specialty Developing Recommendation:** ACS, ACR, SIR **First Identified:** February 2010 **2021 Medicare Utilization:** 6,703

2023 Work RVU: 3.96
2023 NF PE RVU: 25.39
2023 Fac PE RVU: 1.50

RUC Recommendation: 4.21 **Referred to CPT** February 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49420 **Deleted from CPT**

Global: **Issue:** Insertion of Intraperitoneal Cannula or Catheter **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 40 **Specialty Developing Recommendation:** ACS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49421 **Insertion of tunneled intraperitoneal catheter for dialysis, open**

Global: 000 **Issue:** Intraperitoneal Catheter Codes **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 11 **Specialty Developing Recommendation:** ACS, ACR, SIR **First Identified:** September 2007 **2021 Medicare Utilization:** 1,208

2023 Work RVU: 4.21
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.51

RUC Recommendation: 4.21 **Referred to CPT** February 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49422 **Removal of tunneled intraperitoneal catheter**

Global: 000 **Issue:** Removal of Intraperitoneal Catheter **Screen:** Site of Service Anomaly - 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 14 **Specialty Developing Recommendation:** ACS, SVS

First Identified: October 2016 **2021 Medicare Utilization:** 11,413

2023 Work RVU: 4.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.64

RUC Recommendation: 4.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

49436 **Delayed creation of exit site from embedded subcutaneous segment of intraperitoneal cannula or catheter**

Global: 010 **Issue:** Delayed Creation of Exit Site from Embedded Catheter **Screen:** CMS Request - Final Rule for 2022 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 16 **Specialty Developing Recommendation:** ACS

First Identified: November 2021 **2021 Medicare Utilization:** 320

2023 Work RVU: 2.72
2023 NF PE RVU: 13.02
2023 Fac PE RVU: 2.18

RUC Recommendation: PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

49505 **Repair initial inguinal hernia, age 5 years or older; reducible**

Global: 090 **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** ACS

First Identified: September 2011 **2021 Medicare Utilization:** 39,992

2023 Work RVU: 7.96
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.78

RUC Recommendation: Reaffirmed

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

49507 **Repair initial inguinal hernia, age 5 years or older; incarcerated or strangulated**

Global: 090 **Issue:** Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 29 **Specialty Developing Recommendation:** ACS

First Identified: September 2007 **2021 Medicare Utilization:** 8,416

2023 Work RVU: 9.09
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.33

RUC Recommendation: 10.05

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

49521 **Repair recurrent inguinal hernia, any age; incarcerated or strangulated** **Global:** 090 **Issue:** Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 29 **Specialty Developing Recommendation:** ACS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,576

2023 Work RVU: 11.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.20

RUC Recommendation: 12.44 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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49560 **Repair initial incisional or ventral hernia; reducible** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 15,973

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

49561 **Repair initial incisional or ventral hernia; incarcerated or strangulated** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 10,060

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

49565 **Repair recurrent incisional or ventral hernia; reducible** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** October 2019 **2021 Medicare Utilization:** 3,456

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

49566 **Repair recurrent incisional or ventral hernia; incarcerated or strangulated** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 2,765 **2023 Work RVU:** **2023 NF PE RVU:** **2023 Fac PE RVU:**

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49568 **Implantation of mesh or other prosthesis for open incisional or ventral hernia repair or mesh for closure of debridement for necrotizing soft tissue infection (list separately in addition to code for the incisional or ventral hernia repair)** **Global:** ZZZ **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 20,065 **2023 Work RVU:** **2023 NF PE RVU:** **2023 Fac PE RVU:**

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49570 **Repair epigastric hernia (eg, preperitoneal fat); reducible (separate procedure)** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 476 **2023 Work RVU:** **2023 NF PE RVU:** **2023 Fac PE RVU:**

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49572 **Repair epigastric hernia (eg, preperitoneal fat); incarcerated or strangulated** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 432

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49580 **Repair umbilical hernia, younger than age 5 years; reducible** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 2

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49582 **Repair umbilical hernia, younger than age 5 years; incarcerated or strangulated** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49585 **Repair umbilical hernia, age 5 years or older; reducible** **Global:** 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 14,622

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49587 **Repair umbilical hernia, age 5 years or older; incarcerated or strangulated**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** September 2007 **2021 Medicare Utilization:** 6,203

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49590 **Repair spigelian hernia**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 510

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49591 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 5.96
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.79

RUC Recommendation: 6.27 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49592 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 8.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.65

RUC Recommendation: 9.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49593 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); 3 cm to 10 cm, reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 10.26
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.35

RUC Recommendation: 10.80 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49594 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); 3 cm to 10 cm, incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 13.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.50

RUC Recommendation: 14.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49595 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); greater than 10 cm, reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 13.94
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.70

RUC Recommendation: 14.88 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49596 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); greater than 10 cm, incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 18.67
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.42

RUC Recommendation: 20.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49613 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 7.42
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.38

RUC Recommendation: 7.75 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49614 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 10.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.32

RUC Recommendation: 10.79 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49615 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); 3 cm to 10 cm, reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 11.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.84

RUC Recommendation: 12.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49616 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); 3 cm to 10 cm, incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 15.55
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.28

RUC Recommendation: 16.50 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49617 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); greater than 10 cm, reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 16.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.57

RUC Recommendation: 16.97 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49618 **Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); greater than 10 cm, incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 22.67
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.90

RUC Recommendation: 24.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49621 **Repair of parastomal hernia, any approach (ie, open, laparoscopic, robotic), initial or recurrent, including implantation of mesh or other prosthesis, when performed; reducible**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 13.70
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.48

RUC Recommendation: 14.24 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49622 **Repair of parastomal hernia, any approach (ie, open, laparoscopic, robotic), initial or recurrent, including implantation of mesh or other prosthesis, when performed; incarcerated or strangulated**

Global: 000 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 17.06
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.61

RUC Recommendation: 18.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49623 **Removal of total or near total non-infected mesh or other prosthesis at the time of initial or recurrent anterior abdominal hernia repair or parastomal hernia repair, any approach (ie, open, laparoscopic, robotic) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 3.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.34

RUC Recommendation: 5.00 **Referred to CPT** February 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

49652 **Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); reducible**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** June 2010 **2021 Medicare Utilization:** 8,623

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49653 **Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); incarcerated or strangulated**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** June 2010 **2021 Medicare Utilization:** 6,182

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49654 **Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); reducible**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** June 2010 **2021 Medicare Utilization:** 6,511

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49655 **Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); incarcerated or strangulated**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** June 2010 **2021 Medicare Utilization:** 4,650

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

49656 **Laparoscopy, surgical, repair, recurrent incisional hernia (includes mesh insertion, when performed); reducible**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 1,292

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

49657 **Laparoscopy, surgical, repair, recurrent incisional hernia (includes mesh insertion, when performed); incarcerated or strangulated**

Global: 090 **Issue:** Anterior Abdominal Hernia Repair **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 09 **Specialty Developing Recommendation:** ACS, ASCRS (col), SAGES **First Identified:** February 2021 **2021 Medicare Utilization:** 1,395

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2021 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

50021 **Drainage of perirenal or renal abscess; percutaneous**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

50080 **Percutaneous nephrolithotomy or pyelolithotomy, lithotripsy, stone extraction, antegrade ureteroscopy, antegrade stent placement and nephrostomy tube placement, when performed, including imaging guidance; simple (eg, stone[s] up to 2 cm in single location of kidney or renal pelvis, nonbranching stones)**

Global: 090 **Issue:** Percutaneous Nephrostolithotomy **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 08 **Specialty Developing Recommendation:** AUA **First Identified:** October 2019 **2021 Medicare Utilization:** 2,307

2023 Work RVU: 12.41
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.65

RUC Recommendation: 13.50 **Referred to CPT** September 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50081 **Percutaneous nephrolithotomy or pyelolithotomy, lithotripsy, stone extraction, antegrade ureteroscopy, antegrade stent placement and nephrostomy tube placement, when performed, including imaging guidance; complex (eg, stone[s] > 2 cm, branching stones, stones in multiple locations, ureter stones, complicated anatomy)**

Global: 090 **Issue:** Percutaneous Nephrostolithotomy **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 08 **Specialty Developing Recommendation:** AUA **First Identified:** October 2019 **2021 Medicare Utilization:** 5,692

2023 Work RVU: 20.91
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.72

RUC Recommendation: 22.00 **Referred to CPT** September 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

50200 **Renal biopsy; percutaneous, by trocar or needle**

Global: 000 **Issue:** Interventional Radiology Procedures **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** NA **2021 Medicare Utilization:** 34,139

2023 Work RVU: 2.38
2023 NF PE RVU: 12.95
2023 Fac PE RVU: 1.10

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

50360 **Renal allotransplantation, implantation of graft; without recipient nephrectomy**

Global: 090 **Issue:** Renal Allotransplantation **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 21 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** July 2012 **2021 Medicare Utilization:** 11,349

2023 Work RVU: 39.88
2023 NF PE RVU: NA
2023 Fac PE RVU: 23.06

RUC Recommendation: 40.90 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50387 **Removal and replacement of externally accessible nephroureteral catheter (eg, external/internal stent) requiring fluoroscopic guidance, including radiological supervision and interpretation**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 7,932

2023 Work RVU: 1.75
2023 NF PE RVU: 14.90
2023 Fac PE RVU: 0.50

RUC Recommendation: 2.00 **Referred to CPT** October 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

50392 **Introduction of intracatheter or catheter into renal pelvis for drainage and/or injection, percutaneous**

Global: **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

50393 **Introduction of ureteral catheter or stent into ureter through renal pelvis for drainage and/or injection, percutaneous**

Global: **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50394 **Injection procedure for pyelography (as nephrostogram, pyelostogram, antegrade pyeloureterograms) through nephrostomy or pyelostomy tube, or indwelling ureteral catheter**

Global: **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

50395 **Introduction of guide into renal pelvis and/or ureter with dilation to establish nephrostomy tract, percutaneous**

Global: **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

50398 **Change of nephrostomy or pyelostomy tube**

Global: **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50430 **Injection procedure for antegrade nephrostogram and/or ureterogram, complete diagnostic procedure including imaging guidance (eg, ultrasound and fluoroscopy) and all associated radiological supervision and interpretation; new access**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 818

2023 Work RVU: 2.90
2023 NF PE RVU: 15.86
2023 Fac PE RVU: 1.29

RUC Recommendation: 3.15 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

50431 **Injection procedure for antegrade nephrostogram and/or ureterogram, complete diagnostic procedure including imaging guidance (eg, ultrasound and fluoroscopy) and all associated radiological supervision and interpretation; existing access**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 7,737

2023 Work RVU: 1.10
2023 NF PE RVU: 8.54
2023 Fac PE RVU: 0.72

RUC Recommendation: 1.42 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

50432 **Placement of nephrostomy catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation**

Global: 000 **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 27,988

2023 Work RVU: 4.00
2023 NF PE RVU: 23.04
2023 Fac PE RVU: 1.58

RUC Recommendation: 4.00 **Referred to CPT** October 2014 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50433 **Placement of nephroureteral catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation, new access**

Global: 000 **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:**

First Identified: September 2017 **2021 Medicare Utilization:** 5,296

2023 Work RVU: 5.05
2023 NF PE RVU: 28.63
2023 Fac PE RVU: 1.86
Result: Maintain

RUC Recommendation: 5.05

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

50434 **Convert nephrostomy catheter to nephroureteral catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation, via pre-existing nephrostomy tract**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR

First Identified: October 2014 **2021 Medicare Utilization:** 2,179

2023 Work RVU: 3.75
2023 NF PE RVU: 23.33
2023 Fac PE RVU: 1.45
Result: Increase

RUC Recommendation: 4.20

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

50435 **Exchange nephrostomy catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR

First Identified: October 2014 **2021 Medicare Utilization:** 46,485

2023 Work RVU: 1.82
2023 NF PE RVU: 16.18
2023 Fac PE RVU: 0.91
Result: Increase

RUC Recommendation: 2.00

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50436 **Dilation of existing tract, percutaneous, for an endourologic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation, with postprocedure tube placement, when performed;**

Global: 000 **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** September 2017 **2021 Medicare Utilization:** 455

2023 Work RVU: 2.78
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.29

RUC Recommendation: 3.37 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

50437 **Dilation of existing tract, percutaneous, for an endourologic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation, with postprocedure tube placement, when performed; including new access into the renal collecting system**

Global: 000 **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** September 2017 **2021 Medicare Utilization:** 815

2023 Work RVU: 4.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.95

RUC Recommendation: 5.44 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

50542 **Laparoscopy, surgical; ablation of renal mass lesion(s), including intraoperative ultrasound guidance and monitoring, when performed**

Global: 090 **Issue:** Laproscopic Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** AUA **First Identified:** October 2008 **2021 Medicare Utilization:** 104

2023 Work RVU: 21.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.38

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50548 **Laparoscopy, surgical; nephrectomy with total ureterectomy**

Global: 090 **Issue:** Laproscopic Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** AUA

First Identified: October 2008 **2021 Medicare Utilization:** 2,250

2023 Work RVU: 25.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.98

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

50590 **Lithotripsy, extracorporeal shock wave**

Global: 090 **Issue:** Lithotripsy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 42 **Specialty Developing Recommendation:** AUA

First Identified: September 2011 **2021 Medicare Utilization:** 44,587

2023 Work RVU: 9.77
2023 NF PE RVU: 11.09
2023 Fac PE RVU: 5.95

RUC Recommendation: 9.77

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

50605 **Ureterotomy for insertion of indwelling stent, all types**

Global: 090 **Issue:** Ureterotomy **Screen:** CMS Fastest Growing / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** AUA, SIR

First Identified: October 2008 **2021 Medicare Utilization:** 2,682

2023 Work RVU: 16.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.43

RUC Recommendation: Review action plan at the RAW Oct 2015. CPT Assistant article published.

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2009

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

50606 **Endoluminal biopsy of ureter and/or renal pelvis, non-endoscopic, including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 08 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 88

2023 Work RVU: 3.16
2023 NF PE RVU: 11.06
2023 Fac PE RVU: 0.53

RUC Recommendation: 3.16 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

50693 **Placement of ureteral stent, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; pre-existing nephrostomy tract**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 3,734

2023 Work RVU: 3.96
2023 NF PE RVU: 25.72
2023 Fac PE RVU: 1.59

RUC Recommendation: 4.60 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

50694 **Placement of ureteral stent, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; new access, without separate nephrostomy catheter**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 807

2023 Work RVU: 5.25
2023 NF PE RVU: 27.96
2023 Fac PE RVU: 2.01

RUC Recommendation: 6.00 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

50695 **Placement of ureteral stent, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; new access, with separate nephrostomy catheter**

Global: 000 **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 1,158

2023 Work RVU: 6.80
2023 NF PE RVU: 33.00
2023 Fac PE RVU: 2.50

RUC Recommendation: 7.55 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

50705 **Ureteral embolization or occlusion, including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 08 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 67

2023 Work RVU: 4.03
2023 NF PE RVU: 51.21
2023 Fac PE RVU: 0.67

RUC Recommendation: 4.03 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

50706 **Balloon dilation, ureteral stricture, including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 08 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2014 **2021 Medicare Utilization:** 1,315

2023 Work RVU: 3.80
2023 NF PE RVU: 21.16
2023 Fac PE RVU: 1.08

RUC Recommendation: 3.80 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

51040 **Cystostomy, cystotomy with drainage**

Global: 090 **Issue:** Cystostomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 4,081

2023 Work RVU: 4.49
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.61

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

51102 **Aspiration of bladder; with insertion of suprapubic catheter**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 45 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 12,932

2023 Work RVU: 2.70
2023 NF PE RVU: 4.20
2023 Fac PE RVU: 1.22

RUC Recommendation: 2.70

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

51700 **Bladder irrigation, simple, lavage and/or instillation**

Global: 000 **Issue:** Bladder Catheter **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 32 **Specialty Developing Recommendation:** AUA

First Identified: July 2015 **2021 Medicare Utilization:** 178,463

2023 Work RVU: 0.60
2023 NF PE RVU: 1.60
2023 Fac PE RVU: 0.21

RUC Recommendation: 0.60

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

51701 **Insertion of non-indwelling bladder catheter (eg, straight catheterization for residual urine)**

Global: 000 **Issue:** Bladder Catheter **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 32 **Specialty Developing Recommendation:** AUA

First Identified: July 2015 **2021 Medicare Utilization:** 142,086

2023 Work RVU: 0.50
2023 NF PE RVU: 0.76
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

51702 **Insertion of temporary indwelling bladder catheter; simple (eg, foley)** **Global:** 000 **Issue:** Bladder Catheter **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 32 **Specialty Developing Recommendation:** AUA **First Identified:** July 2015 **2021 Medicare Utilization:** 215,814

2023 Work RVU: 0.50
2023 NF PE RVU: 1.28
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

51703 **Insertion of temporary indwelling bladder catheter; complicated (eg, altered anatomy, fractured catheter/balloon)** **Global:** 000 **Issue:** Bladder Catheter **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 32 **Specialty Developing Recommendation:** AUA **First Identified:** July 2015 **2021 Medicare Utilization:** 51,883

2023 Work RVU: 1.47
2023 NF PE RVU: 2.83
2023 Fac PE RVU: 0.60

RUC Recommendation: 1.47 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

51720 **Bladder instillation of anticarcinogenic agent (including retention time)** **Global:** 000 **Issue:** Treatment of Bladder Lesion **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 33 **Specialty Developing Recommendation:** AUA **First Identified:** July 2015 **2021 Medicare Utilization:** 164,465

2023 Work RVU: 0.87
2023 NF PE RVU: 1.64
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.87 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

51726 **Complex cystometrogram (ie, calibrated electronic equipment);** **Global:** 000 **Issue:** Urodynamic Studies **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 16 **Specialty Developing Recommendation:** AUA, ACOG **First Identified:** February 2008 **2021 Medicare Utilization:** 3,591

2023 Work RVU: 1.71
2023 NF PE RVU: 7.14
2023 Fac PE RVU: NA

RUC Recommendation: 1.71 **Referred to CPT** February 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

51727 **Complex cystometrogram (ie, calibrated electronic equipment); with urethral pressure profile studies (ie, urethral closure pressure profile), any technique**

Global: 000 **Issue:** Urodynamic Studies **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 16 **Specialty Developing Recommendation:** AUA, ACOG **First Identified:** February 2009 **2021 Medicare Utilization:** 1,768

2023 Work RVU: 2.11
2023 NF PE RVU: 8.62
2023 Fac PE RVU: NA

RUC Recommendation: 2.11 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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51728 **Complex cystometrogram (ie, calibrated electronic equipment); with voiding pressure studies (ie, bladder voiding pressure), any technique**

Global: 000 **Issue:** Urodynamic Studies **Screen:** Codes Reported Together 95% or More / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AUA, ACOG **First Identified:** February 2009 **2021 Medicare Utilization:** 79,629

2023 Work RVU: 2.11
2023 NF PE RVU: 8.62
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 2.11 **Referred to CPT** **Referred to CPT Asst** ☑ **Published in CPT Asst:** **Result:** Decrease

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51729 **Complex cystometrogram (ie, calibrated electronic equipment); with voiding pressure studies (ie, bladder voiding pressure) and urethral pressure profile studies (ie, urethral closure pressure profile), any technique**

Global: 000 **Issue:** Urodynamic Studies **Screen:** Codes Reported Together 95% or More / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AUA, ACOG **First Identified:** February 2009 **2021 Medicare Utilization:** 51,510

2023 Work RVU: 2.51
2023 NF PE RVU: 8.79
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 2.51 **Referred to CPT** **Referred to CPT Asst** ☑ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

51736 **Simple uroflowmetry (ufr) (eg, stop-watch flow rate, mechanical uroflowmeter)** **Global:** XXX **Issue:** Uroflowmetry **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 11 **Specialty Developing Recommendation:** AUA **First Identified:** February 2010 **2021 Medicare Utilization:** 8,620

2023 Work RVU: 0.17
2023 NF PE RVU: 0.21
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

51741 **Complex uroflowmetry (eg, calibrated electronic equipment)** **Global:** XXX **Issue:** Uroflowmetry **Screen:** Harvard Valued - Utilization over 100,000 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AUA **First Identified:** October 2009 **2021 Medicare Utilization:** 350,551

2023 Work RVU: 0.17
2023 NF PE RVU: 0.22
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 0.17 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:**

51772 **Deleted from CPT** **Global:** **Issue:** Urodynamic Studies **Screen:** Codes Reported Together 95% or More / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 16 **Specialty Developing Recommendation:** AUA **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

51784 **Electromyography studies (emg) of anal or urethral sphincter, other than needle, any technique**

Global: XXX **Issue:** Electromyography Studies (EMG) **Screen:** Codes Reported Together 75% or More-Part2 / CMS High Expenditure Procedural Codes2 / CPT Assistant Analysis 2018 / Codes Reported Together 75% or More-Part5 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AUA **First Identified:** October 2012 **2021 Medicare Utilization:** 120,477

2023 Work RVU: 0.75
2023 NF PE RVU: 1.08
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 0.75.

Referred to CPT February 2014
Referred to CPT Asst ☑ **Published in CPT Asst:** Feb 2014

Result: Decrease

51792 **Stimulus evoked response (eg, measurement of bulbocavernosus reflex latency time)**

Global: 000 **Issue:** Urinary Reflex Studies with EMG **Screen:** Codes Reported Together 75% or More-Part2 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** AUA **First Identified:** October 2012 **2021 Medicare Utilization:** 4,455

2023 Work RVU: 1.10
2023 NF PE RVU: 6.91
2023 Fac PE RVU: NA

RUC Recommendation: CPT edits and CPT Assistant article complete.

Referred to CPT February 2014
Referred to CPT Asst ☑ **Published in CPT Asst:** Feb 2014

Result: Maintain

51795 **Deleted from CPT**

Global: **Issue:** Urology Studies **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

51797 **Voiding pressure studies, intra-abdominal (ie, rectal, gastric, intraperitoneal) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Urology Studies **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:**

First Identified: February 2008 **2021 Medicare Utilization:** 97,767

2023 Work RVU: 0.80
2023 NF PE RVU: 4.90
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** February 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

51798 **Measurement of post-voiding residual urine and/or bladder capacity by ultrasound, non-imaging**

Global: XXX **Issue:** Voiding Pressure Studies **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 25 **Specialty Developing Recommendation:** AUA

First Identified: July 2015 **2021 Medicare Utilization:** 1,905,320

2023 Work RVU: 0.00
2023 NF PE RVU: 0.31
2023 Fac PE RVU: NA

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

52000 **Cystourethroscopy (separate procedure)**

Global: 000 **Issue:** Cystourethroscopy **Screen:** MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 35 **Specialty Developing Recommendation:** AUA, ACOG

First Identified: October 2010 **2021 Medicare Utilization:** 802,751

2023 Work RVU: 1.53
2023 NF PE RVU: 5.49
2023 Fac PE RVU: 0.64

RUC Recommendation: 1.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52214 **Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) of trigone, bladder neck, prostatic fossa, urethra, or periurethral glands**

Global: 000 **Issue:** Cystourethroscopy **Screen:** High Volume Growth1 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AUA **First Identified:** June 2008 **2021 Medicare Utilization:** 16,046

2023 Work RVU: 3.50
2023 NF PE RVU: 18.60
2023 Fac PE RVU: 1.20

RUC Recommendation: 3.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Aug 2009 and May 2016

52224 **Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) or treatment of minor (less than 0.5 cm) lesion(s) with or without biopsy**

Global: 000 **Issue:** Cystourethroscopy **Screen:** High Volume Growth1 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AUA **First Identified:** February 2008 **2021 Medicare Utilization:** 29,889

2023 Work RVU: 4.05
2023 NF PE RVU: 18.98
2023 Fac PE RVU: 1.39

RUC Recommendation: 4.05 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Aug 2009 and May 2016

52234 **Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; small bladder tumor(s) (0.5 up to 2.0 cm)**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 25,056

2023 Work RVU: 4.62
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.01

RUC Recommendation: 4.62 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** May 2016

Status Report: CMS Requests and Relativity Assessment Issues

52235 **Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; medium bladder tumor(s) (2.0 to 5.0 cm)**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AUA **First Identified:** April 2011 **2021 Medicare Utilization:** 32,132

2023 Work RVU: 5.44
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.33

RUC Recommendation: 5.44 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** May 2016

52240 **Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; large bladder tumor(s)**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 20,534

2023 Work RVU: 7.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.03

RUC Recommendation: 8.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** May 2016

52281 **Cystourethroscopy, with calibration and/or dilation of urethral stricture or stenosis, with or without meatotomy, with or without injection procedure for cystography, male or female**

Global: 000 **Issue:** Cystourethroscopy **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 38 **Specialty Developing Recommendation:** AUA **First Identified:** October 2009 **2021 Medicare Utilization:** 52,235

2023 Work RVU: 2.75
2023 NF PE RVU: 6.70
2023 Fac PE RVU: 1.36

RUC Recommendation: 2.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52287 **Cystourethroscopy, with injection(s) for chemodenervation of the bladder** **Global:** 000 **Issue:** **Screen:** High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 55,054

2023 Work RVU: 3.20
2023 NF PE RVU: 8.06
2023 Fac PE RVU: 1.35

RUC Recommendation: Remove from Screen **Referred to CPT** **Result:** Remove from Screen
Referred to CPT Asst ☐ **Published in CPT Asst:**

52332 **Cystourethroscopy, with insertion of indwelling ureteral stent (eg, gibbons or double-j type)** **Global:** 000 **Issue:** Cystourethroscopy **Screen:** Harvard Valued - Utilization over 100,000 / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 13 **Specialty Developing Recommendation:** AUA **First Identified:** October 2009 **2021 Medicare Utilization:** 142,221

2023 Work RVU: 2.82
2023 NF PE RVU: 8.88
2023 Fac PE RVU: 1.38

RUC Recommendation: 2.82 **Referred to CPT** February 2013 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

52334 **Cystourethroscopy with insertion of ureteral guide wire through kidney to establish a percutaneous nephrostomy, retrograde** **Global:** 000 **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** September 2017 **2021 Medicare Utilization:** 232

2023 Work RVU: 3.37
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.57

RUC Recommendation: 3.37 **Referred to CPT** **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52341 **Cystourethroscopy; with treatment of ureteral stricture (eg, balloon dilation, laser, electrocautery, and incision)**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** April 2008 **2021 Medicare Utilization:** 2,071

2023 Work RVU: 5.35
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.30
Result: Decrease

RUC Recommendation: 5.35

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52342 **Cystourethroscopy; with treatment of ureteropelvic junction stricture (eg, balloon dilation, laser, electrocautery, and incision)**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** April 2008 **2021 Medicare Utilization:** 180

2023 Work RVU: 5.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.47
Result: Decrease

RUC Recommendation: 5.85

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52343 **Cystourethroscopy; with treatment of intra-renal stricture (eg, balloon dilation, laser, electrocautery, and incision)**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** April 2008 **2021 Medicare Utilization:** 28

2023 Work RVU: 6.55
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.71
Result: Decrease

RUC Recommendation: 6.55

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52344 **Cystourethroscopy with ureteroscopy; with treatment of ureteral stricture (eg, balloon dilation, laser, electrocautery, and incision)**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** September 2007 **2021 Medicare Utilization:** 3,331

2023 Work RVU: 7.05
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.87
Result: Decrease

RUC Recommendation: 7.05

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52345 **Cystourethroscopy with ureteroscopy; with treatment of ureteropelvic junction stricture (eg, balloon dilation, laser, electrocautery, and incision)**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** April 2008 **2021 Medicare Utilization:** 402

2023 Work RVU: 7.55
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.04
Result: Decrease

RUC Recommendation: 7.55

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52346 **Cystourethroscopy with ureteroscopy; with treatment of intra-renal stricture (eg, balloon dilation, laser, electrocautery, and incision)**

Global: 000 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** April 2008 **2021 Medicare Utilization:** 323

2023 Work RVU: 8.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.40
Result: Decrease

RUC Recommendation: 8.58

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52351 **Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 23 **Specialty Developing Recommendation:** AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 21,713

2023 Work RVU: 5.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.40
Result: Decrease

RUC Recommendation: 5.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52352 **Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or manipulation of calculus (ureteral catheterization is included)**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 23 **Specialty Developing Recommendation:** AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 21,092

2023 Work RVU: 6.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.78
Result: Decrease

RUC Recommendation: 6.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52353 **Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy (ureteral catheterization is included)**

Global: 000 **Issue:** Cystourethroscopy **Screen:** Harvard Valued - Utilization over 30,000 / Harvard-Valued Annual Allowed Charges Greater than $10 million / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 13 **Specialty Developing Recommendation:** AUA **First Identified:** April 2011 **2021 Medicare Utilization:** 10,320

2023 Work RVU: 7.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.03
Result: Decrease

RUC Recommendation: 7.50 **Referred to CPT** February 2013
Referred to CPT Asst ☐ **Published in CPT Asst:**

52354 **Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with biopsy and/or fulguration of ureteral or renal pelvic lesion**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 23 **Specialty Developing Recommendation:** AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 8,674

2023 Work RVU: 8.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.20
Result: Increase

RUC Recommendation: 8.58 **Referred to CPT**
Referred to CPT Asst ☐ **Published in CPT Asst:**

52355 **Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with resection of ureteral or renal pelvic tumor**

Global: 000 **Issue:** Cystourethroscopy and Ureteroscopy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 23 **Specialty Developing Recommendation:** AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 857

2023 Work RVU: 9.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.55
Result: Increase

RUC Recommendation: 10.00 **Referred to CPT**
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52356 **Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy including insertion of indwelling ureteral stent (eg, gibbons or double-j type)**

Global: 000 **Issue:** Cystourethroscopy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 13 **Specialty Developing Recommendation:** AUA **First Identified:** January 2013 **2021 Medicare Utilization:** 80,680

2023 Work RVU: 8.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.16

RUC Recommendation: 8.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

52400 **Cystourethroscopy with incision, fulguration, or resection of congenital posterior urethral valves, or congenital obstructive hypertrophic mucosal folds**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA **First Identified:** September 2007 **2021 Medicare Utilization:** 64

2023 Work RVU: 8.69
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.32

RUC Recommendation: 8.69 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

52442 **Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; each additional permanent adjustable transprostatic implant (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** PE Subcommittee **Screen:** PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** AUA, AACU **First Identified:** April 2020 **2021 Medicare Utilization:** 107,292

2023 Work RVU: 1.01
2023 NF PE RVU: 24.99
2023 Fac PE RVU: 0.35

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52500 **Transurethral resection of bladder neck (separate procedure)**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 2,446

2023 Work RVU: 8.14
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.46
Result: Decrease

RUC Recommendation: 8.14

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52601 **Transurethral electrosurgical resection of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included)**

Global: 090 **Issue:** Transurethral Electrosurgical Resection of Prostate (TURP) **Screen:** Site of Service Anomaly - 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 26 **Specialty Developing Recommendation:** AUA

First Identified: October 2015 **2021 Medicare Utilization:** 39,991

2023 Work RVU: 13.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.74
Result: Decrease

RUC Recommendation: 13.16

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

52640 **Transurethral resection; of postoperative bladder neck contracture**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 45 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 1,332

2023 Work RVU: 4.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.19
Result: Decrease

RUC Recommendation: 4.79

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

52648 **Laser vaporization of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, internal urethrotomy and transurethral resection of prostate are included if performed)**

Global: 090 **Issue:** Laser Surgery of Prostate **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** AUA

First Identified: February 2008 **2021 Medicare Utilization:** 15,604

2023 Work RVU: 12.15
2023 NF PE RVU: 34.77
2023 Fac PE RVU: 6.84

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

53445 **Insertion of inflatable urethral/bladder neck sphincter, including placement of pump, reservoir, and cuff**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 31 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 1,797

2023 Work RVU: 13.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.81

RUC Recommendation: 13.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

53850 **Transurethral destruction of prostate tissue; by microwave thermotherapy**

Global: 090 **Issue:** Transurethral Destruction of Prostate Tissue **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 43 **Specialty Developing Recommendation:** AUA

First Identified: September 2011 **2021 Medicare Utilization:** 1,154

2023 Work RVU: 5.42
2023 NF PE RVU: 36.52
2023 Fac PE RVU: 4.46

RUC Recommendation: 10.08

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

54405 **Insertion of multi-component, inflatable penile prosthesis, including placement of pump, cylinders, and reservoir**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 45 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 4,430

2023 Work RVU: 14.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.60
Result: Maintain

RUC Recommendation: 14.39

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

54410 **Removal and replacement of all component(s) of a multi-component, inflatable penile prosthesis at the same operative session**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 31 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 1,146

2023 Work RVU: 15.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.49
Result: Decrease

RUC Recommendation: 15.18

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

54520 **Orchiectomy, simple (including subcapsular), with or without testicular prosthesis, scrotal or inguinal approach**

Global: 090 **Issue:** Removal of Testical **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 2,184

2023 Work RVU: 5.30
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.74
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

54530 **Orchiectomy, radical, for tumor; inguinal approach**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 65 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 1,019

2023 Work RVU: 8.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.56
Result: Decrease

RUC Recommendation: 8.46

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

55700 **Biopsy, prostate; needle or punch, single or multiple, any approach**

Global: 000 **Issue:** Biopsy of Prostate **Screen:** CMS High Expenditure Procedural Codes2 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, AUA **First Identified:** July 2015 **2021 Medicare Utilization:** 139,901

2023 Work RVU: 2.50
2023 NF PE RVU: 4.41
2023 Fac PE RVU: 1.01

RUC Recommendation: Refer to CPT. 2.50 **Referred to CPT** May 2023 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

55706 **Biopsies, prostate, needle, transperineal, stereotactic template guided saturation sampling, including imaging guidance**

Global: 010 **Issue:** RAW **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 52 **Specialty Developing Recommendation:** **First Identified:** January 2014 **2021 Medicare Utilization:** 2,636

2023 Work RVU: 6.28
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.11

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

55840 **Prostatectomy, retropubic radical, with or without nerve sparing;**

Global: 090 **Issue:** **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 31 **Specialty Developing Recommendation:** AUA **First Identified:** October 2013 **2021 Medicare Utilization:** 1,345

2023 Work RVU: 21.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.48

RUC Recommendation: 21.36 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

55842 **Prostatectomy, retropubic radical, with or without nerve sparing; with lymph node biopsy(s) (limited pelvic lymphadenectomy)**

Global: 090 **Issue:** **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 31 **Specialty Developing Recommendation:** AUA **First Identified:** October 2013 **2021 Medicare Utilization:** 99

2023 Work RVU: 21.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.48

RUC Recommendation: 24.16 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

55845 **Prostatectomy, retropubic radical, with or without nerve sparing; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric, and obturator nodes**

Global: 090 **Issue:** RAW **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 31 **Specialty Developing Recommendation:** AUA **First Identified:** July 2013 **2021 Medicare Utilization:** 589

2023 Work RVU: 25.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.80

RUC Recommendation: 29.07 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

55866 **Laparoscopy, surgical prostatectomy, retropubic radical, including nerve sparing, includes robotic assistance, when performed**

Global: 090 **Issue:** Laparoscopic Radical Prostatectomy **Screen:** New Technology / CMS Fastest Growing / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 27 **Specialty Developing Recommendation:** AUA **First Identified:** September 2007 **2021 Medicare Utilization:** 19,282

2023 Work RVU: 22.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.04

RUC Recommendation: 26.80 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

55873 **Cryosurgical ablation of the prostate (includes ultrasonic guidance and monitoring)**

Global: 090 **Issue:** Cryoablation of Prostate **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 25 **Specialty Developing Recommendation:** AUA

First Identified: September 2007 **2021 Medicare Utilization:** 1,093

2023 Work RVU: 13.60
2023 NF PE RVU: 157.69
2023 Fac PE RVU: 7.35

RUC Recommendation: 13.45

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

55875 **Transperineal placement of needles or catheters into prostate for interstitial radioelement application, with or without cystoscopy**

Global: 090 **Issue:** RAW **Screen:** RUC request **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:**

First Identified: April 2015 **2021 Medicare Utilization:** 5,121

2023 Work RVU: 13.46
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.17

RUC Recommendation: Review data at RAW

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Not Part of RAW

56515 **Destruction of lesion(s), vulva; extensive (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery)**

Global: 010 **Issue:** Destruction of Lesions **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ACOG

First Identified: September 2007 **2021 Medicare Utilization:** 2,305

2023 Work RVU: 3.08
2023 NF PE RVU: 4.80
2023 Fac PE RVU: 2.82

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

56620 **Vulvectomy simple; partial**

Global: 090 **Issue:** Partial Removal of Vulva **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** D **Specialty Developing Recommendation:** ACOG

First Identified: September 2007 **2021 Medicare Utilization:** 2,828

2023 Work RVU: 7.53
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.87

RUC Recommendation: 7.35

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

57150 **Irrigation of vagina and/or application of medicament for treatment of bacterial, parasitic, or fungoid disease**

Global: 000 **Issue:** Vaginal Treatments **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 15 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2016 **2021 Medicare Utilization:** 20,062

2023 Work RVU: 0.50
2023 NF PE RVU: 1.17
2023 Fac PE RVU: 0.19

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

57155 **Insertion of uterine tandem and/or vaginal ovoids for clinical brachytherapy**

Global: 000 **Issue:** RAW **Screen:** Site of Service Anomaly / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 30 **Specialty Developing Recommendation:** ACOG, ASTRO **First Identified:** September 2007 **2021 Medicare Utilization:** 2,548

2023 Work RVU: 5.15
2023 NF PE RVU: 6.28
2023 Fac PE RVU: 2.85

RUC Recommendation: 5.40 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

57156 **Insertion of a vaginal radiation afterloading apparatus for clinical brachytherapy**

Global: 000 **Issue:** RAW **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 30 **Specialty Developing Recommendation:** ACOG, ASTRO **First Identified:** September 2007 **2021 Medicare Utilization:** 15,080

2023 Work RVU: 2.69
2023 NF PE RVU: 3.95
2023 Fac PE RVU: 1.60

RUC Recommendation: 2.69 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

57160 **Fitting and insertion of pessary or other intravaginal support device**

Global: 000 **Issue:** Vaginal Treatments **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 15 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2016 **2021 Medicare Utilization:** 74,669

2023 Work RVU: 0.89
2023 NF PE RVU: 1.21
2023 Fac PE RVU: 0.34

RUC Recommendation: 0.89 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

57240 **Anterior colporrhaphy, repair of cystocele with or without repair of urethrocele, including cystourethroscopy, when performed**

Global: 090 **Issue:** Colporrhaphy with Cystourethroscopy **Screen:** Site of Service Anomaly - 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 14 **Specialty Developing Recommendation:** ACOG **First Identified:** October 2015 **2021 Medicare Utilization:** 6,409

2023 Work RVU: 10.08
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.79

RUC Recommendation: 10.08 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

57250 **Posterior colporrhaphy, repair of rectocele with or without perineorrhaphy**

Global: 090 **Issue:** Colporrhaphy with Cystourethroscopy **Screen:** Site of Service Anomaly - 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 14 **Specialty Developing Recommendation:** ACOG **First Identified:** April 2016 **2021 Medicare Utilization:** 7,699

2023 Work RVU: 10.08
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.82

RUC Recommendation: 10.08 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

57260 **Combined anteroposterior colporrhaphy, including cystourethroscopy, when performed;**

Global: 090 **Issue:** Colporrhaphy with Cystourethroscopy **Screen:** Site of Service Anomaly - 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 14 **Specialty Developing Recommendation:** ACOG **First Identified:** April 2016 **2021 Medicare Utilization:** 7,785

2023 Work RVU: 13.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.02

RUC Recommendation: 13.25 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

57265 **Combined anteroposterior colporrhaphy, including cystourethroscopy, when performed; with enterocele repair**

Global: 090 **Issue:** Colporrhaphy with Cystourethroscopy **Screen:** Site of Service Anomaly - 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 14 **Specialty Developing Recommendation:** ACOG **First Identified:** April 2016 **2021 Medicare Utilization:** 3,401

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.73

RUC Recommendation: 15.00 **Referred to CPT** September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

57282 **Colpopexy, vaginal; extra-peritoneal approach (sacrospinous, iliococcygeus)**

Global: 090 **Issue:** Colpopexy **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 26 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 5,779

2023 Work RVU: 11.63
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.40

RUC Recommendation: 13.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

57283 **Colpopexy, vaginal; intra-peritoneal approach (uterosacral, levator myorrhaphy)**

Global: 090 **Issue:** Colpopexy **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 26 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 4,707

2023 Work RVU: 11.66
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.46

RUC Recommendation: 13.51 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

57287 **Removal or revision of sling for stress incontinence (eg, fascia or synthetic)** **Global:** 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** C **Specialty Developing Recommendation:** AUA **First Identified:** September 2007 **2021 Medicare Utilization:** 1,277

2023 Work RVU: 11.15
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.48
Result: Decrease

RUC Recommendation: 10.97 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

57288 **Sling operation for stress incontinence (eg, fascia or synthetic)** **Global:** 090 **Issue:** Sling Operation for Stress Incontinence **Screen:** New Technology **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** O **Specialty Developing Recommendation:** ACOG, AUA **First Identified:** September 2007 **2021 Medicare Utilization:** 18,874

2023 Work RVU: 12.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.33
Result: Decrease

RUC Recommendation: 12.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

57425 **Laparoscopy, surgical, colpopexy (suspension of vaginal apex)** **Global:** 090 **Issue:** Laparoscopic Colopexy **Screen:** Site of Service Anomaly - 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 27 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 9,056

2023 Work RVU: 17.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.46
Result: Increase

RUC Recommendation: 18.02 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

58100 **Endometrial sampling (biopsy) with or without endocervical sampling (biopsy), without cervical dilation, any method (separate procedure)** **Global:** 000 **Issue:** Biopsy of Uterus Lining **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 16 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2016 **2021 Medicare Utilization:** 61,999

2023 Work RVU: 1.21
2023 NF PE RVU: 1.66
2023 Fac PE RVU: 0.48
Result: Decrease

RUC Recommendation: 1.21 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

58110 **Endometrial sampling (biopsy) performed in conjunction with colposcopy (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Biopsy of Uterus Lining **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 16 **Specialty Developing Recommendation:** ACOG **First Identified:** April 2017 **2021 Medicare Utilization:** 620

2023 Work RVU: 0.77
2023 NF PE RVU: 0.60
2023 Fac PE RVU: 0.30

RUC Recommendation: 0.77 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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58555 **Hysteroscopy, diagnostic (separate procedure)**

Global: 000 **Issue:** Hysteroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** NA **2021 Medicare Utilization:** 1,257

2023 Work RVU: 2.65
2023 NF PE RVU: 7.88
2023 Fac PE RVU: 1.42

RUC Recommendation: 3.07 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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58558 **Hysteroscopy, surgical; with sampling (biopsy) of endometrium and/or polypectomy, with or without d & c**

Global: 000 **Issue:** Hysteroscopy **Screen:** CMS Request - Practice Expense Review / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** NA **2021 Medicare Utilization:** 41,984

2023 Work RVU: 4.17
2023 NF PE RVU: 35.64
2023 Fac PE RVU: 2.03

RUC Recommendation: 4.37 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

58559 **Hysteroscopy, surgical; with lysis of intrauterine adhesions (any method)** **Global:** 000 **Issue:** Hysteroscopy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2015 **2021 Medicare Utilization:** 105

2023 Work RVU: 5.20
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.41

RUC Recommendation: 5.54 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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58560 **Hysteroscopy, surgical; with division or resection of intrauterine septum (any method)** **Global:** 000 **Issue:** Hysteroscopy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2015 **2021 Medicare Utilization:** 28

2023 Work RVU: 5.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.61

RUC Recommendation: 6.15 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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58561 **Hysteroscopy, surgical; with removal of leiomyomata** **Global:** 000 **Issue:** Hysteroscopy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2015 **2021 Medicare Utilization:** 2,045

2023 Work RVU: 6.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.95

RUC Recommendation: 7.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

58562 **Hysteroscopy, surgical; with removal of impacted foreign body**

Global: 000 **Issue:** Hysteroscopy **Screen:** CMS Request - Practice Expense Review / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** NA **2021 Medicare Utilization:** 207

2023 Work RVU: 4.00
2023 NF PE RVU: 8.42
2023 Fac PE RVU: 1.94
Result: Decrease

RUC Recommendation: 4.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

58563 **Hysteroscopy, surgical; with endometrial ablation (eg, endometrial resection, electrosurgical ablation, thermoablation)**

Global: 000 **Issue:** Hysteroscopy **Screen:** CMS Request - Practice Expense Review / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 37 **Specialty Developing Recommendation:** ACOG **First Identified:** NA **2021 Medicare Utilization:** 1,758

2023 Work RVU: 4.47
2023 NF PE RVU: 59.24
2023 Fac PE RVU: 2.12
Result: Decrease

RUC Recommendation: 4.62

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

58660 **Laparoscopy, surgical; with lysis of adhesions (salpingolysis, ovariolysis) (separate procedure)**

Global: 090 **Issue:** Laproscopic Procedures **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AUA, ACOG **First Identified:** September 2007 **2021 Medicare Utilization:** 693

2023 Work RVU: 11.59
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.70
Result: PE Only

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

58661 **Laparoscopy, surgical; with removal of adnexal structures (partial or total oophorectomy and/or salpingectomy)**

Global: 010 **Issue:** Laproscopic Procedures **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ACOG

First Identified: September 2007 **2021 Medicare Utilization:** 11,255

2023 Work RVU: 11.35
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.31

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

58823 **Drainage of pelvic abscess, transvaginal or transrectal approach, percutaneous (eg, ovarian, pericolic)**

Global: **Issue:** Drainage of Abscess **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 04 **Specialty Developing Recommendation:**

First Identified: January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2012
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

59400 **Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP

First Identified: February 2008 **2021 Medicare Utilization:** 2,148

2023 Work RVU: 36.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 25.48

RUC Recommendation: 32.69

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

59409 **Vaginal delivery only (with or without episiotomy and/or forceps);**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP

First Identified: February 2008 **2021 Medicare Utilization:** 1,129

2023 Work RVU: 14.37
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.76

RUC Recommendation: 14.37

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

59410 **Vaginal delivery only (with or without episiotomy and/or forceps); including postpartum care**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** February 2008 **2021 Medicare Utilization:** 601

2023 Work RVU: 18.34
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.46
Result: Increase

RUC Recommendation: 18.54

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59412 **External cephalic version, with or without tocolysis**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 31

2023 Work RVU: 1.71
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.85
Result: Maintain

RUC Recommendation: 1.71

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59414 **Delivery of placenta (separate procedure)**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 44

2023 Work RVU: 1.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.63
Result: Maintain

RUC Recommendation: 1.61

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59425 **Antepartum care only; 4-6 visits**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 525

2023 Work RVU: 7.80
2023 NF PE RVU: 6.96
2023 Fac PE RVU: 3.08
Result: Decrease

RUC Recommendation: 6.31

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

59426 **Antepartum care only; 7 or more visits**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 519

2023 Work RVU: 14.30
2023 NF PE RVU: 12.69
2023 Fac PE RVU: 5.67
Result: Decrease

RUC Recommendation: 11.16

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59430 **Postpartum care only (separate procedure)**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 642

2023 Work RVU: 3.22
2023 NF PE RVU: 3.87
2023 Fac PE RVU: 1.27
Result: Increase

RUC Recommendation: 2.47

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59510 **Routine obstetric care including antepartum care, cesarean delivery, and postpartum care**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** February 2008 **2021 Medicare Utilization:** 1,825

2023 Work RVU: 40.39
2023 NF PE RVU: NA
2023 Fac PE RVU: 27.17
Result: Increase

RUC Recommendation: 36.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59514 **Cesarean delivery only;**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** October 2008 **2021 Medicare Utilization:** 974

2023 Work RVU: 16.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.33
Result: Increase

RUC Recommendation: 16.13

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

59515 **Cesarean delivery only; including postpartum care**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 602

2023 Work RVU: 22.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.43
Result: Increase

RUC Recommendation: 22.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59610 **Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care, after previous cesarean delivery**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 92

2023 Work RVU: 38.29
2023 NF PE RVU: NA
2023 Fac PE RVU: 25.58
Result: Increase

RUC Recommendation: 34.40

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59612 **Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps);**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 36

2023 Work RVU: 16.09
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.22
Result: Increase

RUC Recommendation: 16.09

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

59614 **Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps); including postpartum care**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 23

2023 Work RVU: 20.06
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.24
Result: Increase

RUC Recommendation: 20.26

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

59618 **Routine obstetric care including antepartum care, cesarean delivery, and postpartum care, following attempted vaginal delivery after previous cesarean delivery**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 17

2023 Work RVU: 40.91
2023 NF PE RVU: NA
2023 Fac PE RVU: 27.25

RUC Recommendation: 36.69 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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59620 **Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery;**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 14

2023 Work RVU: 16.66
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.44

RUC Recommendation: 16.66 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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59622 **Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery; including postpartum care**

Global: MMM **Issue:** Obstetrical Care **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AAFP **First Identified:** April 2008 **2021 Medicare Utilization:** 12

2023 Work RVU: 22.66
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.13

RUC Recommendation: 22.53 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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60220 **Total thyroid lobectomy, unilateral; with or without isthmusectomy**

Global: 090 **Issue:** Total Thyroid Lobectomy **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 46 **Specialty Developing Recommendation:** ACS, AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 6,624

2023 Work RVU: 11.19
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.92

RUC Recommendation: 12.29 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

60225 **Total thyroid lobectomy, unilateral; with contralateral subtotal lobectomy, including isthmusectomy**

Global: 090 **Issue:** Total Thyroid Lobectomy **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 46 **Specialty Developing Recommendation:** ACS, AAO-HNS

First Identified: September 2007 **2021 Medicare Utilization:** 208

2023 Work RVU: 14.79
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.46
Result: Maintain

RUC Recommendation: 14.67

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

60520 **Thymectomy, partial or total; transcervical approach (separate procedure)**

Global: 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:**

First Identified: November 2011 **2021 Medicare Utilization:** 357

2023 Work RVU: 17.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.19
Result: Remove from Screen

RUC Recommendation: No reliable way to determine an incremental difference from open thoracotomy to thoracoscopic procedures.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

60521 **Thymectomy, partial or total; sternal split or transthoracic approach, without radical mediastinal dissection (separate procedure)**

Global: 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:**

First Identified: November 2011 **2021 Medicare Utilization:** 220

2023 Work RVU: 19.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.54
Result: Remove from Screen

RUC Recommendation: No reliable way to determine an incremental difference from open thoracotomy to thoracoscopic procedures.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

60522 **Thymectomy, partial or total; sternal split or transthoracic approach, with radical mediastinal dissection (separate procedure)**

Global: 090 **Issue:** RAW Review **Screen:** CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:**

First Identified: November 2011 **2021 Medicare Utilization:** 91

2023 Work RVU: 23.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.24
Result: Remove from Screen

RUC Recommendation: No reliable way to determine an incremental difference from open thoracotomy to thoracoscopic procedures.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

61055 **Cisternal or lateral cervical (c1-c2) puncture; with injection of medication or other substance for diagnosis or treatment**

Global: 000 **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: January 2014 **2021 Medicare Utilization:** 135

2023 Work RVU: 2.10
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.06
Result: Remove from Screen

RUC Recommendation: Editorial change

Referred to CPT October 2013

Referred to CPT Asst ☐ **Published in CPT Asst:**

61624 **Transcatheter permanent occlusion or embolization (eg, for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method; central nervous system (intracranial, spinal cord)**

Global: 000 **Issue:** RAW **Screen:** Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AANS, ACR, CNS

First Identified: April 2022 **2021 Medicare Utilization:** 9,239

2023 Work RVU: 20.12
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.37
Result:

RUC Recommendation: Refer to CPT for code bundling solution

Referred to CPT May 2023

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

61781 **Stereotactic computer-assisted (navigational) procedure; cranial, intradural (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Computer-Assisted Volumetric Navigational Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 13 **Specialty Developing Recommendation:** NASS, AANS/CNS **First Identified:** October 2009 **2021 Medicare Utilization:** 15,500

2023 Work RVU: 3.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.80

RUC Recommendation: 3.75 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

61782 **Stereotactic computer-assisted (navigational) procedure; cranial, extradural (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Computer-Assisted Volumetric Navigational Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 13 **Specialty Developing Recommendation:** NASS, AANS/CNS, AAO-HNS **First Identified:** October 2009 **2021 Medicare Utilization:** 16,258

2023 Work RVU: 3.18
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.50

RUC Recommendation: 3.18 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

61783 **Stereotactic computer-assisted (navigational) procedure; spinal (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Computer-Assisted Volumetric Navigational Procedures **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 13 **Specialty Developing Recommendation:** NASS, AANS/CNS **First Identified:** October 2009 **2021 Medicare Utilization:** 23,110

2023 Work RVU: 3.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.84

RUC Recommendation: 3.75 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

61793 **Deleted from CPT**

Global: **Issue:** Stereotactic Radiosurgery **Screen:** CMS Fastest Growing, Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** AANS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

61795 **Deleted from CPT**

Global: **Issue:** Stereotactic Radiosurgery **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** NASS, AAO-HNS, AANS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

61796 **Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 simple cranial lesion**

Global: 090 **Issue:** Stereotactic Radiosurgery **Screen:** CMS Request - 2009 Final Rule **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** **First Identified:** NA **2021 Medicare Utilization:** 6,056

2023 Work RVU: 13.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.30

RUC Recommendation: 15.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

61797 **Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional cranial lesion, simple (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Radiosurgery **Screen:** CMS Request - 2009 Final Rule **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:**

First Identified: NA

2021 Medicare Utilization: 7,926

2023 Work RVU: 3.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.67

RUC Recommendation: 3.48

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

61798 **Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 complex cranial lesion**

Global: 090 **Issue:** Stereotactic Radiosurgery **Screen:** CMS Request - 2009 Final Rule **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:**

First Identified: NA

2021 Medicare Utilization: 3,065

2023 Work RVU: 19.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.01

RUC Recommendation: 19.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

61799 **Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional cranial lesion, complex (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Radiosurgery **Screen:** CMS Request - 2009 Final Rule **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:**

First Identified: NA

2021 Medicare Utilization: 764

2023 Work RVU: 4.81
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.31

RUC Recommendation: 4.81

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

61800 **Application of stereotactic headframe for stereotactic radiosurgery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Radiosurgery **Screen:** CMS Fastest Growing, Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 16 **Specialty Developing Recommendation:**

First Identified: February 2008 **2021 Medicare Utilization:** 4,244

2023 Work RVU: 2.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.36

RUC Recommendation: 2.25 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

61885 **Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array**

Global: 090 **Issue:** Vagal Nerve Stimulator **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 14 **Specialty Developing Recommendation:** AANS/CNS

First Identified: September 2007 **2021 Medicare Utilization:** 4,573

2023 Work RVU: 6.05
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.59

RUC Recommendation: 6.44 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62263 **Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (eg, catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 2 or more days**

Global: 010 **Issue:** Epidual Lysis **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 66 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, NASS

First Identified: September 2007 **2021 Medicare Utilization:** 167

2023 Work RVU: 5.00
2023 NF PE RVU: 13.64
2023 Fac PE RVU: 3.94

RUC Recommendation: 6.54 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62270 **Spinal puncture, lumbar, diagnostic;**

Global: 000 **Issue:** Lumbar Puncture **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 09 **Specialty Developing Recommendation:** ACR, ASNR, SIR **First Identified:** October 2017 **2021 Medicare Utilization:** 24,458

2023 Work RVU: 1.22
2023 NF PE RVU: 2.53
2023 Fac PE RVU: 0.41

RUC Recommendation: 1.44 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

62272 **Spinal puncture, therapeutic, for drainage of cerebrospinal fluid (by needle or catheter);**

Global: 000 **Issue:** Lumbar Puncture **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 09 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 3,414

2023 Work RVU: 1.58
2023 NF PE RVU: 3.34
2023 Fac PE RVU: 0.69

RUC Recommendation: 1.80 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

62281 **Injection/infusion of neurolytic substance (eg, alcohol, phenol, iced saline solutions), with or without other therapeutic substance; epidural, cervical or thoracic**

Global: 010 **Issue:** Injection of Neurolytic Agent **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ASA **First Identified:** September 2007 **2021 Medicare Utilization:** 198

2023 Work RVU: 2.66
2023 NF PE RVU: 4.29
2023 Fac PE RVU: 1.80

RUC Recommendation: Remove 99238 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** Q&A May 2010

Status Report: CMS Requests and Relativity Assessment Issues

62284 **Injection procedure for myelography and/or computed tomography, lumbar** **Global:** 000 **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 15,012

2023 Work RVU: 1.54
2023 NF PE RVU: 4.01
2023 Fac PE RVU: 0.77

RUC Recommendation: 1.54 **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

62287 **Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method utilizing needle based technique to remove disc material under fluoroscopic imaging or other form of indirect visualization, with discography and/or epidural injection(s) at the treated level(s), when performed, single or multiple levels, lumbar** **Global:** 090 **Issue:** Percutaneous Diskectomy **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** ASA **First Identified:** September 2007 **2021 Medicare Utilization:** 87

2023 Work RVU: 9.03
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.86

RUC Recommendation: Reduce 99238 to 0.5 **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

62290 **Injection procedure for discography, each level; lumbar** **Global:** 000 **Issue:** Injection for discography **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ASA, AAPM, AAMPR, AUR, NASS, ACR, ASNR, ISIS, AANS **First Identified:** October 2009 **2021 Medicare Utilization:** 5,927

2023 Work RVU: 3.00
2023 NF PE RVU: 7.24
2023 Fac PE RVU: 1.38

RUC Recommendation: 3.00, CPT Assistant article published. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2011

Status Report: CMS Requests and Relativity Assessment Issues

62302 **Myelography via lumbar injection, including radiological supervision and interpretation; cervical**

Global: 000 **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 2,683

2023 Work RVU: 2.29
2023 NF PE RVU: 5.23
2023 Fac PE RVU: 1.01

RUC Recommendation: 2.29 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62303 **Myelography via lumbar injection, including radiological supervision and interpretation; thoracic**

Global: 000 **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 311

2023 Work RVU: 2.29
2023 NF PE RVU: 5.37
2023 Fac PE RVU: 1.01

RUC Recommendation: 2.29 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62304 **Myelography via lumbar injection, including radiological supervision and interpretation; lumbosacral**

Global: 000 **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 11,749

2023 Work RVU: 2.25
2023 NF PE RVU: 5.22
2023 Fac PE RVU: 1.00

RUC Recommendation: 2.25 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62305 **Myelography via lumbar injection, including radiological supervision and interpretation; 2 or more regions (eg, lumbar/thoracic, cervical/thoracic, lumbar/cervical, lumbar/thoracic/cervical)**

Global: 000 **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 5,024

2023 Work RVU: 2.35
2023 NF PE RVU: 5.79
2023 Fac PE RVU: 1.04

RUC Recommendation: 2.35 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62310 **Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; cervical or thoracic**

Global: **Issue:** Epidural Injections **Screen:** CMS High Expenditure Procedural Codes1 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, ISIS, NASS, ASNR, ASIPP **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

62311 **Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral (caudal)**

Global: **Issue:** Epidural Injections **Screen:** CMS High Expenditure Procedural Codes1 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, ISIS, NASS, ASNR, ASIPP **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62318 **Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, includes contrast for localization when performed, epidural or subarachnoid; cervical or thoracic**

Global: **Issue:** Epidural Injections **Screen:** CMS High Expenditure Procedural Codes1 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, ISIS, NASS, ASNR, ASIPP **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2015 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

62319 **Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral (caudal)**

Global: **Issue:** Epidural Injections **Screen:** CMS High Expenditure Procedural Codes1 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, ISIS, NASS, ASNR, ASIPP **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2015 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

62320 **Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 3,525

2023 Work RVU: 1.80
2023 NF PE RVU: 2.89
2023 Fac PE RVU: 0.92

RUC Recommendation: 1.80 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62321 **Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (ie, fluoroscopy or ct)**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 192,290

2023 Work RVU: 1.95
2023 NF PE RVU: 5.71
2023 Fac PE RVU: 1.01

RUC Recommendation: 1.95 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

62322 **Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 28,139

2023 Work RVU: 1.55
2023 NF PE RVU: 2.41
2023 Fac PE RVU: 0.65

RUC Recommendation: 1.55 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

62323 **Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or ct)**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 603,606

2023 Work RVU: 1.80
2023 NF PE RVU: 5.76
2023 Fac PE RVU: 0.94

RUC Recommendation: 1.80 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62324 **Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 13,434

2023 Work RVU: 1.89
2023 NF PE RVU: 2.07
2023 Fac PE RVU: 0.58

RUC Recommendation: 1.89 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

62325 **Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (ie, fluoroscopy or ct)**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 846

2023 Work RVU: 2.20
2023 NF PE RVU: 5.20
2023 Fac PE RVU: 0.88

RUC Recommendation: 2.20 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62326 **Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 2,184

2023 Work RVU: 1.78
2023 NF PE RVU: 2.21
2023 Fac PE RVU: 0.59

RUC Recommendation: 1.78 **Referred to CPT** May 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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62327 **Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or ct)**

Global: 000 **Issue:** Epidural Injections **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 10 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** May 2015 **2021 Medicare Utilization:** 1,530

2023 Work RVU: 1.90
2023 NF PE RVU: 5.96
2023 Fac PE RVU: 1.03

RUC Recommendation: 1.90 **Referred to CPT** May 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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62328 **Spinal puncture, lumbar, diagnostic; with fluoroscopic or ct guidance**

Global: 000 **Issue:** Lumbar Puncture **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 09 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 42,476

2023 Work RVU: 1.73
2023 NF PE RVU: 5.03
2023 Fac PE RVU: 0.63

RUC Recommendation: 1.95 **Referred to CPT** September 2018 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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Status Report: CMS Requests and Relativity Assessment Issues

62329 **Spinal puncture, therapeutic, for drainage of cerebrospinal fluid (by needle or catheter); with fluoroscopic or ct guidance**

Global: 000 **Issue:** Lumbar Puncture **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 09 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 2,148

2023 Work RVU: 2.03
2023 NF PE RVU: 6.18
2023 Fac PE RVU: 0.80

RUC Recommendation: 2.25 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

62350 **Implantation, revision or repositioning of tunneled intrathecal or epidural catheter, for long-term medication administration via an external pump or implantable reservoir/infusion pump; without laminectomy**

Global: 010 **Issue:** Intrathecal Epidural Catheters & Pumps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 67 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, ISIS, NASS **First Identified:** September 2007 **2021 Medicare Utilization:** 4,451

2023 Work RVU: 6.05
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.68

RUC Recommendation: 6.05 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62355 **Removal of previously implanted intrathecal or epidural catheter**

Global: 010 **Issue:** Intrathecal Epidural Catheters & Pumps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 67 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, ISIS, NASS **First Identified:** September 2007 **2021 Medicare Utilization:** 913

2023 Work RVU: 3.55
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.89

RUC Recommendation: 4.35 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62360 **Implantation or replacement of device for intrathecal or epidural drug infusion; subcutaneous reservoir**

Global: 010 **Issue:** Intrathecal Epidural Catheters & Pumps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 67 **Specialty Developing Recommendation:** AAPMR, ASA, NASS, AAPM, AANS/CNS **First Identified:** April 2008 **2021 Medicare Utilization:** 205

2023 Work RVU: 4.33
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.21

RUC Recommendation: 4.33 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62361 **Implantation or replacement of device for intrathecal or epidural drug infusion; nonprogrammable pump**

Global: 010 **Issue:** Intrathecal Epidural Catheters & Pumps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 67 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, ISIS, NASS **First Identified:** April 2008 **2021 Medicare Utilization:** 40

2023 Work RVU: 5.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.15
Result: Decrease

RUC Recommendation: 5.65

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

62362 **Implantation or replacement of device for intrathecal or epidural drug infusion; programmable pump, including preparation of pump, with or without programming**

Global: 010 **Issue:** Intrathecal Epidural Catheters & Pumps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 67 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, ISIS, NASS **First Identified:** September 2007 **2021 Medicare Utilization:** 6,583

2023 Work RVU: 5.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.67
Result: Decrease

RUC Recommendation: 6.10

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

62365 **Removal of subcutaneous reservoir or pump, previously implanted for intrathecal or epidural infusion**

Global: 010 **Issue:** Intrathecal Epidural Catheters & Pumps **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 67 **Specialty Developing Recommendation:** AAPMR, ASA, NASS, AAPM, AANS/CNS **First Identified:** September 2007 **2021 Medicare Utilization:** 994

2023 Work RVU: 3.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.00
Result: Decrease

RUC Recommendation: 4.65

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62367 **Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); without reprogramming or refill**

Global: XXX **Issue:** Electronic Analysis Implanted Pump (PE Only) **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 14 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, SIS **First Identified:** October 2009 **2021 Medicare Utilization:** 7,208

2023 Work RVU: 0.48
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.19

RUC Recommendation: New PE inputs. 0.48 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

62368 **Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); with reprogramming**

Global: XXX **Issue:** Electronic Analysis Implanted Pump (PE Only) **Screen:** Different Performing Specialty from Survey / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 14 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, SIS **First Identified:** October 2009 **2021 Medicare Utilization:** 34,198

2023 Work RVU: 0.67
2023 NF PE RVU: 0.56
2023 Fac PE RVU: 0.27

RUC Recommendation: New PE inputs. 0.67 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

62369 **Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); with reprogramming and refill**

Global: XXX **Issue:** Electronic Analysis Implanted Pump (PE Only) **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 14 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, SIS **First Identified:** October 2010 **2021 Medicare Utilization:** 24,182

2023 Work RVU: 0.67
2023 NF PE RVU: 2.00
2023 Fac PE RVU: 0.28

RUC Recommendation: New PE inputs. 0.67 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

62370 **Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); with reprogramming and refill (requiring skill of a physician or other qualified health care professional)**

Global: XXX **Issue:** Electronic Analysis Implanted Pump (PE Only) **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 14 **Specialty Developing Recommendation:** AAPM, AAPMR, ASA, SIS **First Identified:** October 2010 **2021 Medicare Utilization:** 94,529

2023 Work RVU: 0.90
2023 NF PE RVU: 1.77
2023 Fac PE RVU: 0.36

RUC Recommendation: New PE inputs. 1.10 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

63020 **Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; 1 interspace, cervical**

Global: 090 **Issue:** Lumbar Laminotomy with Decompression **Screen:** Site of Service Anomaly - 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 17 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** January 2022 **2021 Medicare Utilization:** 927

2023 Work RVU: 14.91
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.40

RUC Recommendation: 15.95 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

63030 **Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; 1 interspace, lumbar**

Global: 090 **Issue:** Lumbar Laminotomy with Decompression **Screen:** Pre-Time Analysis / Site of Service Anomaly - 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 17 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** January 2014 **2021 Medicare Utilization:** 21,722

2023 Work RVU: 12.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.75

RUC Recommendation: 13.18 **Referred to CPT** September 2021 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

63035 **Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; each additional interspace, cervical or lumbar (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Lumbar Laminotomy with Decompression **Screen:** Site of Service Anomaly - 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 17 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** January 2022 **2021 Medicare Utilization:** 5,203

2023 Work RVU: 3.86
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.92

RUC Recommendation: 4.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

63042 **Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; lumbar**

Global: 090 **Issue:** RAW **Screen:** Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** AANS, AAOS, NASS **First Identified:** January 2014 **2021 Medicare Utilization:** 8,780

2023 Work RVU: 18.76
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.72

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 4. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

63045 **Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; cervical**

Global: 090 **Issue:** Laminectomy **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 16 **Specialty Developing Recommendation:** **First Identified:** November 2013 **2021 Medicare Utilization:** 10,176

2023 Work RVU: 17.95
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.63

RUC Recommendation: 17.95 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

63046 **Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; thoracic**

Global: 090 **Issue:** Laminectomy **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 16 **Specialty Developing Recommendation:**

First Identified: November 2013 **2021 Medicare Utilization:** 3,910

2023 Work RVU: 17.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 14.15

RUC Recommendation: 17.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

63047 **Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; lumbar**

Global: 090 **Issue:** Laminectomy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 24 **Specialty Developing Recommendation:** NASS, AANS

First Identified: September 2011 **2021 Medicare Utilization:** 85,737

2023 Work RVU: 15.37
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.14

RUC Recommendation: 15.37

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

63048 **Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; each additional vertebral segment, cervical, thoracic, or lumbar (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Laminectomy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 24 **Specialty Developing Recommendation:** NASS, AANS

First Identified: January 2012 **2021 Medicare Utilization:** 110,425

2023 Work RVU: 3.47
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.73

RUC Recommendation: 3.47

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

63056 **Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (eg, herniated intervertebral disc), single segment; lumbar (including transfacet, or lateral extraforaminal approach) (eg, far lateral herniated intervertebral disc)**

Global: 090 **Issue:** RAW **Screen:** CMS Fastest Growing / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** NASS, AANS **First Identified:** October 2008 **2021 Medicare Utilization:** 4,890

2023 Work RVU: 21.86
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.94

RUC Recommendation: Review action plan at RAW Oct 2015. Maintain **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Oct 2009

63075 **Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, single interspace**

Global: 090 **Issue:** Arthrodesis Including Discectomy **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 5 **Specialty Developing Recommendation:** NASS, AANS/CNS **First Identified:** February 2008 **2021 Medicare Utilization:** 243

2023 Work RVU: 19.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.00

RUC Recommendation: 19.60 **Referred to CPT** October 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

63076 **Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, each additional interspace (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Arthrodesis Including Discectomy **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 5 **Specialty Developing Recommendation:** NASS, AANS/CNS **First Identified:** **2021 Medicare Utilization:** 163

2023 Work RVU: 4.04
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.02

RUC Recommendation: 4.04 **Referred to CPT** October 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

63081 **Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, single segment**

Global: 090 **Issue:** RAW **Screen:** Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AANS, AAOS, CNS, ISASS, NASS **First Identified:** April 2022 **2021 Medicare Utilization:** 3,920

2023 Work RVU: 26.10
2023 NF PE RVU: NA
2023 Fac PE RVU: 18.39

RUC Recommendation: Refer to CPT Assistant **Referred to CPT** **Result:**

Referred to CPT Asst ☑ **Published in CPT Asst:**

63090 **Vertebral corpectomy (vertebral body resection), partial or complete, transperitoneal or retroperitoneal approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic, lumbar, or sacral; single segment**

Global: 090 **Issue:** Vertebral Corpectomy with Arthrodesis **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAOS, AANS **First Identified:** January 2015 **2021 Medicare Utilization:** 687

2023 Work RVU: 30.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 19.06

RUC Recommendation: Maintain **Referred to CPT** September 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

63620 **Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 spinal lesion**

Global: 090 **Issue:** Stereotactic Radiosurgery **Screen:** CMS Request - 2009 Final Rule **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** **First Identified:** NA **2021 Medicare Utilization:** 546

2023 Work RVU: 15.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.16

RUC Recommendation: 15.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

63621 **Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional spinal lesion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Stereotactic Radiosurgery **Screen:** CMS Request - 2009 Final Rule **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:**

First Identified: NA

2021 Medicare Utilization: 181

2023 Work RVU: 4.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.93

RUC Recommendation: 4.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

63650 **Percutaneous implantation of neurostimulator electrode array, epidural**

Global: 010 **Issue:** Percutaneous implantation of neurostimulator **Screen:** Site of Service Anomaly / CMS Fastest Growing / CMS Request - Final Rule for 2013 / PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, ISIS, NASS

First Identified: September 2007

2021 Medicare Utilization: 79,217

2023 Work RVU: 7.15
2023 NF PE RVU: 61.14
2023 Fac PE RVU: 4.33

RUC Recommendation: 7.20. New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

63655 **Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural**

Global: 090 **Issue:** Neurostimulator (Spinal) **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 17 **Specialty Developing Recommendation:** NASS, AANS

First Identified: October 2008

2021 Medicare Utilization: 6,491

2023 Work RVU: 10.92
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.67

RUC Recommendation: 11.43

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

63660 **Deleted from CPT**

Global: **Issue:** Neurostimulator (Spinal) **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 17 **Specialty Developing Recommendation:** AAPM, AANS/CNS, ASA, ISIS, NASS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

63661 **Removal of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed**

Global: 010 **Issue:** Neurostimulator (Spinal) **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 17 **Specialty Developing Recommendation:** ISIS, NASS, AANS/CNS, ASA, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:** 3,609

2023 Work RVU: 5.08
2023 NF PE RVU: 14.48
2023 Fac PE RVU: 3.75

RUC Recommendation: 5.03 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

63662 **Removal of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed**

Global: 090 **Issue:** Neurostimulator (Spinal) **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 17 **Specialty Developing Recommendation:** ISIS, NASS, AANS/CNS, ASA, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:** 2,003

2023 Work RVU: 11.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.84

RUC Recommendation: 10.87 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

63663 **Revision including replacement, when performed, of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed**

Global: 010 **Issue:** Neurostimulator (Spinal) **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 17 **Specialty Developing Recommendation:** ISIS, NASS, AANS/CNS, ASA, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:** 1,474

2023 Work RVU: 7.75
2023 NF PE RVU: 18.19
2023 Fac PE RVU: 4.56

RUC Recommendation: 70 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

63664 **Revision including replacement, when performed, of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed**

Global: 090 **Issue:** Neurostimulator (Spinal) **Screen:** Site of Service Anomaly / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 17 **Specialty Developing Recommendation:** ISIS, NASS, AANS/CNS, ASA, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:** 596

2023 Work RVU: 11.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.16

RUC Recommendation: 11.39 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

63685 **Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling**

Global: 010 **Issue:** Spinal Neurostimulator **Screen:** Site of Service Anomaly / CMS Fastest Growing/ High Volume Growth7 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 04 **Specialty Developing Recommendation:** AANS, AAPM, AAPM&R, ASA, ASIPP, CNS, NANS, NASS, SIS **First Identified:** September 2007 **2021 Medicare Utilization:** 25,656

2023 Work RVU: 5.19
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.54

RUC Recommendation: 5.19 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

63688 **Revision or removal of implanted spinal neurostimulator pulse generator or receiver**

Global: 010 **Issue:** Spinal Neurostimulator **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 04 **Specialty Developing Recommendation:** AANS, AAPM, AAPM&R, ASA, ASIPP, CNS, NANS, NASS, SIS **First Identified:** September 2007 **2021 Medicare Utilization:** 7,334

2023 Work RVU: 5.30
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.72

RUC Recommendation: 4.35 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64400 **Injection(s), anesthetic agent(s) and/or steroid; trigeminal nerve, each branch (ie, ophthalmic, maxillary, mandibular)**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAN, AAPM&R, AAPM, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 37,721

2023 Work RVU: 0.75
2023 NF PE RVU: 2.42
2023 Fac PE RVU: 0.56

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64405 **Injection(s), anesthetic agent(s) and/or steroid; greater occipital nerve**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAN, AAPM, AAPM&R, NANS, SIS **First Identified:** July 2016 **2021 Medicare Utilization:** 122,806

2023 Work RVU: 0.94
2023 NF PE RVU: 1.08
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.94 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

64408 **Injection(s), anesthetic agent(s) and/or steroid; vagus nerve**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 1,288

2023 Work RVU: 0.75
2023 NF PE RVU: 1.60
2023 Fac PE RVU: 0.48

RUC Recommendation: 0.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64412 **Injection, anesthetic agent; spinal accessory nerve**

Global: **Issue:** Anesthetic Injection – Spinal Nerve **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 36 **Specialty Developing Recommendation:** AAN, ASA, AAPMR, ISIS **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** FAQ Sept 2015

Status Report: CMS Requests and Relativity Assessment Issues

64415 **Injection(s), anesthetic agent(s) and/or steroid; brachial plexus, including imaging guidance, when performed**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ASA **First Identified:** October 2008 **2021 Medicare Utilization:** 188,043

2023 Work RVU: 1.50
2023 NF PE RVU: 2.41
2023 Fac PE RVU: 0.43

RUC Recommendation: 1.50 **Referred to CPT** May 2021 **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2011 & Apr 2012

64416 **Injection(s), anesthetic agent(s) and/or steroid; brachial plexus, continuous infusion by catheter (including catheter placement), including imaging guidance, when performed**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** Site of Service Anomaly / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ASA **First Identified:** September 2007 **2021 Medicare Utilization:** 14,334

2023 Work RVU: 1.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.34

RUC Recommendation: 1.80 **Referred to CPT** May 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64417 **Injection(s), anesthetic agent(s) and/or steroid; axillary nerve, including imaging guidance, when performed**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** part of New/Revised Review **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ASA **First Identified:** October 2018 **2021 Medicare Utilization:** 15,954

2023 Work RVU: 1.31
2023 NF PE RVU: 3.36
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.31 **Referred to CPT** May 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64418 **Injection(s), anesthetic agent(s) and/or steroid; suprascapular nerve** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Harvard Valued - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, SIS **First Identified:** October 2015 **2021 Medicare Utilization:** 29,207

2023 Work RVU: 1.10
2023 NF PE RVU: 1.38
2023 Fac PE RVU: 0.43

RUC Recommendation: 1.10 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64420 **Injection(s), anesthetic agent(s) and/or steroid; intercostal nerve, single level** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 20,712

2023 Work RVU: 1.08
2023 NF PE RVU: 1.73
2023 Fac PE RVU: 0.55

RUC Recommendation: 1.18 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

64421 **Injection(s), anesthetic agent(s) and/or steroid; intercostal nerve, each additional level (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 18,781

2023 Work RVU: 0.50
2023 NF PE RVU: 0.44
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64425 **Injection(s), anesthetic agent(s) and/or steroid; ilioinguinal, iliohypogastric nerves** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 7,700

2023 Work RVU: 1.00
2023 NF PE RVU: 2.21
2023 Fac PE RVU: 0.52

RUC Recommendation: 1.19 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64430 **Injection(s), anesthetic agent(s) and/or steroid; pudendal nerve** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ACOG, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 4,666

2023 Work RVU: 1.00
2023 NF PE RVU: 1.83
2023 Fac PE RVU: 0.50

RUC Recommendation: 1.15 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64435 **Injection(s), anesthetic agent(s) and/or steroid; paracervical (uterine) nerve** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ACOG, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 43

2023 Work RVU: 0.75
2023 NF PE RVU: 1.56
2023 Fac PE RVU: 0.42

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64445 **Injection(s), anesthetic agent(s) and/or steroid; sciatic nerve, including imaging guidance, when performed** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, ASA **First Identified:** October 2008 **2021 Medicare Utilization:** 128,862

2023 Work RVU: 1.39
2023 NF PE RVU: 3.26
2023 Fac PE RVU: 0.61

RUC Recommendation: 1.39 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2011 & Apr 2012

64446 **Injection(s), anesthetic agent(s) and/or steroid; sciatic nerve, continuous infusion by catheter (including catheter placement), including imaging guidance, when performed** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Site of Service Anomaly / High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ASA **First Identified:** February 2008 **2021 Medicare Utilization:** 5,217

2023 Work RVU: 1.75
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.34

RUC Recommendation: 1.75 **Referred to CPT** May 2021 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64447 **Injection(s), anesthetic agent(s) and/or steroid; femoral nerve, including imaging guidance, when performed**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part5 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ASA **First Identified:** October 2008 **2021 Medicare Utilization:** 301,602

2023 Work RVU: 1.34
2023 NF PE RVU: 2.03
2023 Fac PE RVU: 0.41

RUC Recommendation: 1.34 **Referred to CPT** May 2021 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2011 & Apr 2012

64448 **Injection(s), anesthetic agent(s) and/or steroid; femoral nerve, continuous infusion by catheter (including catheter placement), including imaging guidance, when performed**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** Site of Service Anomaly / High Volume Growth1 / CMS Fastest Growing / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ASA **First Identified:** February 2008 **2021 Medicare Utilization:** 30,575

2023 Work RVU: 1.68
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.31

RUC Recommendation: 1.68 **Referred to CPT** May 2021 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

64449 **Injection(s), anesthetic agent(s) and/or steroid; lumbar plexus, posterior approach, continuous infusion by catheter (including catheter placement)**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, NANS, SIS **First Identified:** September 2007 **2021 Medicare Utilization:** 1,298

2023 Work RVU: 1.27
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.55 **Referred to CPT** February 2008 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64450 **Injection(s), anesthetic agent(s) and/or steroid; other peripheral nerve or branch** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Harvard Valued - Utilization over 100,000 / Harvard-Valued Annual Allowed Charges Greater than $10 million / High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, APMA, NANS, SIS **First Identified:** October 2009 **2021 Medicare Utilization:** 363,846

2023 Work RVU: 0.75
2023 NF PE RVU: 1.41
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2013

64451 **Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 21,967

2023 Work RVU: 1.52
2023 NF PE RVU: 5.16
2023 Fac PE RVU: 0.75

RUC Recommendation: 1.52 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

64454 **Injection(s), anesthetic agent(s) and/or steroid; genicular nerve branches, including imaging guidance, when performed** **Global:** 000 **Issue:** Somatic Nerve Injections **Screen:** Added as part of family **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, NANS, SIS **First Identified:** October 2021 **2021 Medicare Utilization:** 37,945

2023 Work RVU: 1.52
2023 NF PE RVU: 4.96
2023 Fac PE RVU: 0.76

RUC Recommendation: 1.52 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64455 **Injection(s), anesthetic agent(s) and/or steroid; plantar common digital nerve(s) (eg, morton's neuroma)**

Global: 000 **Issue:** Somatic Nerve Injections **Screen:** High Volume Growth4 / CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, APMA, NANS, SIS **First Identified:** October 2016 **2021 Medicare Utilization:** 68,180

2023 Work RVU: 0.75
2023 NF PE RVU: 0.67
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

64461 **Paravertebral block (pvb) (paraspinous block), thoracic; single injection site (includes imaging guidance, when performed)**

Global: 000 **Issue:** Paravertebral Block Injection **Screen:** New code for CPT 2016. **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 10 **Specialty Developing Recommendation:** ASA **First Identified:** April 2015 **2021 Medicare Utilization:** 7,431

2023 Work RVU: 1.75
2023 NF PE RVU: 2.12
2023 Fac PE RVU: 0.39

RUC Recommendation: CPT Assistant article published Jan 2016 **Referred to CPT** **Result:** Not Part of RAW

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2016

64462 **Paravertebral block (pvb) (paraspinous block), thoracic; second and any additional injection site(s) (includes imaging guidance, when performed) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Paravertebral Block Injection **Screen:** New code for CPT 2016. **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 10 **Specialty Developing Recommendation:** ASA **First Identified:** April 2015 **2021 Medicare Utilization:** 2,015

2023 Work RVU: 1.10
2023 NF PE RVU: 0.95
2023 Fac PE RVU: 0.24

RUC Recommendation: CPT Assistant article published Jan 2016 **Referred to CPT** **Result:** Not Part of RAW

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2016

Status Report: CMS Requests and Relativity Assessment Issues

64463 **Paravertebral block (pvb) (paraspinous block), thoracic; continuous infusion by catheter (includes imaging guidance, when performed)** **Global:** 000 **Issue:** Paravertebral Block Injection **Screen:** New code for CPT 2016. **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 10 **Specialty Developing Recommendation:** ASA **First Identified:** April 2015 **2021 Medicare Utilization:** 1,254

2023 Work RVU: 1.90
2023 NF PE RVU: 4.90
2023 Fac PE RVU: 0.35

RUC Recommendation: CPT Assistant article published Jan 2016 **Referred to CPT** **Result:** Not Part of RAW

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2016

64470 **Deleted from CPT** **Global:** **Issue:** Injection Anesthetic Agent **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** ASA, NASS, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

64472 **Deleted from CPT** **Global:** **Issue:** Injection Anesthetic Agent **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** ASA, NASS, AAPM **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

64475 **Deleted from CPT** **Global:** **Issue:** Injection Anesthetic Agent **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** ASA, NASS, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64476 **Deleted from CPT** **Global:** **Issue:** Injection Anesthetic Agent **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** ASA, NASS, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

64479 **Injection(s), anesthetic agent(s) and/or steroid; transforaminal epidural, with imaging guidance (fluoroscopy or ct), cervical or thoracic, single level** **Global:** 000 **Issue:** Injection Anesthetic Agent **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ISIS, ASA, NASS, AAPMR **First Identified:** October 2008 **2021 Medicare Utilization:** 40,431

2023 Work RVU: 2.29
2023 NF PE RVU: 5.42
2023 Fac PE RVU: 1.34

RUC Recommendation: 2.29 **Referred to CPT** June 2009 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

64480 **Injection(s), anesthetic agent(s) and/or steroid; transforaminal epidural, with imaging guidance (fluoroscopy or ct), cervical or thoracic, each additional level (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Injection Anesthetic Agent **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ISIS, ASA, NASS, AAPMR **First Identified:** October 2008 **2021 Medicare Utilization:** 17,260

2023 Work RVU: 1.20
2023 NF PE RVU: 2.70
2023 Fac PE RVU: 0.49

RUC Recommendation: 1.20 **Referred to CPT** June 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64483 **Injection(s), anesthetic agent(s) and/or steroid; transforaminal epidural, with imaging guidance (fluoroscopy or ct), lumbar or sacral, single level** **Global:** 000 **Issue:** Injection of Anesthetic Agent **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ISIS, ASA, NASS, AAPMR **First Identified:** October 2008 **2021 Medicare Utilization:** 956,821

2023 Work RVU: 1.90
2023 NF PE RVU: 5.28
2023 Fac PE RVU: 1.19

RUC Recommendation: 1.90 **Referred to CPT** June 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64484 **Injection(s), anesthetic agent(s) and/or steroid; transforaminal epidural, with imaging guidance (fluoroscopy or ct), lumbar or sacral, each additional level (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Injection of Anesthetic Agent **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, ISIS, ASA, NASS, AAPMR **First Identified:** October 2008 **2021 Medicare Utilization:** 378,950

2023 Work RVU: 1.00
2023 NF PE RVU: 2.24
2023 Fac PE RVU: 0.42

RUC Recommendation: 1.00 **Referred to CPT** June 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64488 **Transversus abdominis plane (tap) block (abdominal plane block, rectus sheath block) bilateral; by injections (includes imaging guidance, when performed)**

Global: 000 **Issue:** RAW **Screen:** High Volume Growth8 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ANA, ASA **First Identified:** April 2022 **2021 Medicare Utilization:** 63,110

2023 Work RVU: 1.60
2023 NF PE RVU: 2.43
2023 Fac PE RVU: 0.30

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

64490 **Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or ct), cervical or thoracic; single level**

Global: 000 **Issue:** Facet Joint Injections **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 18 **Specialty Developing Recommendation:** ASA, NASS, ASNR, AAPMR, AANS/CNS, AAPM, ISIS **First Identified:** **2021 Medicare Utilization:** 230,815

2023 Work RVU: 1.82
2023 NF PE RVU: 3.70
2023 Fac PE RVU: 1.10

RUC Recommendation: 1.82 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64491 **Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or ct), cervical or thoracic; second level (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Facet Joint Injections **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 18 **Specialty Developing Recommendation:** ASA, NASS, ASNR, AAPMR, AANS/CNS, AAPM, ISIS **First Identified:** **2021 Medicare Utilization:** 205,617

2023 Work RVU: 1.16
2023 NF PE RVU: 1.61
2023 Fac PE RVU: 0.47

RUC Recommendation: 1.16 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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64492 **Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or ct), cervical or thoracic; third and any additional level(s) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Facet Joint Injections **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 18 **Specialty Developing Recommendation:** ASA, NASS, ASNR, AAPMR, AANS/CNS, AAPM, ISIS **First Identified:** **2021 Medicare Utilization:** 43,472

2023 Work RVU: 1.16
2023 NF PE RVU: 1.63
2023 Fac PE RVU: 0.50

RUC Recommendation: 1.16 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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64493 **Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or ct), lumbar or sacral; single level**

Global: 000 **Issue:** Facet Joint Injections **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 18 **Specialty Developing Recommendation:** ASA, NASS, ASNR, AAPMR, AANS/CNS, AAPM, ISIS **First Identified:** **2021 Medicare Utilization:** 783,861

2023 Work RVU: 1.52
2023 NF PE RVU: 3.58
2023 Fac PE RVU: 0.98

RUC Recommendation: 1.52 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

64494 **Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or ct), lumbar or sacral; second level (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Facet Joint Injections **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 18 **Specialty Developing Recommendation:** ASA, NASS, ASNR, AAPMR, AANS/CNS, AAPM, ISIS **First Identified:** **2021 Medicare Utilization:** 697,875

2023 Work RVU: 1.00
2023 NF PE RVU: 1.60
2023 Fac PE RVU: 0.41

RUC Recommendation: 1.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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64495 **Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or ct), lumbar or sacral; third and any additional level(s) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Facet Joint Injections **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 18 **Specialty Developing Recommendation:** ASA, NASS, ASNR, AAPMR, AANS/CNS, AAPM, ISIS **First Identified:** **2021 Medicare Utilization:** 122,717

2023 Work RVU: 1.00
2023 NF PE RVU: 1.60
2023 Fac PE RVU: 0.43

RUC Recommendation: 1.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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64510 **Injection, anesthetic agent; stellate ganglion (cervical sympathetic)**

Global: 000 **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ASA, ISIS, AAPM, APM&R **First Identified:** April 2009 **2021 Medicare Utilization:** 5,905

2023 Work RVU: 1.22
2023 NF PE RVU: 3.04
2023 Fac PE RVU: 0.94

RUC Recommendation: New PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

64520 **Injection, anesthetic agent; lumbar or thoracic (paravertebral sympathetic)** **Global:** 000 **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ASA, ISIS, AAPM, APM&R **First Identified:** April 2009 **2021 Medicare Utilization:** 14,830

2023 Work RVU: 1.35
2023 NF PE RVU: 5.40
2023 Fac PE RVU: 1.02

RUC Recommendation: PE Review - no change **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

64550 **Application of surface (transcutaneous) neurostimulator (eg, TENS unit)** **Global:** **Issue:** Percutaneous NeurostimulatorPlacement **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** AANS, CNS, AOTA **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

64553 **Percutaneous implantation of neurostimulator electrode array; cranial nerve** **Global:** 010 **Issue:** Percutaneous NeurostimulatorPlacement **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 15 **Specialty Developing Recommendation:** AANS, CNS, ASA **First Identified:** July 2014 **2021 Medicare Utilization:** 192

2023 Work RVU: 6.13
2023 NF PE RVU: 69.03
2023 Fac PE RVU: 4.75

RUC Recommendation: 6.13 **Referred to CPT** September 2016 **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64555 **Percutaneous implantation of neurostimulator electrode array; peripheral nerve (excludes sacral nerve)**

Global: 010 **Issue:** Percutaneous NeurostimulatorPlacement **Screen:** High Volume Growth1 / CMS Fastest Growing / Final Rule for 2015 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** AANS, CNS, ASA **First Identified:** February 2008 **2021 Medicare Utilization:** 7,898

2023 Work RVU: 5.76
2023 NF PE RVU: 58.43
2023 Fac PE RVU: 3.25

RUC Recommendation: 5.76. Article published Jan2016 and addressed issues.

Referred to CPT September 2016 **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2016

64561 **Percutaneous implantation of neurostimulator electrode array; sacral nerve (transforaminal placement) including image guidance, if performed**

Global: 010 **Issue:** Percutaneous NeurostimulatorPlacement **Screen:** CMS Fastest Growing / High Volume Growth2 / High Level E/M in Global Period / PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** AANS, CNS **First Identified:** October 2008 **2021 Medicare Utilization:** 17,727

2023 Work RVU: 5.44
2023 NF PE RVU: 16.04
2023 Fac PE RVU: 2.82

RUC Recommendation: 5.44. 99214 visit appropriate. Remove from screen.

Referred to CPT September 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64565 **Percutaneous implantation of neurostimulator electrode array; neuromuscular**

Global: **Issue:** Percutaneous NeurostimulatorPlacement **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 15 **Specialty Developing Recommendation:** AANS, CNS **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64566 **Posterior tibial neurostimulation, percutaneous needle electrode, single treatment, includes programming**

Global: 000 **Issue:** Posterior Tibial Neurostimulation **Screen:** CMS Request - Final Rule for 2014 / High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** ACOG, AUA **First Identified:** July 2013 **2021 Medicare Utilization:** 165,975

2023 Work RVU: 0.60
2023 NF PE RVU: 2.83
2023 Fac PE RVU: 0.21

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

64568 **Open implantation of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator**

Global: 090 **Issue:** Vagus Nerve Stimulator **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 14 **Specialty Developing Recommendation:** AANS/CNS **First Identified:** February 2009 **2021 Medicare Utilization:** 2,011

2023 Work RVU: 9.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.19

RUC Recommendation: 11.19 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

64573 **Deleted from CPT**

Global: **Issue:** Neurosurgical Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 28 **Specialty Developing Recommendation:** AANS/CNS **First Identified:** September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64581 **Open implantation of neurostimulator electrode array; sacral nerve (transforaminal placement)**

Global: 090 **Issue:** Urological Procedures **Screen:** Site of Service Anomaly / High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** AUA **First Identified:** September 2007 **2021 Medicare Utilization:** 12,912

2023 Work RVU: 12.20
2023 NF PE RVU: NA
2023 Fac PE RVU: 5.62

RUC Recommendation: 12.20. 99214 visit appropriate. Remove from screen.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

64590 **Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct or inductive coupling**

Global: 010 **Issue:** Neurostimulator Services-Bladder Dysfunction **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million / Different Performing Specialty from Survey/ RUC recommendation process, not part of RAW screens **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 07 **Specialty Developing Recommendation:** ACOG, AUA **First Identified:** April 2022 **2021 Medicare Utilization:** 15,130

2023 Work RVU: 2.45
2023 NF PE RVU: 5.07
2023 Fac PE RVU: 1.99

RUC Recommendation: CPT Assistant Article

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:**

Result: Remove from Screen

64595 **Revision or removal of peripheral or gastric neurostimulator pulse generator or receiver**

Global: 010 **Issue:** Neurostimulator Services-Bladder Dysfunction **Screen:** RUC recommendation process, not part of RAW screens **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 07 **Specialty Developing Recommendation:** ACOG, AUA **First Identified:** April 2022 **2021 Medicare Utilization:** 3,062

2023 Work RVU: 1.78
2023 NF PE RVU: 4.91
2023 Fac PE RVU: 1.76

RUC Recommendation: CPT Assistant Article

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:**

Result: Not Part of RAW

Status Report: CMS Requests and Relativity Assessment Issues

64615 **Chemodenervation of muscle(s); muscle(s) innervated by facial, trigeminal, cervical spinal and accessory nerves, bilateral (eg, for chronic migraine)**

Global: 010 **Issue:** **Screen:** High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 23 **Specialty Developing Recommendation:** AAN, AANEM, AAPM&R, NANS **First Identified:** October 2019 **2021 Medicare Utilization:** 149,976

2023 Work RVU: 1.85
2023 NF PE RVU: 2.13
2023 Fac PE RVU: 1.18

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

64622 **Destruction by neurolytic agent, paravertebral facet joint nerve; lumbar or sacral, single level**

Global: **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review, High Volume Growth1 / CMS Fastest Growing, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ASA, ISIS, AAPM, APM&R **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: PE Review - no change **Referred to CPT** June 2008 and Feb 2011 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

64623 **Destruction by neurolytic agent, paravertebral facet joint nerve; lumbar or sacral, each additional level (List separately in addition to code for primary procedure)**

Global: **Issue:** Destruction by Neurolytic Agent **Screen:** High Volume Growth1, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** ASA, NASS, AAPM **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2008 and Feb 2011 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

64626 **Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level**

Global: **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review, High Volume Growth1 / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ASA, ISIS, AAPM, APM&R **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: PE Review - no change **Referred to CPT** June 2008 and Feb 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

64627 **Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure)**

Global: **Issue:** Destruction by Neurolytic Agent **Screen:** High Volume Growth1/ CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** ASA, NASS, AAPM **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2008 and Feb 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

64633 **Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or ct); cervical or thoracic, single facet joint**

Global: 010 **Issue:** Destruction by Neurolytic Agent **Screen:** Work Neutrality Review **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 17 **Specialty Developing Recommendation:** ASA, AAPM, AAPMR, ASIPP, ISIS, NANS, NASS, SIS **First Identified:** September 2014 **2021 Medicare Utilization:** 86,057

2023 Work RVU: 3.32
2023 NF PE RVU: 9.48
2023 Fac PE RVU: 2.03

RUC Recommendation: 3.42 **Referred to CPT** May 2015 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** February 2015

Status Report: CMS Requests and Relativity Assessment Issues

64634 **Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or ct); cervical or thoracic, each additional facet joint (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Destruction by Neurolytic Agent **Screen:** Work Neutrality Review **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 17 **Specialty Developing Recommendation:** ASA, AAPM, AAPMR, ASIPP, ISIS, NANS, NASS, SIS **First Identified:** September 2014 **2021 Medicare Utilization:** 119,880

2023 Work RVU: 1.32
2023 NF PE RVU: 6.27
2023 Fac PE RVU: 0.53

RUC Recommendation: 1.32 **Referred to CPT** May 2015 **Result:** Maintain
Referred to CPT Asst ☑ **Published in CPT Asst:** February 2015

64635 **Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or ct); lumbar or sacral, single facet joint**

Global: 010 **Issue:** Destruction by Neurolytic Agent **Screen:** Work Neutrality Review **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 17 **Specialty Developing Recommendation:** ASA, AAPM, AAPMR, ASIPP, ISIS, NANS, NASS, SIS **First Identified:** September 2014 **2021 Medicare Utilization:** 342,267

2023 Work RVU: 3.32
2023 NF PE RVU: 9.60
2023 Fac PE RVU: 2.04

RUC Recommendation: 3.42 **Referred to CPT** May 2015 **Result:** Decrease
Referred to CPT Asst ☑ **Published in CPT Asst:** February 2015

64636 **Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or ct); lumbar or sacral, each additional facet joint (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Destruction by Neurolytic Agent **Screen:** Work Neutrality Review **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 17 **Specialty Developing Recommendation:** ASA, AAPM, AAPMR, ASIPP, ISIS, NANS, NASS, SIS **First Identified:** September 2014 **2021 Medicare Utilization:** 462,017

2023 Work RVU: 1.16
2023 NF PE RVU: 5.98
2023 Fac PE RVU: 0.47

RUC Recommendation: 1.16 **Referred to CPT** May 2015 **Result:** Maintain
Referred to CPT Asst ☑ **Published in CPT Asst:** Feb 2015

Status Report: CMS Requests and Relativity Assessment Issues

64640 **Destruction by neurolytic agent; other peripheral nerve or branch** **Global:** 010 **Issue:** Injection Treatment of Nerve **Screen:** Site of Service Anomaly (99238-Only) / Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 25 **Specialty Developing Recommendation:** ASAM AAPM, APMA, ASIPP **First Identified:** September 2007 **2021 Medicare Utilization:** 64,408

2023 Work RVU: 1.98
2023 NF PE RVU: 5.20
2023 Fac PE RVU: 1.33

RUC Recommendation: 1.23. Remove 99238.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

64708 **Neuroplasty, major peripheral nerve, arm or leg, open; other than specified** **Global:** 090 **Issue:** Neuroplasty – Leg or Arm **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 69 **Specialty Developing Recommendation:** AOFAS, ASSH, AAOS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 6,398

2023 Work RVU: 6.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.65

RUC Recommendation: 6.36

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

64712 **Neuroplasty, major peripheral nerve, arm or leg, open; sciatic nerve** **Global:** 090 **Issue:** Neuroplasty – Leg or Arm **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 40 **Specialty Developing Recommendation:** AOFAS, ASSH, AAOS, ASPS **First Identified:** September 2007 **2021 Medicare Utilization:** 645

2023 Work RVU: 8.07
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.18

RUC Recommendation: Remove from screen

Referred to CPT February 2010
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

64831 **Suture of digital nerve, hand or foot; 1 nerve** **Global:** 090 **Issue:** Neurorrhaphy – Finger **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 70 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** September 2007 **2021 Medicare Utilization:** 794

2023 Work RVU: 9.16
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.04

RUC Recommendation: 9.16

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

64596 **Global:** **Issue:** Spinal Neurostimulator **Screen:** Contractor Price-Survey below 30 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 04 **Specialty Developing Recommendation:** AAPM, ASA, ASIPP, NANS **First Identified:** September 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action plan. Contractor Price.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

64597 **Global:** **Issue:** Spinal Neurostimulator **Screen:** Contractor Price-Survey below 30 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 04 **Specialty Developing Recommendation:** AAPM, ASA, ASIPP, NANS **First Identified:** September 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action plan. Contractor Price.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

64598 **Global:** **Issue:** Spinal Neurostimulator **Screen:** Contractor Price-Survey below 30 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 04 **Specialty Developing Recommendation:** AAPM, ASA, ASIPP, NANS **First Identified:** September 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action plan. Contractor Price.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

65105 **Enucleation of eye; with implant, muscles attached to implant** **Global:** 090 **Issue:** Ophthalmologic Procedures **Screen:** Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAO **First Identified:** September 2007 **2021 Medicare Utilization:** 646

2023 Work RVU: 9.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.80

RUC Recommendation: Reduce 99238 to 0.5

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

65205 **Removal of foreign body, external eye; conjunctival superficial**

Global: 000 **Issue:** Removal of Foreign Body - Eye **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAO, AOA **First Identified:** July 2016 **2021 Medicare Utilization:** 23,025

2023 Work RVU: 0.49
2023 NF PE RVU: 0.33
2023 Fac PE RVU: 0.33

RUC Recommendation: 0.49 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

65210 **Removal of foreign body, external eye; conjunctival embedded (includes concretions), subconjunctival, or scleral nonperforating**

Global: 000 **Issue:** Removal of Foreign Body - Eye **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAO, AOA **First Identified:** July 2016 **2021 Medicare Utilization:** 22,067

2023 Work RVU: 0.61
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

65222 **Removal of foreign body, external eye; corneal, with slit lamp**

Global: 000 **Issue:** Removal of Foreign Body **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 26 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** April 2011 **2021 Medicare Utilization:** 21,757

2023 Work RVU: 0.84
2023 NF PE RVU: 1.12
2023 Fac PE RVU: 0.59

RUC Recommendation: 0.93 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

65285 **Repair of laceration; cornea and/or sclera, perforating, with reposition or resection of uveal tissue**

Global: 090 **Issue:** Repair of Eye Wound **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 8 **Specialty Developing Recommendation:** AAO

First Identified: September 2007 **2021 Medicare Utilization:** 622

2023 Work RVU: 15.36
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.94

RUC Recommendation: 16.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

65778 **Placement of amniotic membrane on the ocular surface; without sutures**

Global: 000 **Issue:** RAW **Screen:** High Volume Growth8 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AOA

First Identified: April 2022 **2021 Medicare Utilization:** 44,738

2023 Work RVU: 1.00
2023 NF PE RVU: 38.67
2023 Fac PE RVU: 0.51

RUC Recommendation: 0.84

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

65779 **Placement of amniotic membrane on the ocular surface; single layer, sutured**

Global: 000 **Issue:** RAW **Screen:** High Volume Growth8 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AOA

First Identified: September 2022 **2021 Medicare Utilization:** 621

2023 Work RVU: 2.50
2023 NF PE RVU: 31.48
2023 Fac PE RVU: 1.62

RUC Recommendation: 1.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

65780 **Ocular surface reconstruction; amniotic membrane transplantation, multiple layers**

Global: 090 **Issue:** Ocular Reconstruction Transplant **Screen:** CMS Fastest Growing / 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AOA

First Identified: October 2008 **2021 Medicare Utilization:** 1,500

2023 Work RVU: 7.81
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.31

RUC Recommendation: 7.03

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:** Jun 2009

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

65800 **Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous**

Global: 000 **Issue:** Paracentesis of the Eye **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 21 **Specialty Developing Recommendation:** AAO **First Identified:** September 2011 **2021 Medicare Utilization:** 21,162

2023 Work RVU: 1.53
2023 NF PE RVU: 1.89
2023 Fac PE RVU: 0.96

RUC Recommendation: 1.53 **Referred to CPT** October 2011 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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65805 **Paracentesis of anterior chamber of eye (separate procedure); with therapeutic release of aqueous**

Global: **Issue:** Paracentesis of the Eye **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 21 **Specialty Developing Recommendation:** AAO **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

65855 **Trabeculoplasty by laser surgery**

Global: 010 **Issue:** Trabeculoplasty by Laser Surgery **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 11 **Specialty Developing Recommendation:** AAO **First Identified:** January 2014 **2021 Medicare Utilization:** 134,166

2023 Work RVU: 3.00
2023 NF PE RVU: 4.03
2023 Fac PE RVU: 2.81

RUC Recommendation: 3.00 **Referred to CPT** February 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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66170 **Fistulization of sclera for glaucoma; trabeculectomy ab externo in absence of previous surgery**

Global: 090 **Issue:** Glaucoma Surgery **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 32 **Specialty Developing Recommendation:** AAO **First Identified:** January 2014 **2021 Medicare Utilization:** 5,537

2023 Work RVU: 13.94
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.17

RUC Recommendation: 13.94 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

66172 **Fistulization of sclera for glaucoma; trabeculectomy ab externo with scarring from previous ocular surgery or trauma (includes injection of antifibrotic agents)**

Global: 090 **Issue:** Glaucoma Surgery **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 32 **Specialty Developing Recommendation:** AAO

First Identified: January 2014

2021 Medicare Utilization: 2,229

2023 Work RVU: 14.84
2023 NF PE RVU: NA
2023 Fac PE RVU: 19.16

RUC Recommendation: 14.81

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

66174 **Transluminal dilation of aqueous outflow canal (eg, canaloplasty); without retention of device or stent**

Global: 090 **Issue:** Dilation of Aqueous Outflow Canal **Screen:** New Technology/ New Service **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 15 **Specialty Developing Recommendation:** AAO

First Identified: April 2010

2021 Medicare Utilization: 16,775

2023 Work RVU: 7.62
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.16

RUC Recommendation: 8.53

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

66175 **Transluminal dilation of aqueous outflow canal (eg, canaloplasty); with retention of device or stent**

Global: 090 **Issue:** Dilation of Aqueous Outflow Cana **Screen:** New Technology/ New Service **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 15 **Specialty Developing Recommendation:** AAO

First Identified: October 2020

2021 Medicare Utilization: 431

2023 Work RVU: 9.34
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.26

RUC Recommendation: 10.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

66179 **Aqueous shunt to extraocular equatorial plate reservoir, external approach; without graft**

Global: 090 **Issue:** Aqueous Shunt **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 12 **Specialty Developing Recommendation:** AAO **First Identified:** January 2014 **2021 Medicare Utilization:** 691

2023 Work RVU: 14.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.71

RUC Recommendation: 14.00 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

66180 **Aqueous shunt to extraocular equatorial plate reservoir, external approach; with graft**

Global: 090 **Issue:** Aqueous Shunt **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million / 090-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAO **First Identified:** October 2012 **2021 Medicare Utilization:** 9,749

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 17.35

RUC Recommendation: Maintain. 15.00 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

66183 **Insertion of anterior segment aqueous drainage device, without extraocular reservoir, external approach**

Global: 090 **Issue:** Aqueous Shunt **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million / 090-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAO **First Identified:** January 2014 **2021 Medicare Utilization:** 6,717

2023 Work RVU: 13.20
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.07

RUC Recommendation: Maintain. 13.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

66184 **Revision of aqueous shunt to extraocular equatorial plate reservoir; without graft** **Global:** 090 **Issue:** Aqueous Shunt **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 12 **Specialty Developing Recommendation:** AAO **First Identified:** January 2014 **2021 Medicare Utilization:** 502

2023 Work RVU: 9.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.01

RUC Recommendation: 9.58 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

66185 **Revision of aqueous shunt to extraocular equatorial plate reservoir; with graft** **Global:** 090 **Issue:** Aqueous Shunt **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million / 090-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAO **First Identified:** October 2012 **2021 Medicare Utilization:** 1,500

2023 Work RVU: 10.58
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.65

RUC Recommendation: Maintain. 10.58 **Referred to CPT** October 2013 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

66711 **Ciliary body destruction; cyclophotocoagulation, endoscopic, without concomitant removal of crystalline lens** **Global:** 090 **Issue:** Cyclophotocoagulation **Screen:** Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 11 **Specialty Developing Recommendation:** AAO **First Identified:** October 2017 **2021 Medicare Utilization:** 754

2023 Work RVU: 5.62
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.86

RUC Recommendation: 6.36 **Referred to CPT** May 2018 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

66761 **Iridotomy/iridectomy by laser surgery (eg, for glaucoma) (per session)**

Global: 010 **Issue:** Iridotomy **Screen:** High IWPUT / 010-Day Global Post-Operative Visits2 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAO

First Identified: February 2008

2021 Medicare Utilization: 52,500

2023 Work RVU: 3.00
2023 NF PE RVU: 5.64
2023 Fac PE RVU: 3.72

RUC Recommendation: Maintain. 3.00

Referred to CPT February 2010

Result: Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

66821 **Discission of secondary membranous cataract (opacified posterior lens capsule and/or anterior hyaloid); laser surgery (eg, yag laser) (1 or more stages)**

Global: 090 **Issue:** **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 41 **Specialty Developing Recommendation:** AAO

First Identified: October 2010

2021 Medicare Utilization: 635,643

2023 Work RVU: 3.42
2023 NF PE RVU: 6.22
2023 Fac PE RVU: 5.52

RUC Recommendation: Maintain

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

66982 **Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; without endoscopic cyclophotocoagulation**

Global: 090 **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High IWPUT / CMS Fastest Growing, Site of Service Anomaly (99238-Only) / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: September 2007

2021 Medicare Utilization: 147,982

2023 Work RVU: 10.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.87

RUC Recommendation: 10.25

Referred to CPT

Result: Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2009

Status Report: CMS Requests and Relativity Assessment Issues

66983 **Intracapsular cataract extraction with insertion of intraocular lens prosthesis (1 stage procedure)**

Global: 090 **Issue:** Cyclophotocoagulation **Screen:** Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 11 **Specialty Developing Recommendation:**

First Identified: January 2019

2021 Medicare Utilization: 79

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Contractor Price

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Contractor Price

66984 **Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); without endoscopic cyclophotocoagulation**

Global: 090 **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High IWPUT / MPC List / Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: February 2008

2021 Medicare Utilization: 1,527,486

2023 Work RVU: 7.35
2023 NF PE RVU: NA
2023 Fac PE RVU: 8.09

RUC Recommendation: 7.35

Referred to CPT May 2018

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

66987 **Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; with endoscopic cyclophotocoagulation**

Global: 090 **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: January 2019

2021 Medicare Utilization: 918

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 13.15

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

66988 **Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); with endoscopic cyclophotocoagulation**

Global: 090 **Issue:** Cyclophotocoagulation **Screen:** Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 11 **Specialty Developing Recommendation:**

First Identified: January 2019 **2021 Medicare Utilization:** 5,398

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 10.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

66989 **Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; with insertion of intraocular (eg, trabecular meshwork, supraciliary, suprachoroidal) anterior segment aqueous drainage device, without extraocular reservoir, internal approach, one or more**

Global: 090 **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 12.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 12.06

RUC Recommendation: 12.13

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

66991 **Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); with insertion of intraocular (eg, trabecular meshwork, supraciliary, suprachoroidal) anterior segment aqueous drainage device, without extraocular reservoir, internal approach, one or more**

Global: 090 **Issue:** Cataract Removal with Drainage Device Insertion **Screen:** High Volume Category III Codes 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 9.23
2023 NF PE RVU: NA
2023 Fac PE RVU: 10.16

RUC Recommendation: 9.23

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

67028 **Intravitreal injection of a pharmacologic agent (separate procedure)**

Global: 000 **Issue:** Treatment of Retinal Lesion **Screen:** High Volume Growth1 / CMS Fastest Growing, Harvard Valued - Utilization over 100,000 / CMS High Expenditure Procedural Codes1 / High Volume Growth3 / Codes Reported Together 75% or More-Part5 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAO, ASRS

First Identified: February 2008 **2021 Medicare Utilization:** 3,951,441

2023 Work RVU: 1.44
2023 NF PE RVU: 1.80
2023 Fac PE RVU: 1.14

RUC Recommendation: 1.44

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

67036 **Vitrectomy, mechanical, pars plana approach;**

Global: 090 **Issue:** Vitrectomy **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 11 **Specialty Developing Recommendation:** AAO

First Identified: October 2012 **2021 Medicare Utilization:** 17,220

2023 Work RVU: 12.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 13.26

RUC Recommendation: 12.13

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67038 **Deleted from CPT**

Global: **Issue:** Ophthalmological Procedures **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: September 2007 **Tab:** 16 **Specialty Developing Recommendation:** AAO

First Identified: September 2007 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2007
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

67039 **Vitrectomy, mechanical, pars plana approach; with focal endolaser photocoagulation**

Global: 090 **Issue:** Vitrectomy

Screen: Site of Service Anomaly (99238-Only) / Harvard-Valued Annual Allowed Charges Greater than $10 million

Complete? Yes

Most Recent RUC Meeting: October 2013

Tab: 11

Specialty Developing Recommendation: AAO

First Identified: September 2007

2021 Medicare Utilization: 3,661

2023 Work RVU: 13.20

2023 NF PE RVU: NA

2023 Fac PE RVU: 13.95

RUC Recommendation: 13.20

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67040 **Vitrectomy, mechanical, pars plana approach; with endolaser panretinal photocoagulation**

Global: 090 **Issue:** Vitrectomy

Screen: Site of Service Anomaly (99238-Only) / Harvard-Valued Annual Allowed Charges Greater than $10 million

Complete? Yes

Most Recent RUC Meeting: October 2013

Tab: 11

Specialty Developing Recommendation: AAO

First Identified: September 2007

2021 Medicare Utilization: 6,743

2023 Work RVU: 14.50

2023 NF PE RVU: NA

2023 Fac PE RVU: 14.77

RUC Recommendation: 14.50

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67041 **Vitrectomy, mechanical, pars plana approach; with removal of preretinal cellular membrane (eg, macular pucker)**

Global: 090 **Issue:** Vitrectomy

Screen: Harvard-Valued Annual Allowed Charges Greater than $10 million

Complete? Yes

Most Recent RUC Meeting: October 2013

Tab: 11

Specialty Developing Recommendation: AAO

First Identified: October 2012

2021 Medicare Utilization: 11,425

2023 Work RVU: 16.33

2023 NF PE RVU: NA

2023 Fac PE RVU: 15.94

RUC Recommendation: 16.33

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

67042 **Vitrectomy, mechanical, pars plana approach; with removal of internal limiting membrane of retina (eg, for repair of macular hole, diabetic macular edema), includes, if performed, intraocular tamponade (ie, air, gas or silicone oil)**

Global: 090 **Issue:** Vitrectomy **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 11 **Specialty Developing Recommendation:** AAO **First Identified:** October 2012 **2021 Medicare Utilization:** 23,661

2023 Work RVU: 16.33
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.93

RUC Recommendation: 16.33 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67043 **Vitrectomy, mechanical, pars plana approach; with removal of subretinal membrane (eg, choroidal neovascularization), includes, if performed, intraocular tamponade (ie, air, gas or silicone oil) and laser photocoagulation**

Global: 090 **Issue:** Vitrectomy **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 11 **Specialty Developing Recommendation:** AAO **First Identified:** October 2012 **2021 Medicare Utilization:** 289

2023 Work RVU: 17.40
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.61

RUC Recommendation: 17.40 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67101 **Repair of retinal detachment, including drainage of subretinal fluid when performed; cryotherapy**

Global: 010 **Issue:** Retinal Detachment Repair **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 11 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** April 2015 **2021 Medicare Utilization:** 286

2023 Work RVU: 3.50
2023 NF PE RVU: 6.13
2023 Fac PE RVU: 4.61

RUC Recommendation: 3.50 **Referred to CPT** May 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

67105 **Repair of retinal detachment, including drainage of subretinal fluid when performed; photocoagulation**

Global: 010 **Issue:** Retinal Detachment Repair **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 11 **Specialty Developing Recommendation:** AAO, ASRS

First Identified: April 2015

2021 Medicare Utilization: 3,103

2023 Work RVU: 3.39
2023 NF PE RVU: 5.10
2023 Fac PE RVU: 4.44

RUC Recommendation: 3.84

Referred to CPT May 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67107 **Repair of retinal detachment; scleral buckling (such as lamellar scleral dissection, imbrication or encircling procedure), including, when performed, implant, cryotherapy, photocoagulation, and drainage of subretinal fluid**

Global: 090 **Issue:** Retinal Detachment Repair **Screen:** Site of Service Anomaly (99238-Only) / 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 12 **Specialty Developing Recommendation:** AAO

First Identified: September 2007

2021 Medicare Utilization: 449

2023 Work RVU: 16.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 15.73

RUC Recommendation: 16.00. Reduce 99238 to 0.5

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67108 **Repair of retinal detachment; with vitrectomy, any method, including, when performed, air or gas tamponade, focal endolaser photocoagulation, cryotherapy, drainage of subretinal fluid, scleral buckling, and/or removal of lens by same technique**

Global: 090 **Issue:** Retinal Detachment Repair **Screen:** Site of Service Anomaly (99238-Only) / 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 12 **Specialty Developing Recommendation:** AAO

First Identified: September 2007

2021 Medicare Utilization: 15,259

2023 Work RVU: 17.13
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.43

RUC Recommendation: 17.13

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

67110 **Repair of retinal detachment; by injection of air or other gas (eg, pneumatic retinopexy)**

Global: 090 **Issue:** Retinal Detachment Repair **Screen:** Site of Service Anomaly (99238-Only) / 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 12 **Specialty Developing Recommendation:** AAO

First Identified: September 2007 **2021 Medicare Utilization:** 2,171

2023 Work RVU: 10.25
2023 NF PE RVU: 15.27
2023 Fac PE RVU: 12.88

RUC Recommendation: 10.25. Remove 99238

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

67112 **Repair of retinal detachment; by scleral buckling or vitrectomy, on patient having previous ipsilateral retinal detachment repair(s) using scleral buckling or vitrectomy techniques**

Global: **Issue:** Retinal Detachment Repair **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 12 **Specialty Developing Recommendation:** AAO

First Identified: April 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

67113 **Repair of complex retinal detachment (eg, proliferative vitreoretinopathy, stage c-1 or greater, diabetic traction retinal detachment, retinopathy of prematurity, retinal tear of greater than 90 degrees), with vitrectomy and membrane peeling, including, when performed, air, gas, or silicone oil tamponade, cryotherapy, endolaser photocoagulation, drainage of subretinal fluid, scleral buckling, and/or removal of lens**

Global: 090 **Issue:** Retinal Detachment Repair **Screen:** 090-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 12 **Specialty Developing Recommendation:** AAO

First Identified: January 2014 **2021 Medicare Utilization:** 10,813

2023 Work RVU: 19.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 18.52

RUC Recommendation: 19.00

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

67141 **Prophylaxis of retinal detachment (eg, retinal break, lattice degeneration) without drainage; cryotherapy, diathermy**

Global: 090 **Issue:** Retinal Detachment Prophylaxis **Screen:** Harvard Valued - Utilization over 30,000-Part4 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 08 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** January 2020 **2021 Medicare Utilization:** 1,128

2023 Work RVU: 2.53
2023 NF PE RVU: 5.26
2023 Fac PE RVU: 3.65

RUC Recommendation: 2.53 **Referred to CPT** May 2020 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67145 **Prophylaxis of retinal detachment (eg, retinal break, lattice degeneration) without drainage; photocoagulation**

Global: 090 **Issue:** Retinal Detachment Prophylaxis **Screen:** Harvard Valued - Utilization over 30,000-Part4 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 08 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** October 2019 **2021 Medicare Utilization:** 30,277

2023 Work RVU: 2.53
2023 NF PE RVU: 4.46
2023 Fac PE RVU: 3.65

RUC Recommendation: 2.53 **Referred to CPT** May 2020 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67210 **Destruction of localized lesion of retina (eg, macular edema, tumors), 1 or more sessions; photocoagulation**

Global: 090 **Issue:** Treatment of Retinal Lesion or Choroid **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 13 **Specialty Developing Recommendation:** AAO **First Identified:** February 2008 **2021 Medicare Utilization:** 41,588

2023 Work RVU: 6.36
2023 NF PE RVU: 8.35
2023 Fac PE RVU: 7.80

RUC Recommendation: 6.36 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

67220 **Destruction of localized lesion of choroid (eg, choroidal neovascularization); photocoagulation (eg, laser), 1 or more sessions**

Global: 090 **Issue:** Treatment of Retinal Lesion or Choroid **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 13 **Specialty Developing Recommendation:** AAO

First Identified: February 2008 **2021 Medicare Utilization:** 2,172

2023 Work RVU: 6.36
2023 NF PE RVU: 8.80
2023 Fac PE RVU: 7.80

RUC Recommendation: 6.36

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67225 **Destruction of localized lesion of choroid (eg, choroidal neovascularization); photodynamic therapy, second eye, at single session (list separately in addition to code for primary eye treatment)**

Global: ZZZ **Issue:** Photodynamic Therapy of the Eye **Screen:** New Technology **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** P **Specialty Developing Recommendation:** AAO

First Identified: September 2007 **2021 Medicare Utilization:** 125

2023 Work RVU: 0.47
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.30

RUC Recommendation: 0.47

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

67228 **Treatment of extensive or progressive retinopathy (eg, diabetic retinopathy), photocoagulation**

Global: 010 **Issue:** Treatment of Retinal Lesion or Choroid **Screen:** High IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 40 **Specialty Developing Recommendation:** AAO

First Identified: February 2008 **2021 Medicare Utilization:** 46,728

2023 Work RVU: 4.39
2023 NF PE RVU: 5.28
2023 Fac PE RVU: 4.17

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

67255 **Scleral reinforcement (separate procedure); with graft** **Global:** 090 **Issue:** Aqueous Shunt **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 12 **Specialty Developing Recommendation:** AAO **First Identified:** January 2014 **2021 Medicare Utilization:** 706

2023 Work RVU: 8.38
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.25
Result: Maintain

RUC Recommendation: 10.17 **Referred to CPT** October 2013
Referred to CPT Asst ☐ **Published in CPT Asst:**

67311 **Strabismus surgery, recession or resection procedure; 1 horizontal muscle** **Global:** 090 **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** April 2020 **2021 Medicare Utilization:** 4,449

2023 Work RVU: 5.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.02
Result: Decrease

RUC Recommendation: 5.93 **Referred to CPT**
Referred to CPT Asst ☐ **Published in CPT Asst:**

67312 **Strabismus surgery, recession or resection procedure; 2 horizontal muscles** **Global:** 090 **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** April 2020 **2021 Medicare Utilization:** 1,281

2023 Work RVU: 9.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.29
Result: Decrease

RUC Recommendation: 9.50 **Referred to CPT**
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

67314 **Strabismus surgery, recession or resection procedure; 1 vertical muscle (excluding superior oblique)**

Global: 090 **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** April 2020 **2021 Medicare Utilization:** 2,238

2023 Work RVU: 5.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.02

RUC Recommendation: 5.93 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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67316 **Strabismus surgery, recession or resection procedure; 2 or more vertical muscles (excluding superior oblique)**

Global: 090 **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** April 2020 **2021 Medicare Utilization:** 140

2023 Work RVU: 10.31
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.83

RUC Recommendation: 10.31 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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67318 **Strabismus surgery, any procedure, superior oblique muscle**

Global: 090 **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** April 2020 **2021 Medicare Utilization:** 143

2023 Work RVU: 9.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 9.65

RUC Recommendation: 9.80 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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67320 **Transposition procedure (eg, for paretic extraocular muscle), any extraocular muscle (specify) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** October 2019 **2021 Medicare Utilization:** 290

2023 Work RVU: 3.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.75

RUC Recommendation: 3.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

67331 **Strabismus surgery on patient with previous eye surgery or injury that did not involve the extraocular muscles (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** October 2019 **2021 Medicare Utilization:** 871

2023 Work RVU: 2.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.52

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67332 **Strabismus surgery on patient with scarring of extraocular muscles (eg, prior ocular injury, strabismus or retinal detachment surgery) or restrictive myopathy (eg, dysthyroid ophthalmopathy) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** October 2019 **2021 Medicare Utilization:** 1,424

2023 Work RVU: 3.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.39

RUC Recommendation: 3.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67334 **Strabismus surgery by posterior fixation suture technique, with or without muscle recession (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** October 2019 **2021 Medicare Utilization:** 125

2023 Work RVU: 2.06
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.38

RUC Recommendation: 2.06 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

67335 **Placement of adjustable suture(s) during strabismus surgery, including postoperative adjustment(s) of suture(s) (list separately in addition to code for specific strabismus surgery)**

Global: ZZZ **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** October 2019 **2021 Medicare Utilization:** 1,511

2023 Work RVU: 3.23
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.02

RUC Recommendation: 3.23 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

67340 **Strabismus surgery involving exploration and/or repair of detached extraocular muscle(s) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Strabismus Surgery **Screen:** ZZZ Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 18 **Specialty Developing Recommendation:** AAO, AAP **First Identified:** October 2019 **2021 Medicare Utilization:** 69

2023 Work RVU: 5.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.17

RUC Recommendation: 5.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67500 **Retrobulbar injection; medication (separate procedure, does not include supply of medication)**

Global: 000 **Issue:** Injection – Eye **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 11 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** October 2017 **2021 Medicare Utilization:** 7,736

2023 Work RVU: 1.18
2023 NF PE RVU: 0.99
2023 Fac PE RVU: 0.60

RUC Recommendation: 1.18 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

67505 **Retrobulbar injection; alcohol**

Global: 000 **Issue:** Injection – Eye **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 11 **Specialty Developing Recommendation:** AAO, ASRS

First Identified: October 2017

2021 Medicare Utilization: 79

2023 Work RVU: 1.18
2023 NF PE RVU: 1.28
2023 Fac PE RVU: 0.85

RUC Recommendation: 1.18

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67515 **Injection of medication or other substance into tenon's capsule**

Global: 000 **Issue:** Injection – Eye **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 11 **Specialty Developing Recommendation:** AAO, ASRS

First Identified: July 2016

2021 Medicare Utilization: 20,130

2023 Work RVU: 0.75
2023 NF PE RVU: 0.72
2023 Fac PE RVU: 0.58

RUC Recommendation: 0.84

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67820 **Correction of trichiasis; epilation, by forceps only**

Global: 000 **Issue:** Correction of Trichiasis **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 29 **Specialty Developing Recommendation:** AOA, AOA (optometry)

First Identified: July 2015

2021 Medicare Utilization: 180,998

2023 Work RVU: 0.32
2023 NF PE RVU: 0.23
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.32

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

67914 **Repair of ectropion; suture**

Global: 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO

First Identified: October 2012

2021 Medicare Utilization: 1,286

2023 Work RVU: 3.75

2023 NF PE RVU: 10.52

2023 Fac PE RVU: 5.61

RUC Recommendation: 3.75

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

67915 **Repair of ectropion; thermocauterization**

Global: 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO

First Identified: October 2012

2021 Medicare Utilization: 229

2023 Work RVU: 2.03

2023 NF PE RVU: 7.27

2023 Fac PE RVU: 3.68

RUC Recommendation: 2.03

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67916 **Repair of ectropion; excision tarsal wedge**

Global: 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO

First Identified: October 2012

2021 Medicare Utilization: 1,137

2023 Work RVU: 5.48

2023 NF PE RVU: 12.27

2023 Fac PE RVU: 6.71

RUC Recommendation: 5.48

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

67917 **Repair of ectropion; extensive (eg, tarsal strip operations)**

Global: 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO

First Identified: October 2012

2021 Medicare Utilization: 18,613

2023 Work RVU: 5.93

2023 NF PE RVU: 12.18

2023 Fac PE RVU: 7.00

RUC Recommendation: 5.93

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

67921 **Repair of entropion; suture**

Global: 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO

First Identified: October 2012

2021 Medicare Utilization: 3,049

2023 Work RVU: 3.47

2023 NF PE RVU: 10.54

2023 Fac PE RVU: 5.45

RUC Recommendation: 3.47

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

67922 **Repair of entropion; thermocauterization**

Global: 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO

First Identified: October 2012

2021 Medicare Utilization: 66

2023 Work RVU: 2.03

2023 NF PE RVU: 6.99

2023 Fac PE RVU: 3.69

RUC Recommendation: 2.03

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

67923 **Repair of entropion; excision tarsal wedge** **Global:** 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO **First Identified:** October 2012 **2021 Medicare Utilization:** 860

2023 Work RVU: 5.48
2023 NF PE RVU: 12.28
2023 Fac PE RVU: 6.72

RUC Recommendation: 5.48 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

67924 **Repair of entropion; extensive (eg, tarsal strip or capsulopalpebral fascia repairs operation)** **Global:** 090 **Issue:** Repair of Eyelid **Screen:** Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 24 **Specialty Developing Recommendation:** AAO **First Identified:** October 2012 **2021 Medicare Utilization:** 9,083

2023 Work RVU: 5.93
2023 NF PE RVU: 12.96
2023 Fac PE RVU: 7.01

RUC Recommendation: 5.93 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

68040 **Expression of conjunctival follicles (eg, for trachoma)** **Global:** 000 **Issue:** Treatment of Eyelid Lesions **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 51 **Specialty Developing Recommendation:** AAO **First Identified:** February 2008 **2021 Medicare Utilization:** 6,286

2023 Work RVU: 0.85
2023 NF PE RVU: 0.94
2023 Fac PE RVU: 0.50

RUC Recommendation: Revised parenthetical **Referred to CPT** February 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

68200 **Subconjunctival injection**

Global: 000 **Issue:** Subconjunctival Injection **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAO

First Identified: April 2011

2021 Medicare Utilization: 5,347

2023 Work RVU: 0.49
2023 NF PE RVU: 0.70
2023 Fac PE RVU: 0.47

RUC Recommendation: 0.49

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

68801 **Dilation of lacrimal punctum, with or without irrigation**

Global: 010 **Issue:** Dilation and Probing of Lacrimal and Nasolacrimal Duct **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 23 **Specialty Developing Recommendation:** AAO, AOA (optometry)

First Identified: January 2014

2021 Medicare Utilization: 22,177

2023 Work RVU: 0.82
2023 NF PE RVU: 2.00
2023 Fac PE RVU: 1.47

RUC Recommendation: 1.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

68810 **Probing of nasolacrimal duct, with or without irrigation;**

Global: 010 **Issue:** Dilation and Probing of Lacrimal and Nasolacrimal Duct **Screen:** Site of Service Anomaly / 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 23 **Specialty Developing Recommendation:** AAO, AOA (optometry)

First Identified: September 2007

2021 Medicare Utilization: 21,662

2023 Work RVU: 1.54
2023 NF PE RVU: 3.13
2023 Fac PE RVU: 2.11

RUC Recommendation: 1.54

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

68811 **Probing of nasolacrimal duct, with or without irrigation; requiring general anesthesia**

Global: 010 **Issue:** **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 23 **Specialty Developing Recommendation:** AAO, AOA (optometry)

First Identified: September 2014 **2021 Medicare Utilization:** 349

2023 Work RVU: 1.74
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.09

RUC Recommendation: 2.03

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

68815 **Probing of nasolacrimal duct, with or without irrigation; with insertion of tube or stent**

Global: 010 **Issue:** Dilation and Probing of Lacrimal and Nasolacrimal Duct **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 23 **Specialty Developing Recommendation:** AAO, AOA (optometry)

First Identified: January 2014 **2021 Medicare Utilization:** 6,177

2023 Work RVU: 2.70
2023 NF PE RVU: 8.32
2023 Fac PE RVU: 3.62

RUC Recommendation: 3.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

68816 **Probing of nasolacrimal duct, with or without irrigation; with transluminal balloon catheter dilation**

Global: 010 **Issue:** **Screen:** 010-Day Global Post-Operative Visits **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 23 **Specialty Developing Recommendation:** AAO, AOA (optometry)

First Identified: September 2014 **2021 Medicare Utilization:** 181

2023 Work RVU: 2.10
2023 NF PE RVU: 23.49
2023 Fac PE RVU: 2.35

RUC Recommendation: 2.35

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

69100 **Biopsy external ear**

Global: 000 **Issue:** Biopsy of Ear **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 28 **Specialty Developing Recommendation:** AAD

First Identified: October 2008 **2021 Medicare Utilization:** 159,540

2023 Work RVU: 0.81
2023 NF PE RVU: 1.99
2023 Fac PE RVU: 0.48

RUC Recommendation: 0.81

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

69200 **Removal foreign body from external auditory canal; without general anesthesia** **Global:** 000 **Issue:** Removal of Foreign Body **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 29 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** April 2011 **2021 Medicare Utilization:** 50,973

2023 Work RVU: 0.77
2023 NF PE RVU: 1.53
2023 Fac PE RVU: 0.53

RUC Recommendation: 0.77 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

69210 **Removal impacted cerumen requiring instrumentation, unilateral** **Global:** 000 **Issue:** Removal of Cerumen **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 29 **Specialty Developing Recommendation:** AAFP, AAO-HNS **First Identified:** September 2011 **2021 Medicare Utilization:** 1,423,836

2023 Work RVU: 0.61
2023 NF PE RVU: 0.73
2023 Fac PE RVU: 0.28

RUC Recommendation: 0.58. **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

69400 **Eustachian tube inflation, transnasal; with catheterization** **Global:** **Issue:** Eustachian Tube Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** October 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

69401 **Eustachian tube inflation, transnasal; without catheterization** **Global:** **Issue:** Eustachian Tube Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

69405 **Eustachian tube catheterization, transtympanic**

Global: **Issue:** Eustachian Tube Procedures **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** AAO-HNS

First Identified: October 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

69433 **Tympanostomy (requiring insertion of ventilating tube), local or topical anesthesia**

Global: 010 **Issue:** Tympanostomy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 30 **Specialty Developing Recommendation:** AAO-HNS

First Identified: April 2011 **2021 Medicare Utilization:** 30,622

2023 Work RVU: 1.57
2023 NF PE RVU: 4.32
2023 Fac PE RVU: 2.19

RUC Recommendation: 1.57

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

69801 **Labyrinthotomy, with perfusion of vestibuloactive drug(s), transcanal**

Global: 000 **Issue:** Labyrinthotomy **Screen:** CMS Fastest Growing / Site of Service Anomaly (99238-Only) / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** AAO-HNS

First Identified: September 2007 **2021 Medicare Utilization:** 23,490

2023 Work RVU: 2.06
2023 NF PE RVU: 4.54
2023 Fac PE RVU: 1.36

RUC Recommendation: Review action plan at RAW Oct 2015. 2.06

Referred to CPT Feb 2010
Referred to CPT Asst ☑ **Published in CPT Asst:** May 2011

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

69802 **Labyrinthotomy, with perfusion of vestibuloactive drug(s); with mastoidectomy**

Global: **Issue:** Labryinthotomy **Screen:** CMS Fastest Growing / Site of Service Anomaly (99238-Only) **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 16 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** Feburary 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

69930 **Cochlear device implantation, with or without mastoidectomy**

Global: 090 **Issue:** Cochlear Device Implantation **Screen:** Site of Service Anomaly **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** M **Specialty Developing Recommendation:** AAO-HNS **First Identified:** September 2007 **2021 Medicare Utilization:** 3,904

2023 Work RVU: 17.73
2023 NF PE RVU: NA
2023 Fac PE RVU: 16.35

RUC Recommendation: 17.60 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70030 **Radiologic examination, eye, for detection of foreign body**

Global: XXX **Issue:** X-Ray of Eye **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 28 **Specialty Developing Recommendation:** **First Identified:** January 2019 **2021 Medicare Utilization:** 21,076

2023 Work RVU: 0.18
2023 NF PE RVU: 0.78
2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70100 **Radiologic examination, mandible; partial, less than 4 views** **Global:** XXX **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 18,627

2023 Work RVU: 0.18
2023 NF PE RVU: 0.96
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: RUC to submit letter to CMS specifying the innapropriate reporting of this service with the hand-held device in Texas.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

70210 **Radiologic examination, sinuses, paranasal, less than 3 views** **Global:** XXX **Issue:** X-Ray Exam - Sinuses **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 24 **Specialty Developing Recommendation:** AAFP, ACP, ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 14,260

2023 Work RVU: 0.17
2023 NF PE RVU: 0.78
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 0.20

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

70220 **Radiologic examination, sinuses, paranasal, complete, minimum of 3 views** **Global:** XXX **Issue:** X-Ray Exam - Sinuses **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 24 **Specialty Developing Recommendation:** AAFP, ACP, ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 30,910

2023 Work RVU: 0.22
2023 NF PE RVU: 0.89
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.22

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70250 **Radiologic examination, skull; less than 4 views** **Global:** XXX **Issue:** X-Ray Exam – Skull **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 25 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 40,209

2023 Work RVU: 0.18
2023 NF PE RVU: 0.88
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

70260 **Radiologic examination, skull; complete, minimum of 4 views** **Global:** XXX **Issue:** X-Ray Exam – Skull **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 25 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 8,116

2023 Work RVU: 0.28
2023 NF PE RVU: 1.04
2023 Fac PE RVU: NA

RUC Recommendation: 0.29 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

70310 **Radiologic examination, teeth; partial examination, less than full mouth** **Global:** XXX **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 1,368

2023 Work RVU: 0.16
2023 NF PE RVU: 1.00
2023 Fac PE RVU: NA

RUC Recommendation: RUC to submit letter to CMS specifying the innapropriate reporting of this service with the hand-held device in Texas. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70360 **Radiologic examination; neck, soft tissue** **Global:** XXX **Issue:** X-Ray Exam – Neck **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 26 **Specialty Developing Recommendation:** AAFP, ACP, ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 38,451

2023 Work RVU: 0.18
2023 NF PE RVU: 0.75
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

70371 **Complex dynamic pharyngeal and speech evaluation by cine or video recording** **Global:** XXX **Issue:** Laryngography **Screen:** Codes Reported Together 75% or More-Part2 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** ACR, AAFP **First Identified:** October 2012 **2021 Medicare Utilization:** 980

2023 Work RVU: 0.84
2023 NF PE RVU: 2.36
2023 Fac PE RVU: NA

RUC Recommendation: CPT Assistant article published, addressed issues identified. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2014

70373 **Laryngography, contrast, radiological supervision and interpretation** **Global:** **Issue:** Laryngography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** **Specialty Developing Recommendation:** ACR, AAFP **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: CPT Assistant article published. **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2014

Status Report: CMS Requests and Relativity Assessment Issues

70450 **Computed tomography, head or brain; without contrast material**

Global: XXX **Issue:** CT Head/Brain **Screen:** CMS-Other - Utilization over 500,000 / CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 15 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2011 **2021 Medicare Utilization:** 4,982,473

2023 Work RVU: 0.85
2023 NF PE RVU: 2.39
2023 Fac PE RVU: NA

RUC Recommendation: 0.85 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70460 **Computed tomography, head or brain; with contrast material(s)**

Global: XXX **Issue:** CT Head/Brain **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 15 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2013 **2021 Medicare Utilization:** 20,993

2023 Work RVU: 1.13
2023 NF PE RVU: 3.39
2023 Fac PE RVU: NA

RUC Recommendation: 1.13 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70470 **Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Head/Brain **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 15 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2009 **2021 Medicare Utilization:** 70,531

2023 Work RVU: 1.27
2023 NF PE RVU: 4.04
2023 Fac PE RVU: NA

RUC Recommendation: 1.27 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70480 **Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material**

Global: XXX **Issue:** CT – Orbit/Ear/Fossa **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 16 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 48,924

2023 Work RVU: 1.28
2023 NF PE RVU: 3.56
2023 Fac PE RVU: NA

RUC Recommendation: 1.28 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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70481 **Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; with contrast material(s)**

Global: XXX **Issue:** CT – Orbit/Ear/Fossa **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 16 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 9,404

2023 Work RVU: 1.13
2023 NF PE RVU: 4.41
2023 Fac PE RVU: NA

RUC Recommendation: 1.13 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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70482 **Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT – Orbit/Ear/Fossa **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 16 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2017 **2021 Medicare Utilization:** 4,372

2023 Work RVU: 1.27
2023 NF PE RVU: 5.20
2023 Fac PE RVU: NA

RUC Recommendation: 1.27 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

70486 **Computed tomography, maxillofacial area; without contrast material** **Global:** XXX **Issue:** CT – Maxillofacial **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 41 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2013 **2021 Medicare Utilization:** 450,568

2023 Work RVU: 0.85
2023 NF PE RVU: 3.08
2023 Fac PE RVU: NA

RUC Recommendation: 0.85 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

70487 **Computed tomography, maxillofacial area; with contrast material(s)** **Global:** XXX **Issue:** CT – Maxillofacial **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 41 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 27,136

2023 Work RVU: 1.13
2023 NF PE RVU: 3.52
2023 Fac PE RVU: NA

RUC Recommendation: 1.17 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

70488 **Computed tomography, maxillofacial area; without contrast material, followed by contrast material(s) and further sections** **Global:** XXX **Issue:** CT – Maxillofacial **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 41 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2014 **2021 Medicare Utilization:** 3,177

2023 Work RVU: 1.27
2023 NF PE RVU: 4.39
2023 Fac PE RVU: NA

RUC Recommendation: 1.30 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

70490 **Computed tomography, soft tissue neck; without contrast material** **Global:** XXX **Issue:** CT Soft Tissue Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 21 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 58,481

2023 Work RVU: 1.28
2023 NF PE RVU: 3.30
2023 Fac PE RVU: NA

RUC Recommendation: 1.28 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70491 **Computed tomography, soft tissue neck; with contrast material(s)**

Global: XXX **Issue:** CT Soft Tissue Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 21 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 263,568

2023 Work RVU: 1.38
2023 NF PE RVU: 4.27
2023 Fac PE RVU: NA

RUC Recommendation: 1.38 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70492 **Computed tomography, soft tissue neck; without contrast material followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Soft Tissue Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 21 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 21,431

2023 Work RVU: 1.62
2023 NF PE RVU: 5.18
2023 Fac PE RVU: NA

RUC Recommendation: 1.62 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

70496 **Computed tomographic angiography, head, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography – Head & Neck **Screen:** High Volume Growth1 / CMS Fastest Growing / High Volume Growth2 / High Volume Growth5 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2008 **2021 Medicare Utilization:** 601,126

2023 Work RVU: 1.75
2023 NF PE RVU: 6.70
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT for code bundling solution. 1.75 **Referred to CPT** May 2023 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70498 **Computed tomographic angiography, neck, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography – Head & Neck **Screen:** High Volume Growth1 / CMS Fastest Growing / High Volume Growth5 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2008 **2021 Medicare Utilization:** 622,608

2023 Work RVU: 1.75
2023 NF PE RVU: 6.69
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT for code bundling solution. 1.75 **Referred to CPT** May 2023

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70540 **Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; without contrast material(s)**

Global: XXX **Issue:** MRI Face and Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 39 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 9,546

2023 Work RVU: 1.35
2023 NF PE RVU: 5.64
2023 Fac PE RVU: NA

RUC Recommendation: 1.35 **Referred to CPT**

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70542 **Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; with contrast material(s)**

Global: XXX **Issue:** MRI Face and Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 39 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 707

2023 Work RVU: 1.62
2023 NF PE RVU: 6.69
2023 Fac PE RVU: NA

RUC Recommendation: 1.62 **Referred to CPT**

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70543 **Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; without contrast material(s), followed by contrast material(s) and further sequences**

Global: XXX **Issue:** MRI Face and Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 39 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 61,935

2023 Work RVU: 2.15
2023 NF PE RVU: 8.32
2023 Fac PE RVU: NA

RUC Recommendation: 2.15 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70544 **Magnetic resonance angiography, head; without contrast material(s)**

Global: XXX **Issue:** Magnetic Resonance Angiography (MR) Head/Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 194,391

2023 Work RVU: 1.20
2023 NF PE RVU: 5.44
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan. 1.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70545 **Magnetic resonance angiography, head; with contrast material(s)**

Global: XXX **Issue:** Magnetic Resonance Angiography (MR) Head/Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 3,043

2023 Work RVU: 1.20
2023 NF PE RVU: 5.80
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70546 **Magnetic resonance angiography, head; without contrast material(s), followed by contrast material(s) and further sequences**

Global: XXX **Issue:** Magnetic Resonance Angiography (MR) Head/Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 18,663

2023 Work RVU: 1.48
2023 NF PE RVU: 8.69
2023 Fac PE RVU: NA

RUC Recommendation: 1.48 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

70547 **Magnetic resonance angiography, neck; without contrast material(s)**

Global: XXX **Issue:** Magnetic Resonance Angiography (MR) Head/Neck **Screen:** CMS High Expenditure Procedural Codes2 / Codes Reported Together 75% or More-Part5 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 64,908

2023 Work RVU: 1.20
2023 NF PE RVU: 5.45
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan. 1.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70548 **Magnetic resonance angiography, neck; with contrast material(s)**

Global: XXX **Issue:** Magnetic Resonance Angiography (MR) Head/Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 19 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 12,924

2023 Work RVU: 1.50
2023 NF PE RVU: 6.06
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70549 **Magnetic resonance angiography, neck; without contrast material(s), followed by contrast material(s) and further sequences**

Global: XXX **Issue:** Magnetic Resonance Angiography (MR) Head/Neck **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 19 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2015 **2021 Medicare Utilization:** 42,928

2023 Work RVU: 1.80
2023 NF PE RVU: 8.85
2023 Fac PE RVU: NA

RUC Recommendation: 1.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70551 **Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material**

Global: XXX **Issue:** MRI-Brain **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 26 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** September 2011 **2021 Medicare Utilization:** 1,069,458

2023 Work RVU: 1.48
2023 NF PE RVU: 4.53
2023 Fac PE RVU: NA

RUC Recommendation: 1.48 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

70552 **Magnetic resonance (eg, proton) imaging, brain (including brain stem); with contrast material(s)**

Global: XXX **Issue:** MRI-Brain **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 26 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** September 2011 **2021 Medicare Utilization:** 17,460

2023 Work RVU: 1.78
2023 NF PE RVU: 6.54
2023 Fac PE RVU: NA

RUC Recommendation: 1.78 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

70553 **Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material, followed by contrast material(s) and further sequences**

Global: XXX **Issue:** MRI-Brain **Screen:** CMS-Other - Utilization over 500,000 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 26 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2011 **2021 Medicare Utilization:** 944,689

2023 Work RVU: 2.29
2023 NF PE RVU: 7.51
2023 Fac PE RVU: NA

RUC Recommendation: 2.36 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

71010 **Radiologic examination, chest; single view, frontal**

Global: **Issue:** Chest X-Rays **Screen:** Low Value-High Volume / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71015 **Radiologic examination, chest; stereo, frontal**

Global: **Issue:** Chest X-Rays **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

71020 **Radiologic examination, chest, 2 views, frontal and lateral;** **Global:** **Issue:** Chest X-Rays **Screen:** MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71021 **Radiologic examination, chest, 2 views, frontal and lateral; with apical lordotic procedure** **Global:** **Issue:** Chest X-Rays **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71022 **Radiologic examination, chest, 2 views, frontal and lateral; with oblique projections** **Global:** **Issue:** Chest X-Rays **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

71023 **Radiologic examination, chest, 2 views, frontal and lateral; with fluoroscopy** **Global:** **Issue:** Chest X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71030 **Radiologic examination, chest, complete, minimum of 4 views;** **Global:** **Issue:** Chest X-Rays **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71034 **Radiologic examination, chest, complete, minimum of 4 views; with fluoroscopy** **Global:** **Issue:** Chest X-Rays **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71035 **Radiologic examination, chest, special views (eg, lateral decubitus, Bucky studies)** **Global:** **Issue:** Chest X-Rays **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

71045 **Radiologic examination, chest; single view**

Global: XXX **Issue:** Chest X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR

First Identified: February 2016 **2021 Medicare Utilization:** 14,823,913

2023 Work RVU: 0.18
2023 NF PE RVU: 0.58
2023 Fac PE RVU: NA

RUC Recommendation: 0.18

Referred to CPT February 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

71046 **Radiologic examination, chest; 2 views**

Global: XXX **Issue:** Chest X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR

First Identified: February 2016 **2021 Medicare Utilization:** 6,063,799

2023 Work RVU: 0.22
2023 NF PE RVU: 0.77
2023 Fac PE RVU: NA

RUC Recommendation: 0.22

Referred to CPT February 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

71047 **Radiologic examination, chest; 3 views**

Global: XXX **Issue:** Chest X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR

First Identified: February 2016 **2021 Medicare Utilization:** 12,495

2023 Work RVU: 0.27
2023 NF PE RVU: 0.98
2023 Fac PE RVU: NA

RUC Recommendation: 0.27

Referred to CPT February 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

71048 **Radiologic examination, chest; 4 or more views**

Global: XXX **Issue:** Chest X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 07 **Specialty Developing Recommendation:** ACR

First Identified: February 2016 **2021 Medicare Utilization:** 7,750

2023 Work RVU: 0.31
2023 NF PE RVU: 1.06
2023 Fac PE RVU: NA

RUC Recommendation: 0.31

Referred to CPT February 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

71090 **Insertion pacemaker, fluoroscopy and radiography, radiological supervision and interpretation**

Global: **Issue:** Insertion/Removal of Pacemeaker or Pacing Cardioverter-Defibrillator **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

71100 **Radiologic examination, ribs, unilateral; 2 views**

Global: XXX **Issue:** X-Ray of Ribs **Screen:** CMS-Other - Utilization over 250,000 / CMS-Other - Utilization over 250,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 30 **Specialty Developing Recommendation:** ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 132,073

2023 Work RVU: 0.22
2023 NF PE RVU: 0.87
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

71101 **Radiologic examination, ribs, unilateral; including posteroanterior chest, minimum of 3 views**

Global: XXX **Issue:** X-Ray of Ribs **Screen:** CMS-Other - Utilization over 250,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 30 **Specialty Developing Recommendation:** ACR **First Identified:** October 2015 **2021 Medicare Utilization:** 249,946

2023 Work RVU: 0.27
2023 NF PE RVU: 0.98
2023 Fac PE RVU: NA

RUC Recommendation: 0.27 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

71110 **Radiologic examination, ribs, bilateral; 3 views**

Global: XXX **Issue:** X-Ray of Ribs **Screen:** CMS-Other - Utilization over 250,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 30 **Specialty Developing Recommendation:** ACR

First Identified: October 2015 **2021 Medicare Utilization:** 20,626

2023 Work RVU: 0.29
2023 NF PE RVU: 1.01
2023 Fac PE RVU: NA

RUC Recommendation: 0.29

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

71111 **Radiologic examination, ribs, bilateral; including posteroanterior chest, minimum of 4 views**

Global: XXX **Issue:** X-Ray of Ribs **Screen:** CMS-Other - Utilization over 250,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 30 **Specialty Developing Recommendation:** ACR

First Identified: October 2015 **2021 Medicare Utilization:** 27,613

2023 Work RVU: 0.32
2023 NF PE RVU: 1.23
2023 Fac PE RVU: NA

RUC Recommendation: 0.32

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

71250 **Computed tomography, thorax, diagnostic; without contrast material**

Global: XXX **Issue:** Screening CT of Thorax **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 07 **Specialty Developing Recommendation:** ACR

First Identified: October 2008 **2021 Medicare Utilization:** 2,145,188

2023 Work RVU: 1.08
2023 NF PE RVU: 2.98
2023 Fac PE RVU: NA

RUC Recommendation: 1.16

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

71260 **Computed tomography, thorax, diagnostic; with contrast material(s)**

Global: XXX **Issue:** Screening CT of Thorax **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 1,736,347

2023 Work RVU: 1.16
2023 NF PE RVU: 3.94
2023 Fac PE RVU: NA

RUC Recommendation: 1.38 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

71270 **Computed tomography, thorax, diagnostic; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** Screening CT of Thorax **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 07 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 56,503

2023 Work RVU: 1.25
2023 NF PE RVU: 4.78
2023 Fac PE RVU: NA

RUC Recommendation: 1.24 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

71271 **Computed tomography, thorax, low dose for lung cancer screening, without contrast material(s)**

Global: XXX **Issue:** Screening CT of Thorax **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 07 **Specialty Developing Recommendation:** **First Identified:** May 2019 **2021 Medicare Utilization:** 324,831

2023 Work RVU: 1.08
2023 NF PE RVU: 3.12
2023 Fac PE RVU: NA

RUC Recommendation: 1.16 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

71275 **Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography-Chest **Screen:** CMS Fastest Growing / MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 27 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2008 **2021 Medicare Utilization:** 1,478,442

2023 Work RVU: 1.82
2023 NF PE RVU: 6.79
2023 Fac PE RVU: NA

RUC Recommendation: 1.82 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Jun 2009

72020 **Radiologic examination, spine, single view, specify level**

Global: XXX **Issue:** X-Ray Spine **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** April 2016 **2021 Medicare Utilization:** 110,300

2023 Work RVU: 0.16
2023 NF PE RVU: 0.56
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

72040 **Radiologic examination, spine, cervical; 2 or 3 views**

Global: XXX **Issue:** X-Ray Spine **Screen:** Low Value-High Volume / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** October 2010 **2021 Medicare Utilization:** 558,600

2023 Work RVU: 0.22
2023 NF PE RVU: 0.95
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72050 **Radiologic examination, spine, cervical; 4 or 5 views**

Global: XXX **Issue:** X-Ray Spine **Screen:** Low Value-High Volume / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** October 2010 **2021 Medicare Utilization:** 326,846

2023 Work RVU: 0.27
2023 NF PE RVU: 1.31
2023 Fac PE RVU: NA

RUC Recommendation: 0.27 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

72052 **Radiologic examination, spine, cervical; 6 or more views**

Global: XXX **Issue:** X-Ray Spine **Screen:** Low Value-High Volume / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** October 2010 **2021 Medicare Utilization:** 63,518

2023 Work RVU: 0.30
2023 NF PE RVU: 1.54
2023 Fac PE RVU: NA

RUC Recommendation: 0.30 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

72070 **Radiologic examination, spine; thoracic, 2 views**

Global: XXX **Issue:** X-Ray Spine **Screen:** CMS-Other - Utilization over 250,000 / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** April 2013 **2021 Medicare Utilization:** 270,070

2023 Work RVU: 0.20
2023 NF PE RVU: 0.77
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72072 **Radiologic examination, spine; thoracic, 3 views** **Global:** XXX **Issue:** X-Ray Spine **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** April 2016 **2021 Medicare Utilization:** 150,105

2023 Work RVU: 0.23
2023 NF PE RVU: 0.93
2023 Fac PE RVU: NA

RUC Recommendation: 0.23 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

72074 **Radiologic examination, spine; thoracic, minimum of 4 views** **Global:** XXX **Issue:** X-Ray Spine **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** October 2016 **2021 Medicare Utilization:** 10,986

2023 Work RVU: 0.25
2023 NF PE RVU: 1.06
2023 Fac PE RVU: NA

RUC Recommendation: 0.25 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

72080 **Radiologic examination, spine; thoracolumbar junction, minimum of 2 views** **Global:** XXX **Issue:** X-Ray Spine **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** October 2016 **2021 Medicare Utilization:** 41,682

2023 Work RVU: 0.21
2023 NF PE RVU: 0.81
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72100 **Radiologic examination, spine, lumbosacral; 2 or 3 views**

Global: XXX **Issue:** X-Ray Spine **Screen:** Harvard Valued - Utilization over 100,000 / Low Value-High Volume / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** February 2010 **2021 Medicare Utilization:** 1,583,990

2023 Work RVU: 0.22
2023 NF PE RVU: 0.96
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72110 **Radiologic examination, spine, lumbosacral; minimum of 4 views**

Global: XXX **Issue:** X-Ray Spine **Screen:** Harvard Valued - Utilization over 100,000 / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** October 2009 **2021 Medicare Utilization:** 742,086

2023 Work RVU: 0.26
2023 NF PE RVU: 1.26
2023 Fac PE RVU: NA

RUC Recommendation: 0.26 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

72114 **Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views**

Global: XXX **Issue:** X-Ray Spine **Screen:** Harvard Valued - Utilization over 100,000 / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** February 2010 **2021 Medicare Utilization:** 87,900

2023 Work RVU: 0.30
2023 NF PE RVU: 1.53
2023 Fac PE RVU: NA

RUC Recommendation: 0.30 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72120 **Radiologic examination, spine, lumbosacral; bending views only, 2 or 3 views** **Global:** XXX **Issue:** X-Ray Spine **Screen:** Harvard Valued - Utilization over 100,000 / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 27 **Specialty Developing Recommendation:** AAOS, ACR, ASNR **First Identified:** February 2010 **2021 Medicare Utilization:** 46,212

2023 Work RVU: 0.22
2023 NF PE RVU: 0.98
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72125 **Computed tomography, cervical spine; without contrast material** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2008 **2021 Medicare Utilization:** 1,295,484

2023 Work RVU: 1.00
2023 NF PE RVU: 2.97
2023 Fac PE RVU: NA

RUC Recommendation: 1.07 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72126 **Computed tomography, cervical spine; with contrast material** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 18,311

2023 Work RVU: 1.22
2023 NF PE RVU: 3.94
2023 Fac PE RVU: NA

RUC Recommendation: 1.22 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72127 **Computed tomography, cervical spine; without contrast material, followed by contrast material(s) and further sections** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 1,728

2023 Work RVU: 1.27
2023 NF PE RVU: 4.78
2023 Fac PE RVU: NA

RUC Recommendation: 1.27 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72128 **Computed tomography, thoracic spine; without contrast material** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2008 **2021 Medicare Utilization:** 200,681

2023 Work RVU: 1.00
2023 NF PE RVU: 2.97
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72129 **Computed tomography, thoracic spine; with contrast material** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 33,452

2023 Work RVU: 1.22
2023 NF PE RVU: 3.97
2023 Fac PE RVU: NA

RUC Recommendation: 1.22 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72130 **Computed tomography, thoracic spine; without contrast material, followed by contrast material(s) and further sections** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 1,316

2023 Work RVU: 1.27
2023 NF PE RVU: 4.84
2023 Fac PE RVU: NA

RUC Recommendation: 1.27 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72131 **Computed tomography, lumbar spine; without contrast material** **Global:** XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 487,126

2023 Work RVU: 1.00
2023 NF PE RVU: 2.95
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72132 **Computed tomography, lumbar spine; with contrast material**

Global: XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 61,062

2023 Work RVU: 1.22
2023 NF PE RVU: 3.95
2023 Fac PE RVU: NA

RUC Recommendation: 1.22 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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72133 **Computed tomography, lumbar spine; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Spine **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** February 2009 **2021 Medicare Utilization:** 3,692

2023 Work RVU: 1.27
2023 NF PE RVU: 4.80
2023 Fac PE RVU: NA

RUC Recommendation: 1.27 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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72141 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, cervical; without contrast material**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** September 2011 **2021 Medicare Utilization:** 544,579

2023 Work RVU: 1.48
2023 NF PE RVU: 4.36
2023 Fac PE RVU: NA

RUC Recommendation: 1.48 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

72142 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, cervical; with contrast material(s)**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 2,811

2023 Work RVU: 1.78
2023 NF PE RVU: 6.71
2023 Fac PE RVU: NA

RUC Recommendation: 1.78 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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72146 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; without contrast material**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 212,578

2023 Work RVU: 1.48
2023 NF PE RVU: 4.36
2023 Fac PE RVU: NA

RUC Recommendation: 1.48 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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72147 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; with contrast material(s)**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 2,629

2023 Work RVU: 1.78
2023 NF PE RVU: 6.64
2023 Fac PE RVU: NA

RUC Recommendation: 1.78 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

72148 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; without contrast material**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS-Other - Utilization over 500,000 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** AAOS, AUR, ACR, NASS, ASNR **First Identified:** April 2011 **2021 Medicare Utilization:** 1,251,695

2023 Work RVU: 1.48
2023 NF PE RVU: 4.38
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 1.48

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

72149 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; with contrast material(s)**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 4,604

2023 Work RVU: 1.78
2023 NF PE RVU: 6.56
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 1.78

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

72156 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; cervical**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 111,923

2023 Work RVU: 2.29
2023 NF PE RVU: 7.56
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 2.29

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72157 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; thoracic**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:**

First Identified: April 2013

2021 Medicare Utilization: 97,003

2023 Work RVU: 2.29
2023 NF PE RVU: 7.58
2023 Fac PE RVU: NA

RUC Recommendation: 2.29

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

72158 **Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar**

Global: XXX **Issue:** MRI Neck and Lumbar Spine **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 25 **Specialty Developing Recommendation:**

First Identified: April 2013

2021 Medicare Utilization: 216,368

2023 Work RVU: 2.29
2023 NF PE RVU: 7.54
2023 Fac PE RVU: NA

RUC Recommendation: 2.29

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

72170 **Radiologic examination, pelvis; 1 or 2 views**

Global: XXX **Issue:** X-Ray Exam – Pelvis **Screen:** Low Value-High Volume / Codes Reported Together 75% or More-Part2 / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 28 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: October 2010

2021 Medicare Utilization: 706,554

2023 Work RVU: 0.17
2023 NF PE RVU: 0.65
2023 Fac PE RVU: NA

RUC Recommendation: 0.17

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

72190 **Radiologic examination, pelvis; complete, minimum of 3 views**

Global: XXX **Issue:** X-Ray Exam – Pelvis **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 28 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: October 2017

2021 Medicare Utilization: 54,865

2023 Work RVU: 0.25

2023 NF PE RVU: 1.00

2023 Fac PE RVU: NA

RUC Recommendation: 0.25

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

72191 **Computed tomographic angiography, pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography **Screen:** High Volume Growth1 / CMS Fastest Growing / Codes Reported Together 75% or More-Part1 / CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR

First Identified: February 2008

2021 Medicare Utilization: 2,841

2023 Work RVU: 1.81

2023 NF PE RVU: 7.56

2023 Fac PE RVU: NA

RUC Recommendation: 1.81

Referred to CPT October 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

72192 **Computed tomography, pelvis; without contrast material**

Global: XXX **Issue:** CT Pelvis **Screen:** Codes Reported Together 95% or More / CMS Fastest Growing / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACR

First Identified: October 2008

2021 Medicare Utilization: 171,942

2023 Work RVU: 1.09

2023 NF PE RVU: 2.97

2023 Fac PE RVU: NA

RUC Recommendation: 1.09

Referred to CPT October 2009

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

72193 **Computed tomography, pelvis; with contrast material(s)**

Global: XXX **Issue:** CT Pelvis **Screen:** Codes Reported Together 95% or More / CMS Fastest Growing / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACR **First Identified:** October 2008 **2021 Medicare Utilization:** 34,286

2023 Work RVU: 1.16
2023 NF PE RVU: 5.95
2023 Fac PE RVU: NA

RUC Recommendation: 1.16 **Referred to CPT** October 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72194 **Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Abdomen and Pelvis **Screen:** Codes Reported Together 95% or More / CMS Fastest Growing / CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 44 **Specialty Developing Recommendation:** ACR **First Identified:** February 2008 **2021 Medicare Utilization:** 5,008

2023 Work RVU: 1.22
2023 NF PE RVU: 6.63
2023 Fac PE RVU: NA

RUC Recommendation: 1.22 **Referred to CPT** October 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72195 **Magnetic resonance (eg, proton) imaging, pelvis; without contrast material(s)**

Global: XXX **Issue:** MRI Pelvis **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 80,763

2023 Work RVU: 1.46
2023 NF PE RVU: 5.61
2023 Fac PE RVU: NA

RUC Recommendation: 1.46 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

72196 **Magnetic resonance (eg, proton) imaging, pelvis; with contrast material(s)**

Global: XXX **Issue:** MRI Pelvis **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 2,197

2023 Work RVU: 1.73
2023 NF PE RVU: 6.57
2023 Fac PE RVU: NA

RUC Recommendation: 1.73 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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72197 **Magnetic resonance (eg, proton) imaging, pelvis; without contrast material(s), followed by contrast material(s) and further sequences**

Global: XXX **Issue:** MRI Pelvis **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 249,299

2023 Work RVU: 2.20
2023 NF PE RVU: 8.22
2023 Fac PE RVU: NA

RUC Recommendation: 2.20 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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72200 **Radiologic examination, sacroiliac joints; less than 3 views**

Global: XXX **Issue:** X-Ray Sacrum **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 29 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2016 **2021 Medicare Utilization:** 13,715

2023 Work RVU: 0.17
2023 NF PE RVU: 0.80
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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72202 **Radiologic examination, sacroiliac joints; 3 or more views**

Global: XXX **Issue:** X-Ray Sacrum **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 29 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2016 **2021 Medicare Utilization:** 38,357

2023 Work RVU: 0.23
2023 NF PE RVU: 0.93
2023 Fac PE RVU: NA

RUC Recommendation: 0.26 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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Status Report: CMS Requests and Relativity Assessment Issues

72220 **Radiologic examination, sacrum and coccyx, minimum of 2 views**

Global: XXX **Issue:** X-Ray Sacrum **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 29 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: April 2016

2021 Medicare Utilization: 100,892

2023 Work RVU: 0.17
2023 NF PE RVU: 0.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.20

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

72240 **Myelography, cervical, radiological supervision and interpretation**

Global: XXX **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR

First Identified: October 2012

2021 Medicare Utilization: 356

2023 Work RVU: 0.91
2023 NF PE RVU: 2.46
2023 Fac PE RVU: NA

RUC Recommendation: 0.91

Referred to CPT October 2013
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

72255 **Myelography, thoracic, radiological supervision and interpretation**

Global: XXX **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR

First Identified: October 2013

2021 Medicare Utilization: 90

2023 Work RVU: 0.91
2023 NF PE RVU: 2.59
2023 Fac PE RVU: NA

RUC Recommendation: 0.91

Referred to CPT October 2013
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

72265 **Myelography, lumbosacral, radiological supervision and interpretation**

Global: XXX **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 2,010

2023 Work RVU: 0.83
2023 NF PE RVU: 2.41
2023 Fac PE RVU: NA

RUC Recommendation: 0.83 **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72270 **Myelography, 2 or more regions (eg, lumbar/thoracic, cervical/thoracic, lumbar/cervical, lumbar/thoracic/cervical), radiological supervision and interpretation**

Global: XXX **Issue:** Myelography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** October 2012 **2021 Medicare Utilization:** 361

2023 Work RVU: 1.33
2023 NF PE RVU: 3.53
2023 Fac PE RVU: NA

RUC Recommendation: 1.33 **Referred to CPT** October 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

72275 **Epidurography, radiological supervision and interpretation**

Global: XXX **Issue:** Epidurography **Screen:** Different Performing Specialty from Survey3 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** ASA, AAPM, AAMPR, NASS **First Identified:** October 2009 **2021 Medicare Utilization:** 56,054

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2020 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Oct 2009 and Q&A - May 2010

Status Report: CMS Requests and Relativity Assessment Issues

72291 **Radiological supervision and interpretation, percutaneous vertebroplasty, vertebral augmentation, or sacral augmentation (sacroplasty), including cavity creation, per vertebral body or sacrum; under fluoroscopic guidance**

Global: **Issue:** Percutaneous Vertebroplasty with Radiological S&I **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:**

First Identified: October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

72292 **Radiological supervision and interpretation, percutaneous vertebroplasty, vertebral augmentation, or sacral augmentation (sacroplasty), including cavity creation, per vertebral body or sacrum; under CT guidance**

Global: **Issue:** Percutaneous Vertebroplasty with Radiological S&I **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 06 **Specialty Developing Recommendation:**

First Identified: October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

73000 **Radiologic examination; clavicle, complete**

Global: XXX **Issue:** X-Ray – Clavicle/Shoulder **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 17 **Specialty Developing Recommendation:** ACR, AAOS

First Identified: October 2017 **2021 Medicare Utilization:** 91,121

2023 Work RVU: 0.16
2023 NF PE RVU: 0.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73010 **Radiologic examination; scapula, complete**

Global: XXX **Issue:** X-Ray – Clavicle/Shoulder **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 17 **Specialty Developing Recommendation:** ACR, AAOS

First Identified: October 2017

2021 Medicare Utilization: 42,771

2023 Work RVU: 0.17
2023 NF PE RVU: 0.52
2023 Fac PE RVU: NA

RUC Recommendation: 0.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

73020 **Radiologic examination, shoulder; 1 view**

Global: XXX **Issue:** X-Ray – Clavicle/Shoulder **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 17 **Specialty Developing Recommendation:** ACR, AAOS

First Identified: October 2017

2021 Medicare Utilization: 99,142

2023 Work RVU: 0.15
2023 NF PE RVU: 0.48
2023 Fac PE RVU: NA

RUC Recommendation: 0.15

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

73030 **Radiologic examination, shoulder; complete, minimum of 2 views**

Global: XXX **Issue:** X-Ray – Clavicle/Shoulder **Screen:** Low Value-High Volume / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 17 **Specialty Developing Recommendation:** ACR, AAOS

First Identified: October 2010

2021 Medicare Utilization: 2,525,765

2023 Work RVU: 0.18
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: 0.18

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

73050 **Radiologic examination; acromioclavicular joints, bilateral, with or without weighted distraction**

Global: XXX **Issue:** X-Ray – Clavicle/Shoulder **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 17 **Specialty Developing Recommendation:** ACR, AAOS **First Identified:** October 2017 **2021 Medicare Utilization:** 6,416

2023 Work RVU: 0.18
2023 NF PE RVU: 0.66
2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73060 **Radiologic examination; humerus, minimum of 2 views**

Global: XXX **Issue:** X-Ray Exams **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 303,754

2023 Work RVU: 0.16
2023 NF PE RVU: 0.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73070 **Radiologic examination, elbow; 2 views**

Global: XXX **Issue:** X-Ray Elbow/Forearm **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 30 **Specialty Developing Recommendation:** AAOS, ACR, ASSH **First Identified:** April 2016 **2021 Medicare Utilization:** 192,334

2023 Work RVU: 0.16
2023 NF PE RVU: 0.70
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73080 **Radiologic examination, elbow; complete, minimum of 3 views**

Global: XXX **Issue:** X-Ray Elbow/Forearm **Screen:** Harvard Valued - Utilization over 100,000 / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 30 **Specialty Developing Recommendation:** AAOS, ACR, ASSH **First Identified:** October 2009 **2021 Medicare Utilization:** 372,951

2023 Work RVU: 0.17
2023 NF PE RVU: 0.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73090 **Radiologic examination; forearm, 2 views**

Global: XXX **Issue:** X-Ray Elbow/Forearm **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 30 **Specialty Developing Recommendation:** AAOS, ACR, ASSH **First Identified:** April 2016 **2021 Medicare Utilization:** 209,495

2023 Work RVU: 0.16
2023 NF PE RVU: 0.70
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73100 **Radiologic examination, wrist; 2 views**

Global: XXX **Issue:** X-Ray Wrist **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 32 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 229,151

2023 Work RVU: 0.16
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73110 **Radiologic examination, wrist; complete, minimum of 3 views**

Global: XXX **Issue:** X-Ray Wrist **Screen:** Low Value-High Volume / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 32 **Specialty Developing Recommendation:** ACR

First Identified: October 2010 **2021 Medicare Utilization:** 986,576

2023 Work RVU: 0.17
2023 NF PE RVU: 1.04
2023 Fac PE RVU: NA

RUC Recommendation: 0.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

73120 **Radiologic examination, hand; 2 views**

Global: XXX **Issue:** X-Ray of Hand/Fingers **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 33 **Specialty Developing Recommendation:** ACR

First Identified: July 2015 **2021 Medicare Utilization:** 244,773

2023 Work RVU: 0.16
2023 NF PE RVU: 0.76
2023 Fac PE RVU: NA

RUC Recommendation: 0.16

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

73130 **Radiologic examination, hand; minimum of 3 views**

Global: XXX **Issue:** X-Ray of Hand/Fingers **Screen:** Low Value-High Volume / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 33 **Specialty Developing Recommendation:** ACR

First Identified: October 2010 **2021 Medicare Utilization:** 1,230,447

2023 Work RVU: 0.17
2023 NF PE RVU: 0.92
2023 Fac PE RVU: NA

RUC Recommendation: 0.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

73140 **Radiologic examination, finger(s), minimum of 2 views**

Global: XXX **Issue:** X-Ray of Hand/Fingers **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 33 **Specialty Developing Recommendation:** ACR

First Identified: July 2015

2021 Medicare Utilization: 340,779

2023 Work RVU: 0.13
2023 NF PE RVU: 0.99
2023 Fac PE RVU: NA

RUC Recommendation: 0.13

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

73200 **Computed tomography, upper extremity; without contrast material**

Global: XXX **Issue:** CT Upper Extremity **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 23 **Specialty Developing Recommendation:** ACR

First Identified: October 2008

2021 Medicare Utilization: 127,767

2023 Work RVU: 1.00
2023 NF PE RVU: 3.98
2023 Fac PE RVU: NA

RUC Recommendation: 1.09

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

73201 **Computed tomography, upper extremity; with contrast material(s)**

Global: XXX **Issue:** CT Upper Extremity **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 40 **Specialty Developing Recommendation:** ACR

First Identified: February 2009

2021 Medicare Utilization: 20,132

2023 Work RVU: 1.16
2023 NF PE RVU: 5.04
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

73202 **Computed tomography, upper extremity; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Upper Extremity **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 40 **Specialty Developing Recommendation:** ACR

First Identified: February 2009

2021 Medicare Utilization: 1,750

2023 Work RVU: 1.22
2023 NF PE RVU: 6.49
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

73206 **Computed tomographic angiography, upper extremity, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** May 2013 **2021 Medicare Utilization:** 7,201

2023 Work RVU: 1.81
2023 NF PE RVU: 7.32
2023 Fac PE RVU: NA

RUC Recommendation: Survey with all CTA codes for October 2013.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

73218 **Magnetic resonance (eg, proton) imaging, upper extremity, other than joint; without contrast material(s)**

Global: XXX **Issue:** MRI **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** ACR **First Identified:** October 2008 **2021 Medicare Utilization:** 31,297

2023 Work RVU: 1.35
2023 NF PE RVU: 8.09
2023 Fac PE RVU: NA

RUC Recommendation: CPT Assistant published.

Referred to CPT
Referred to CPT Asst ☑ **Published in CPT Asst:** Feb 2011

Result: Maintain

73221 **Magnetic resonance (eg, proton) imaging, any joint of upper extremity; without contrast material(s)**

Global: XXX **Issue:** MRI **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** October 2008 **2021 Medicare Utilization:** 428,900

2023 Work RVU: 1.35
2023 NF PE RVU: 4.88
2023 Fac PE RVU: NA

RUC Recommendation: 1.35

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

73500 **Radiologic examination, hip, unilateral; 1 view**

Global: **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** CMS-Other - Utilization over 500,000 / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

73501 **Radiologic examination, hip, unilateral, with pelvis when performed; 1 view**

Global: XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:** 225,727

2023 Work RVU: 0.18
2023 NF PE RVU: 0.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73502 **Radiologic examination, hip, unilateral, with pelvis when performed; 2-3 views**

Global: XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:** 2,397,096

2023 Work RVU: 0.22
2023 NF PE RVU: 1.17
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73503 **Radiologic examination, hip, unilateral, with pelvis when performed; minimum of 4 views**

Global: XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:** 47,178

2023 Work RVU: 0.27
2023 NF PE RVU: 1.49
2023 Fac PE RVU: NA

RUC Recommendation: 0.27 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73510 **Radiologic examination, hip, unilateral; complete, minimum of 2 views**

Global: **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Havard Valued - Utilization over 1 Million / Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

73520 **Radiologic examination, hips, bilateral, minimum of 2 views of each hip, including anteroposterior view of pelvis**

Global: **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73521 **Radiologic examination, hips, bilateral, with pelvis when performed; 2 views** **Global:** XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:** 137,912

2023 Work RVU: 0.22
2023 NF PE RVU: 1.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73522 **Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views** **Global:** XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:** 171,162

2023 Work RVU: 0.29
2023 NF PE RVU: 1.30
2023 Fac PE RVU: NA

RUC Recommendation: 0.29 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73523 **Radiologic examination, hips, bilateral, with pelvis when performed; minimum of 5 views** **Global:** XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:** 102,864

2023 Work RVU: 0.31
2023 NF PE RVU: 1.52
2023 Fac PE RVU: NA

RUC Recommendation: 0.31 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73540 **Radiologic examination, pelvis and hips, infant or child, minimum of 2 views** **Global:** **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2014 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

73542 **Radiological examination, sacroiliac joint arthrography, radiological supervision and interpretation** **Global:** **Issue:** Sacroiliac Joint Arthrography **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ASA, AAPM, AAMPR, NASS, ACR, AUR, ISIS, ASNR **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Deleted from CPT

73550 **Radiologic examination, femur, 2 views** **Global:** **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73551 **Radiologic examination, femur; 1 view**

Global: XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: October 2014 **2021 Medicare Utilization:** 30,254

2023 Work RVU: 0.16
2023 NF PE RVU: 0.70
2023 Fac PE RVU: NA

RUC Recommendation: 0.16

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

73552 **Radiologic examination, femur; minimum 2 views**

Global: XXX **Issue:** Radiologic Exam-Hip and Pelvis **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: October 2014 **2021 Medicare Utilization:** 505,931

2023 Work RVU: 0.18
2023 NF PE RVU: 0.87
2023 Fac PE RVU: NA

RUC Recommendation: 0.18

Referred to CPT October 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

73560 **Radiologic examination, knee; 1 or 2 views**

Global: XXX **Issue:** X-Ray Exams **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: October 2010 **2021 Medicare Utilization:** 1,439,460

2023 Work RVU: 0.16
2023 NF PE RVU: 0.85
2023 Fac PE RVU: NA

RUC Recommendation: 0.16

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

73562 **Radiologic examination, knee; 3 views**

Global: XXX **Issue:** X-Ray Exams **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR

First Identified: October 2010 **2021 Medicare Utilization:** 2,216,138

2023 Work RVU: 0.18
2023 NF PE RVU: 1.02
2023 Fac PE RVU: NA

RUC Recommendation: 0.18

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

73564 **Radiologic examination, knee; complete, 4 or more views**

Global: XXX **Issue:** X-Ray Exams **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2010 **2021 Medicare Utilization:** 1,633,314

2023 Work RVU: 0.22
2023 NF PE RVU: 1.16
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73565 **Radiologic examination, knee; both knees, standing, anteroposterior**

Global: XXX **Issue:** X-Ray Exams **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 120,857

2023 Work RVU: 0.16
2023 NF PE RVU: 1.02
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73580 **Radiologic examination, knee, arthrography, radiological supervision and interpretation**

Global: XXX **Issue:** Contrast X-Ray of Knee Joint **Screen:** High Volume Growth1 / CMS Fastest Growing / CPT Assistant Analysis / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 16 **Specialty Developing Recommendation:** ACR **First Identified:** February 2008 **2021 Medicare Utilization:** 17,808

2023 Work RVU: 0.59
2023 NF PE RVU: 3.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.59 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Jun 2012

Status Report: CMS Requests and Relativity Assessment Issues

73590 **Radiologic examination; tibia and fibula, 2 views**

Global: XXX **Issue:** X-Ray Exams **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 446,376

2023 Work RVU: 0.16
2023 NF PE RVU: 0.77
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

73600 **Radiologic examination, ankle; 2 views**

Global: XXX **Issue:** X-Ray Exams **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 17 **Specialty Developing Recommendation:** AAOS, ACR, APMA **First Identified:** April 2013 **2021 Medicare Utilization:** 205,057

2023 Work RVU: 0.16
2023 NF PE RVU: 0.80
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73610 **Radiologic examination, ankle; complete, minimum of 3 views**

Global: XXX **Issue:** Radiologic Examination **Screen:** Havard Valued - Utilization over 1 Million / Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 24 **Specialty Developing Recommendation:** ACR, AAOS, APMA, AOFAS **First Identified:** October 2008 **2021 Medicare Utilization:** 1,141,900

2023 Work RVU: 0.17
2023 NF PE RVU: 0.92
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73620 **Radiologic examination, foot; 2 views**

Global: XXX **Issue:** X-Ray Exam of Foot **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 27 **Specialty Developing Recommendation:** ACR, AAOS, APMA **First Identified:** October 2010 **2021 Medicare Utilization:** 449,205

2023 Work RVU: 0.16
2023 NF PE RVU: 0.67
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73630 **Radiologic examination, foot; complete, minimum of 3 views**

Global: XXX **Issue:** Radiologic Examination **Screen:** Havard Valued - Utilization over 1 Million / Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 24 **Specialty Developing Recommendation:** ACR, AAOS, APMA, AOFAS **First Identified:** October 2008 **2021 Medicare Utilization:** 2,542,826

2023 Work RVU: 0.17
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73650 **Radiologic examination; calcaneus, minimum of 2 views**

Global: XXX **Issue:** X-Ray Heel **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 31 **Specialty Developing Recommendation:** AAOS, ACR, APMA, AOFAS **First Identified:** April 2016 **2021 Medicare Utilization:** 66,700

2023 Work RVU: 0.16
2023 NF PE RVU: 0.68
2023 Fac PE RVU: NA

RUC Recommendation: 0.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73660 **Radiologic examination; toe(s), minimum of 2 views**

Global: XXX **Issue:** X-Ray Toe **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 32 **Specialty Developing Recommendation:** AAOS, ACR, APMA, AOFAS **First Identified:** April 2016 **2021 Medicare Utilization:** 98,154

2023 Work RVU: 0.13
2023 NF PE RVU: 0.73
2023 Fac PE RVU: NA

RUC Recommendation: 0.13 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73700 **Computed tomography, lower extremity; without contrast material**

Global: XXX **Issue:** CT Lower Extremity **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** October 2008 **2021 Medicare Utilization:** 338,121

2023 Work RVU: 1.00
2023 NF PE RVU: 2.96
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73701 **Computed tomography, lower extremity; with contrast material(s)**

Global: XXX **Issue:** CT Lower Extremity **Screen:** High Volume Growth1 / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** February 2009 **2021 Medicare Utilization:** 49,729

2023 Work RVU: 1.16
2023 NF PE RVU: 3.94
2023 Fac PE RVU: NA

RUC Recommendation: 1.16 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73702 **Computed tomography, lower extremity; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Lower Extremity **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** February 2009 **2021 Medicare Utilization:** 4,736

2023 Work RVU: 1.22
2023 NF PE RVU: 4.77
2023 Fac PE RVU: NA

RUC Recommendation: 1.22 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73706 **Computed tomographic angiography, lower extremity, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2008 **2021 Medicare Utilization:** 18,273

2023 Work RVU: 1.90
2023 NF PE RVU: 8.04
2023 Fac PE RVU: NA

RUC Recommendation: Survey for October 2013. Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

73718 **Magnetic resonance (eg, proton) imaging, lower extremity other than joint; without contrast material(s)**

Global: XXX **Issue:** MRI Lower Extremity **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 130,744

2023 Work RVU: 1.35
2023 NF PE RVU: 5.56
2023 Fac PE RVU: NA

RUC Recommendation: 1.35 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

73719 **Magnetic resonance (eg, proton) imaging, lower extremity other than joint; with contrast material(s)**

Global: XXX **Issue:** MRI Lower Extremity **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 996

2023 Work RVU: 1.62
2023 NF PE RVU: 6.50
2023 Fac PE RVU: NA

RUC Recommendation: 1.62 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73720 **Magnetic resonance (eg, proton) imaging, lower extremity other than joint; without contrast material(s), followed by contrast material(s) and further sequences**

Global: XXX **Issue:** MRI Lower Extremity **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 59,489

2023 Work RVU: 2.15
2023 NF PE RVU: 8.28
2023 Fac PE RVU: NA

RUC Recommendation: 2.15 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

73721 **Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material**

Global: XXX **Issue:** MRI of Lower Extremity Joint **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** October 2010 **2021 Medicare Utilization:** 597,704

2023 Work RVU: 1.35
2023 NF PE RVU: 4.87
2023 Fac PE RVU: NA

RUC Recommendation: 1.35 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74000 **Radiologic examination, abdomen; single anteroposterior view**

Global: **Issue:** Abdominal X-Ray **Screen:** Low Value-High Volume / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74010 **Radiologic examination, abdomen; anteroposterior and additional oblique and cone views**

Global: **Issue:** Abdominal X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74018 **Radiologic examination, abdomen; 1 view**

Global: XXX **Issue:** Abdominal X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** February 2016 **2021 Medicare Utilization:** 1,943,803

2023 Work RVU: 0.18

2023 NF PE RVU: 0.70

2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** February 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74019 **Radiologic examination, abdomen; 2 views**

Global: XXX **Issue:** Abdominal X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** February 2016 **2021 Medicare Utilization:** 301,854

2023 Work RVU: 0.23
2023 NF PE RVU: 0.86
2023 Fac PE RVU: NA

RUC Recommendation: 0.23 **Referred to CPT** February 2016 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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74020 **Radiologic examination, abdomen; complete, including decubitus and/or erect views**

Global: **Issue:** Abdominal X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

74021 **Radiologic examination, abdomen; 3 or more views**

Global: XXX **Issue:** Abdominal X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** February 2016 **2021 Medicare Utilization:** 40,490

2023 Work RVU: 0.27
2023 NF PE RVU: 1.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.27 **Referred to CPT** February 2016 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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74022 **Radiologic examination, complete acute abdomen series, including 2 or more views of the abdomen (eg, supine, erect, decubitus), and a single view chest**

Global: XXX **Issue:** Abdominal X-Ray **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 08 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 154,690

2023 Work RVU: 0.32
2023 NF PE RVU: 1.15
2023 Fac PE RVU: NA

RUC Recommendation: 0.32 **Referred to CPT** February 2016 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

74150 **Computed tomography, abdomen; without contrast material**

Global: XXX **Issue:** CT Abdomen **Screen:** Codes Reported Together 95% or More / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ACR

First Identified: February 2008

2021 Medicare Utilization: 62,048

2023 Work RVU: 1.19

2023 NF PE RVU: 2.98

2023 Fac PE RVU: NA

RUC Recommendation: Review PE. 0.35

Referred to CPT October 2009

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

74160 **Computed tomography, abdomen; with contrast material(s)**

Global: XXX **Issue:** CT Abdomen and Pelvis **Screen:** Codes Reported Together 95% or More / MPC List / CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 44 **Specialty Developing Recommendation:** ACR

First Identified: February 2008

2021 Medicare Utilization: 85,997

2023 Work RVU: 1.27

2023 NF PE RVU: 5.96

2023 Fac PE RVU: NA

RUC Recommendation: 0.42

Referred to CPT October 2009

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

74170 **Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further sections**

Global: XXX **Issue:** CT Abdomen **Screen:** Codes Reported Together 95% or More / CMS-Other - Utilization over 500,000 / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 34 **Specialty Developing Recommendation:** ACR

First Identified: February 2008

2021 Medicare Utilization: 98,664

2023 Work RVU: 1.40

2023 NF PE RVU: 6.72

2023 Fac PE RVU: NA

RUC Recommendation: 1.40

Referred to CPT October 2009

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74174 **Computed tomographic angiography, abdomen and pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR

First Identified: **2021 Medicare Utilization:** 326,502

2023 Work RVU: 2.20
2023 NF PE RVU: 9.50
2023 Fac PE RVU: NA

RUC Recommendation: 2.20

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

74175 **Computed tomographic angiography, abdomen, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part1 / CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR

First Identified: October 2008 **2021 Medicare Utilization:** 30,514

2023 Work RVU: 1.82
2023 NF PE RVU: 7.60
2023 Fac PE RVU: NA

RUC Recommendation: 1.82

Referred to CPT October 2010
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

74176 **Computed tomography, abdomen and pelvis; without contrast material**

Global: XXX **Issue:** CT Abdomen/CT Pelvis **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 16 **Specialty Developing Recommendation:** ACR

First Identified: October 2009 **2021 Medicare Utilization:** 1,996,910

2023 Work RVU: 1.74
2023 NF PE RVU: 3.82
2023 Fac PE RVU: NA

RUC Recommendation: 1.74

Referred to CPT October 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

74177 **Computed tomography, abdomen and pelvis; with contrast material(s)** **Global:** XXX **Issue:** CT Abdomen and Pelvis **Screen:** CMS Fastest Growing / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 44 **Specialty Developing Recommendation:** ACR **First Identified:** October 2009 **2021 Medicare Utilization:** 3,314,771

2023 Work RVU: 1.82
2023 NF PE RVU: 7.58
2023 Fac PE RVU: NA

RUC Recommendation: 1.82 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

74178 **Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions** **Global:** XXX **Issue:** CT Abdomen/CT Pelvis **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 16 **Specialty Developing Recommendation:** ACR **First Identified:** October 2009 **2021 Medicare Utilization:** 488,616

2023 Work RVU: 2.01
2023 NF PE RVU: 8.53
2023 Fac PE RVU: NA

RUC Recommendation: 2.01 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

74181 **Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s)** **Global:** XXX **Issue:** MRI of Abdomen **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 104,564

2023 Work RVU: 1.46
2023 NF PE RVU: 4.57
2023 Fac PE RVU: NA

RUC Recommendation: 1.46 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74182 **Magnetic resonance (eg, proton) imaging, abdomen; with contrast material(s)** **Global:** XXX **Issue:** MRI of Abdomen **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 3,787

2023 Work RVU: 1.73
2023 NF PE RVU: 7.63
2023 Fac PE RVU: NA

RUC Recommendation: 1.73 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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74183 **Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s), followed by with contrast material(s) and further sequences** **Global:** XXX **Issue:** MRI of Abdomen **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:** 381,929

2023 Work RVU: 2.20
2023 NF PE RVU: 8.26
2023 Fac PE RVU: NA

RUC Recommendation: 2.20 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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74210 **Radiologic examination, pharynx and/or cervical esophagus, including scout neck radiograph(s) and delayed image(s), when performed, contrast (eg, barium) study** **Global:** XXX **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** October 2016 **2021 Medicare Utilization:** 1,014

2023 Work RVU: 0.59
2023 NF PE RVU: 2.28
2023 Fac PE RVU: NA

RUC Recommendation: 0.59 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

74220 **Radiologic examination, esophagus, including scout chest radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study**

Global: XXX **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** April 2016 **2021 Medicare Utilization:** 101,875

2023 Work RVU: 0.60
2023 NF PE RVU: 2.34
2023 Fac PE RVU: NA

RUC Recommendation: 0.60 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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74221 **Radiologic examination, esophagus, including scout chest radiograph(s) and delayed image(s), when performed; double-contrast (eg, high-density barium and effervescent agent) study**

Global: XXX **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:** 62,697

2023 Work RVU: 0.70
2023 NF PE RVU: 2.61
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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74230 **Radiologic examination, swallowing function, with cineradiography/videoradiography, including scout neck radiograph(s) and delayed image(s), when performed, contrast (eg, barium) study**

Global: XXX **Issue:** X-Ray Esophagus **Screen:** CMS-Other - Utilization over 250,000 / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 300,780

2023 Work RVU: 0.53
2023 NF PE RVU: 3.24
2023 Fac PE RVU: NA

RUC Recommendation: 0.53 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

74240 **Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study**

Global: XXX **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 69,897

2023 Work RVU: 0.80
2023 NF PE RVU: 2.89
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** May 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

74241 **Radiologic examination, gastrointestinal tract, upper; with or without delayed images, with KUB**

Global: **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74245 **Radiologic examination, gastrointestinal tract, upper; with small intestine, includes multiple serial images**

Global: **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74246 **Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (eg, high-density barium and effervescent agent) study, including glucagon, when administered**

Global: XXX **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 51,276

2023 Work RVU: 0.90
2023 NF PE RVU: 3.29
2023 Fac PE RVU: NA

RUC Recommendation: 0.90 **Referred to CPT** May 2018 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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74247 **Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon; with or without delayed images, with KUB**

Global: **Issue:** X-Ray Exam – Upper GI **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Deleted from CPT

74248 **Radiologic small intestine follow-through study, including multiple serial images (list separately in addition to code for primary procedure for upper gi radiologic examination)**

Global: ZZZ **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:** 16,404

2023 Work RVU: 0.70
2023 NF PE RVU: 1.76
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** February 2019-EC **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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Status Report: CMS Requests and Relativity Assessment Issues

74249 **Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon; with small intestine follow-through**

Global: **Issue:** X-Ray Exam – Upper GI **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 12 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74250 **Radiologic examination, small intestine, including multiple serial images and scout abdominal radiograph(s), when performed; single-contrast (eg, barium) study**

Global: XXX **Issue:** Lower Gastroinetstinal Tract Imaging **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 11 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 44,087

2023 Work RVU: 0.81
2023 NF PE RVU: 2.86
2023 Fac PE RVU: NA

RUC Recommendation: 0.81 **Referred to CPT** May 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

74251 **Radiologic examination, small intestine, including multiple serial images and scout abdominal radiograph(s), when performed; double-contrast (eg, high-density barium and air via enteroclysis tube) study, including glucagon, when administered**

Global: XXX **Issue:** Lower Gastroinetstinal Tract Imaging **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 11 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 351

2023 Work RVU: 1.17
2023 NF PE RVU: 9.99
2023 Fac PE RVU: NA

RUC Recommendation: 1.17 **Referred to CPT** May 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74260 **Duodenography, hypotonic**

Global: **Issue:** X-Ray Exam – Small Intestine/Colon **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 11 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74270 **Radiologic examination, colon, including scout abdominal radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study**

Global: XXX **Issue:** Lower Gastroinetstinal Tract Imaging **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 11 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 21,188

2023 Work RVU: 1.04
2023 NF PE RVU: 3.58
2023 Fac PE RVU: NA

RUC Recommendation: 1.04 **Referred to CPT** May 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

74280 **Radiologic examination, colon, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (eg, high density barium and air) study, including glucagon, when administered**

Global: XXX **Issue:** Lower Gastroinetstinal Tract Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 11 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:** 5,661

2023 Work RVU: 1.26
2023 NF PE RVU: 5.38
2023 Fac PE RVU: NA

RUC Recommendation: 1.26 **Referred to CPT** May 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74300 **Cholangiography and/or pancreatography; intraoperative, radiological supervision and interpretation**

Global: XXX **Issue:** X-Rays at Surgery Add-On **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ACR, SAGES **First Identified:** October 2018 **2021 Medicare Utilization:** 22,738

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.32 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

74301 **Cholangiography and/or pancreatography; additional set intraoperative, radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** X-Rays at Surgery Add-On **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 19 **Specialty Developing Recommendation:** ACR, ACS, SAGES, SIR **First Identified:** October 2018 **2021 Medicare Utilization:** 72

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

74305 **Deleted from CPT**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74320 **Cholangiography, percutaneous, transhepatic, radiological supervision and interpretation**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74327 **Postoperative biliary duct calculus removal, percutaneous via T-tube tract, basket, or snare (eg, Burhenne technique), radiological supervision and interpretation**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** February 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74328 **Endoscopic catheterization of the biliary ductal system, radiological supervision and interpretation**

Global: XXX **Issue:** X-Rays at Surgery Add-On **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ACR, SAGES **First Identified:** October 2018 **2021 Medicare Utilization:** 61,638

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.47 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74329 **Endoscopic catheterization of the pancreatic ductal system, radiological supervision and interpretation**

Global: XXX **Issue:** X-Rays at Surgery Add-On **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ACR, SAGES **First Identified:** October 2018 **2021 Medicare Utilization:** 2,577

2023 Work RVU: 0.00 **2023 NF PE RVU:** 0.00 **2023 Fac PE RVU:** NA

RUC Recommendation: 0.50 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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74330 **Combined endoscopic catheterization of the biliary and pancreatic ductal systems, radiological supervision and interpretation**

Global: XXX **Issue:** X-Rays at Surgery Add-On **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ACR, SAGES **First Identified:** October 2018 **2021 Medicare Utilization:** 11,174

2023 Work RVU: 0.00 **2023 NF PE RVU:** 0.00 **2023 Fac PE RVU:** NA

RUC Recommendation: 0.70 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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74400 **Urography (pyelography), intravenous, with or without kub, with or without tomography**

Global: XXX **Issue:** Contrast X-Ray Exams **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 31 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:** 3,315

2023 Work RVU: 0.49 **2023 NF PE RVU:** 3.55 **2023 Fac PE RVU:** NA

RUC Recommendation: 0.49 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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74420 **Urography, retrograde, with or without kub**

Global: XXX **Issue:** X-Ray Urinary Tract **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 26 **Specialty Developing Recommendation:** ACR, AUA **First Identified:** April 2016 **2021 Medicare Utilization:** 149,626

2023 Work RVU: 0.52 **2023 NF PE RVU:** 1.76 **2023 Fac PE RVU:** NA

RUC Recommendation: 0.52 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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Status Report: CMS Requests and Relativity Assessment Issues

74425 **Urography, antegrade, radiological supervision and interpretation**

Global: XXX **Issue:** Urography **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 18 **Specialty Developing Recommendation:** ACR, AUA, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 1,469

2023 Work RVU: 0.51
2023 NF PE RVU: 3.58
2023 Fac PE RVU: NA

RUC Recommendation: 0.51, editorially revised **Referred to CPT** September 2019 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

74475 **Introduction of intracatheter or catheter into renal pelvis for drainage and/or injection, percutaneous, radiological supervision and interpretation**

Global: **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

74480 **Introduction of ureteral catheter or stent into ureter through renal pelvis for drainage and/or injection, percutaneous, radiological supervision and interpretation**

Global: **Issue:** Genitourinary Catheter Procedures **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 09 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

74485 **Dilation of ureter(s) or urethra, radiological supervision and interpretation** **Global:** XXX **Issue:** Dilation of Urinary Tract **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** September 2017 **2021 Medicare Utilization:** 1,316

2023 Work RVU: 0.83
2023 NF PE RVU: 2.70
2023 Fac PE RVU: NA

RUC Recommendation: 0.83 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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75561 **Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences;** **Global:** XXX **Issue:** **Screen:** High Volume Growth7 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** October 2020 **2021 Medicare Utilization:** 36,144

2023 Work RVU: 2.60
2023 NF PE RVU: 8.65
2023 Fac PE RVU: NA

RUC Recommendation: Maintain **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Remove from Screen

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75571 **Computed tomography, heart, without contrast material, with quantitative evaluation of coronary calcium** **Global:** XXX **Issue:** RAW **Screen:** High Volume Growth8 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, SCCT **First Identified:** April 2022 **2021 Medicare Utilization:** 48,132

2023 Work RVU: 0.58
2023 NF PE RVU: 2.46
2023 Fac PE RVU: NA

RUC Recommendation: Maintain **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

75572 **Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology (including 3d image postprocessing, assessment of cardiac function, and evaluation of venous structures, if performed)**

Global: XXX **Issue:** **Screen:** High Volume Growth7 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** October 2020 **2021 Medicare Utilization:** 37,654

2023 Work RVU: 1.75
2023 NF PE RVU: 5.16
2023 Fac PE RVU: NA

RUC Recommendation: Maintain **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

75574 **Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3d image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed)**

Global: XXX **Issue:** **Screen:** CMS Request - Final Rule for 2013 / High Volume Growth7 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** ACR, SIR, ACC **First Identified:** May 2013 **2021 Medicare Utilization:** 110,974

2023 Work RVU: 2.40
2023 NF PE RVU: 7.38
2023 Fac PE RVU: NA

RUC Recommendation: Maintain **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

75625 **Aortography, abdominal, by serialography, radiological supervision and interpretation**

Global: XXX **Issue:** Abdominal Aortography **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 19 **Specialty Developing Recommendation:** ACC, SCAI, SIR, SVS **First Identified:** October 2017 **2021 Medicare Utilization:** 77,919

2023 Work RVU: 1.44
2023 NF PE RVU: 2.14
2023 Fac PE RVU: NA

RUC Recommendation: 1.75 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75630 **Aortography, abdominal plus bilateral iliofemoral lower extremity, catheter, by serialography, radiological supervision and interpretation**

Global: XXX **Issue:** Abdominal Aortography **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 19 **Specialty Developing Recommendation:** ACC, SCAI, SIR, SVS **First Identified:** October 2017 **2021 Medicare Utilization:** 19,887

2023 Work RVU: 2.00
2023 NF PE RVU: 2.48
2023 Fac PE RVU: NA

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

75635 **Computed tomographic angiography, abdominal aorta and bilateral iliofemoral lower extremity runoff, with contrast material(s), including noncontrast images, if performed, and image postprocessing**

Global: XXX **Issue:** CT Angiography of Abdominal Arteries **Screen:** High Volume Growth1 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 34 **Specialty Developing Recommendation:** ACR **First Identified:** February 2008 **2021 Medicare Utilization:** 105,000

2023 Work RVU: 2.40
2023 NF PE RVU: 10.17
2023 Fac PE RVU: NA

RUC Recommendation: 2.40 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

75650 **Angiography, carotid, cervical, bilateral, radiological supervision and interpretation**

Global: **Issue:** Carotid Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC, ACR, ASNR, AUR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75671 **Angiography, carotid, cerebral, bilateral, radiological supervision and interpretation** **Global:** **Issue:** Carotid Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** AANS/CNS, ACC, ACR, ASNR, AUR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75680 **Angiography, carotid, cervical, bilateral, radiological supervision and interpretation** **Global:** **Issue:** Carotid Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** AANS/CNS, ACC, ACR, ASNR, AUR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75710 **Angiography, extremity, unilateral, radiological supervision and interpretation** **Global:** XXX **Issue:** Angiography of Extremities **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** No

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** ACR, ACC, RPA, SCAI, SIR, SVS **First Identified:** July 2015 **2021 Medicare Utilization:** 132,977

2023 Work RVU: 1.75
2023 NF PE RVU: 2.51
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant and review after 2 years of data after publication available. 1.75 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2021

Status Report: CMS Requests and Relativity Assessment Issues

75716 **Angiography, extremity, bilateral, radiological supervision and interpretation** **Global:** XXX **Issue:** Angiography of Extremities **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACC, RPA, SCAI, SIR, SVS **First Identified:** July 2015 **2021 Medicare Utilization:** 57,043

2023 Work RVU: 1.97
2023 NF PE RVU: 2.67
2023 Fac PE RVU: NA

RUC Recommendation: 1.97 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

75722 **Angiography, renal, unilateral, selective (including flush aortogram), radiological supervision and interpretation** **Global:** **Issue:** Renal Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC, ACR, ASNR, AUR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75724 **Angiography, renal, bilateral, selective (including flush aortogram), radiological supervision and interpretation** **Global:** **Issue:** Renal Angiography **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC, ACR, ASNR, AUR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75726 **Angiography, visceral, selective or supraselective (with or without flush aortogram), radiological supervision and interpretation**

Global: XXX **Issue:** Angiography **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 20 **Specialty Developing Recommendation:** SCAI, SIR, SVS **First Identified:** October 2017 **2021 Medicare Utilization:** 38,496

2023 Work RVU: 2.05
2023 NF PE RVU: 2.89
2023 Fac PE RVU: NA

RUC Recommendation: 2.05 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

75774 **Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Angiography **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 20 **Specialty Developing Recommendation:** SCAI, SIR, SVS **First Identified:** October 2017 **2021 Medicare Utilization:** 73,664

2023 Work RVU: 1.01
2023 NF PE RVU: 1.81
2023 Fac PE RVU: NA

RUC Recommendation: 1.01 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

75790 **Deleted from CPT**

Global: **Issue:** Arteriovenous Shunt Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 9 **Specialty Developing Recommendation:** SVS, SIR, ACR **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75791 **Angiography, arteriovenous shunt (eg, dialysis patient fistula/graft), complete evaluation of dialysis access, including fluoroscopy, image documentation and report (includes injections of contrast and all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava), radiological supervision and interpretation**

Global: **Issue:** Dialysis Circuit -1 **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 14 **Specialty Developing Recommendation:** ACR, RPA, SIR, SVS **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75820 **Venography, extremity, unilateral, radiological supervision and interpretation** **Global:** XXX **Issue:** Venography **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** January 2019 **2021 Medicare Utilization:** 21,725

2023 Work RVU: 1.05
2023 NF PE RVU: 2.13
2023 Fac PE RVU: NA

RUC Recommendation: 1.05 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

75822 **Venography, extremity, bilateral, radiological supervision and interpretation** **Global:** XXX **Issue:** Venography **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** October 2019 **2021 Medicare Utilization:** 10,013

2023 Work RVU: 1.48
2023 NF PE RVU: 2.37
2023 Fac PE RVU: NA

RUC Recommendation: 1.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75885 **Percutaneous transhepatic portography with hemodynamic evaluation, radiological supervision and interpretation**

Global: XXX **Issue:** Interventional Radiology Procedures **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 21 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** NA **2021 Medicare Utilization:** 276

2023 Work RVU: 1.44
2023 NF PE RVU: 2.53
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

75887 **Percutaneous transhepatic portography without hemodynamic evaluation, radiological supervision and interpretation**

Global: XXX **Issue:** Interventional Radiology Procedures **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 21 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** NA **2021 Medicare Utilization:** 615

2023 Work RVU: 1.44
2023 NF PE RVU: 2.59
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

75894 **Transcatheter therapy, embolization, any method, radiological supervision and interpretation**

Global: XXX **Issue:** Transcatheter Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AANS, ACR, CNS **First Identified:** February 2010 **2021 Medicare Utilization:** 10,086

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT to create a code bundling solution. **Referred to CPT** May 2023 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75896 **Transcatheter therapy, infusion, other than for thrombolysis, radiological supervision and interpretation**

Global: **Issue:** Intracranial Endovascular Intervention **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 09 **Specialty Developing Recommendation:** AANS/CNS, ACR, ASNR, SCAI, SIR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 February 2015 May 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75898 **Angiography through existing catheter for follow-up study for transcatheter therapy, embolization or infusion, other than for thrombolysis**

Global: XXX **Issue:** Intracranial Endovascular Intervention **Screen:** Codes Reported Together 75% or More-Part1 / CPT Assistant Analysis / Code Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AANS, ACR, CNS **First Identified:** February 2010 **2021 Medicare Utilization:** 13,562

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT for code bundling solution **Referred to CPT** May 2023 February 2014 February 2015 **Result:** Contractor Price

Referred to CPT Asst ☑ **Published in CPT Asst:** September 2019

75940 **Percutaneous placement of IVC filter, radiological supervision and interpretation**

Global: **Issue:** Major Vein Revision **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75945 **Intravascular ultrasound (non-coronary vessel), radiological supervision and interpretation; initial vessel**

Global: **Issue:** Intravascular Ultrasound **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 07 **Specialty Developing Recommendation:** ACC,SCAI, SIR, SVS **First Identified:** July 2014 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75946 **Intravascular ultrasound (non-coronary vessel), radiological supervision and interpretation; each additional non-coronary vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Intravascular Ultrasound **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 07 **Specialty Developing Recommendation:** ACC,SCAI, SIR, SVS **First Identified:** July 2014 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75952 **Endovascular repair of infrarenal abdominal aortic aneurysm or dissection, radiological supervision and interpretation**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75953 **Placement of proximal or distal extension prosthesis for endovascular repair of infrarenal aortic or iliac artery aneurysm, pseudoaneurysm, or dissection, radiological supervision and interpretation**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75954 **Endovascular repair of iliac artery aneurysm, pseudoaneurysm, arteriovenous malformation, or trauma, using ilio-iliac tube endoprosthesis, radiological supervision and interpretation**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75960 **Transcatheter introduction of intravascular stent(s) (except coronary, carotid, vertebral, iliac, and lower extremity artery), percutaneous and/or open, radiological supervision and interpretation, each vessel**

Global: **Issue:** RAW **Screen:** High Volume Growth1 / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 27 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75961 **Transcatheter retrieval, percutaneous, of intravascular foreign body (eg, fractured venous or arterial catheter), radiological supervision and interpretation**

Global: **Issue:** Transcatheter Procedures **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75962 **Transluminal balloon angioplasty, peripheral artery other than renal, or other visceral artery, iliac or lower extremity, radiological supervision and interpretation**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** High Volume Growth1 / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** April 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75964 **Transluminal balloon angioplasty, each additional peripheral artery other than renal or other visceral artery, iliac or lower extremity, radiological supervision and interpretation (List separately in addition to code for primary procedure)**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75966 **Transluminal balloon angioplasty, renal or other visceral artery, radiological supervision and interpretation**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** January 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75968 **Transluminal balloon angioplasty, each additional visceral artery, radiological supervision and interpretation (List separately in addition to code for primary procedure)**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** January 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75978 **Transluminal balloon angioplasty, venous (eg, subclavian stenosis), radiological supervision and interpretation**

Global: **Issue:** Open and Percutaneous Transluminal Angioplasty **Screen:** CMS-Other - Utilization over 250,000 / CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part3 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 15 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75980 **Percutaneous transhepatic biliary drainage with contrast monitoring, radiological supervision and interpretation**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75982 **Percutaneous placement of drainage catheter for combined internal and external biliary drainage or of a drainage stent for internal biliary drainage in patients with an inoperable mechanical biliary obstruction, radiological supervision and interpretation**

Global: **Issue:** Percutaneous Biliary Procedures Bundling **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 06 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

75984 **Change of percutaneous tube or drainage catheter with contrast monitoring (eg, genitourinary system, abscess), radiological supervision and interpretation**

Global: XXX **Issue:** Introduction of Catheter or Stent **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 17 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 19,778

2023 Work RVU: 0.83
2023 NF PE RVU: 2.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.83 **Referred to CPT** RAW will assess Oct 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75992 **Deleted from CPT** **Global:** **Issue:** Transluminal Arthrectomy **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

75993 **Deleted from CPT** **Global:** **Issue:** Transluminal Arthrectomy **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

75994 **Revised to Category III** **Global:** **Issue:** Transluminal Arthrectomy **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

75995 **Revised to Category III** **Global:** **Issue:** Transluminal Arthrectomy **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

75996 **Revised to Category III** **Global:** **Issue:** Transluminal Arthrectomy **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 57 **Specialty Developing Recommendation:** SIR, ACR, SVS **First Identified:** April 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

76000 **Fluoroscopy (separate procedure), up to 1 hour physician or other qualified health care professional time** **Global:** XXX **Issue:** Fluoroscopy **Screen:** Low Value-Billed in Multiple Units / CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 27 **Specialty Developing Recommendation:** ACR, APMA **First Identified:** October 2010 **2021 Medicare Utilization:** 102,019

2023 Work RVU: 0.30
2023 NF PE RVU: 0.95
2023 Fac PE RVU: NA

RUC Recommendation: 0.30 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

76001 **Fluoroscopy, physician or other qualified health care professional time more than 1 hour, assisting a nonradiologic physician or other qualified health care professional (eg, nephrostolithotomy, ERCP, bronchoscopy, transbronchial biopsy)** **Global:** **Issue:** Fluoroscopy **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 27 **Specialty Developing Recommendation:** ACR **First Identified:** October 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2017 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76098 **Radiological examination, surgical specimen** **Global:** XXX **Issue:** X-Ray Exam Specimen **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 21 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 69,462

2023 Work RVU: 0.31
2023 NF PE RVU: 0.92
2023 Fac PE RVU: NA

RUC Recommendation: 0.31 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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76100 **Radiologic examination, single plane body section (eg, tomography), other than with urography** **Global:** XXX **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ACR, ISIS **First Identified:** April 2009 **2021 Medicare Utilization:** 6,850

2023 Work RVU: 0.58
2023 NF PE RVU: 2.07
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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76101 **Radiologic examination, complex motion (ie, hypercycloidal) body section (eg, mastoid polytomography), other than with urography; unilateral** **Global:** XXX **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ACR, ISIS **First Identified:** April 2009 **2021 Medicare Utilization:** 1

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: New PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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76102 **Radiologic examination, complex motion (ie, hypercycloidal) body section (eg, mastoid polytomography), other than with urography; bilateral** **Global:** XXX **Issue:** Fluroscopy **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 27 **Specialty Developing Recommendation:** ACR, ISIS **First Identified:** April 2009 **2021 Medicare Utilization:** 2,793

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: New PE inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

76376 **3d rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; not requiring image postprocessing on an independent workstation**

Global: XXX **Issue:** 3D Rendering **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 23 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** April 2017 **2021 Medicare Utilization:** 279,233

2023 Work RVU: 0.20
2023 NF PE RVU: 0.50
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76377 **3d rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; requiring image postprocessing on an independent workstation**

Global: XXX **Issue:** 3D Rendering with Interpretation and Report **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASNR **First Identified:** July 2019 **2021 Medicare Utilization:** 172,788

2023 Work RVU: 0.79
2023 NF PE RVU: 1.43
2023 Fac PE RVU: NA

RUC Recommendation: 0.79 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76510 **Ophthalmic ultrasound, diagnostic; b-scan and quantitative a-scan performed during the same patient encounter**

Global: XXX **Issue:** Opthalmic Ultrasound **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 23 **Specialty Developing Recommendation:** AAO, ASRS, AOA (optometry) **First Identified:** April 2016 **2021 Medicare Utilization:** 12,903

2023 Work RVU: 0.70
2023 NF PE RVU: 1.34
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76511 **Ophthalmic ultrasound, diagnostic; quantitative a-scan only**

Global: XXX **Issue:** Opthalmic Ultrasound **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 23 **Specialty Developing Recommendation:** AAO, ASRS, AOA (optometry) **First Identified:** April 2016 **2021 Medicare Utilization:** 3,771

2023 Work RVU: 0.64
2023 NF PE RVU: 1.04
2023 Fac PE RVU: NA

RUC Recommendation: 0.64 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

76512 **Ophthalmic ultrasound, diagnostic; b-scan (with or without superimposed non-quantitative a-scan)**

Global: XXX **Issue:** Opthalmic Ultrasound **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 23 **Specialty Developing Recommendation:** AAO, ASRS, AOA (optometry) **First Identified:** July 2015 **2021 Medicare Utilization:** 209,882

2023 Work RVU: 0.56
2023 NF PE RVU: 0.85
2023 Fac PE RVU: NA

RUC Recommendation: 0.56 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

76513 **Ophthalmic ultrasound, diagnostic; anterior segment ultrasound, immersion (water bath) b-scan or high resolution biomicroscopy, unilateral or bilateral**

Global: XXX **Issue:** Ophthalmic Ultrasound Anterior Segment **Screen:** High Volume Growth1 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 17 **Specialty Developing Recommendation:** AAO, AOA (optometric), ASCRS **First Identified:** February 2008 **2021 Medicare Utilization:** 15,878

2023 Work RVU: 0.60
2023 NF PE RVU: 1.62
2023 Fac PE RVU: NA

RUC Recommendation: 0.60 and CPT Assistant article published **Referred to CPT** September 2019 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Apr 2013

Status Report: CMS Requests and Relativity Assessment Issues

76514 **Ophthalmic ultrasound, diagnostic; corneal pachymetry, unilateral or bilateral (determination of corneal thickness)**

Global: XXX **Issue:** Echo Exam of Eye Thickness **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 12 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** April 2017 **2021 Medicare Utilization:** 438,672

2023 Work RVU: 0.14
2023 NF PE RVU: 0.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76516 **Ophthalmic biometry by ultrasound echography, a-scan;**

Global: XXX **Issue:** Opthalmic Biometry **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 36 **Specialty Developing Recommendation:** AAO, AOA (optometry) **First Identified:** April 2016 **2021 Medicare Utilization:** 2,273

2023 Work RVU: 0.40
2023 NF PE RVU: 0.97
2023 Fac PE RVU: NA

RUC Recommendation: 0.40 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

76519 **Ophthalmic biometry by ultrasound echography, a-scan; with intraocular lens power calculation**

Global: XXX **Issue:** Opthalmic Biometry **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 36 **Specialty Developing Recommendation:** AAO, AOA (optometry) **First Identified:** July 2015 **2021 Medicare Utilization:** 137,533

2023 Work RVU: 0.54
2023 NF PE RVU: 1.45
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76536 **Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation**

Global: XXX **Issue:** Soft Tissue Ultrasound **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** ACR, ASNR, TES, AACE **First Identified:** October 2008 **2021 Medicare Utilization:** 874,305

2023 Work RVU: 0.56
2023 NF PE RVU: 2.74
2023 Fac PE RVU: NA

RUC Recommendation: 0.56 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76604 **Ultrasound, chest (includes mediastinum), real time with image documentation** **Global:** XXX **Issue:** Ultrasound Exam - Chest **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 24 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 103,362

2023 Work RVU: 0.59
2023 NF PE RVU: 1.06
2023 Fac PE RVU: NA

RUC Recommendation: 0.59 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

76641 **Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; complete** **Global:** XXX **Issue:** Breast Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** January 2014 **2021 Medicare Utilization:** 685,993

2023 Work RVU: 0.73
2023 NF PE RVU: 2.33
2023 Fac PE RVU: NA

RUC Recommendation: 0.73 **Referred to CPT** October 2013 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

76642 **Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; limited** **Global:** XXX **Issue:** Breast Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** January 2014 **2021 Medicare Utilization:** 736,738

2023 Work RVU: 0.68
2023 NF PE RVU: 1.83
2023 Fac PE RVU: NA

RUC Recommendation: 0.68 **Referred to CPT** October 2013 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

76645 **Ultrasound, breast(s) (unilateral or bilateral), real time with image documentation** **Global:** **Issue:** Breast Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76700 **Ultrasound, abdominal, real time with image documentation; complete** **Global:** XXX **Issue:** Ultrasound **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** October 2010 **2021 Medicare Utilization:** 765,508

2023 Work RVU: 0.81
2023 NF PE RVU: 2.65
2023 Fac PE RVU: NA

RUC Recommendation: 0.81 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76705 **Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)** **Global:** XXX **Issue:** Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 13 **Specialty Developing Recommendation:** ACR, ASBS **First Identified:** April 2011 **2021 Medicare Utilization:** 994,878

2023 Work RVU: 0.59
2023 NF PE RVU: 2.01
2023 Fac PE RVU: NA

RUC Recommendation: 0.59 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76706 **Ultrasound, abdominal aorta, real time with image documentation, screening study for abdominal aortic aneurysm (aaa)** **Global:** XXX **Issue:** Abdominal Aorta Ultrasound Screening **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** May 2015 **2021 Medicare Utilization:** 140,849

2023 Work RVU: 0.55
2023 NF PE RVU: 2.61
2023 Fac PE RVU: NA

RUC Recommendation: 0.55 **Referred to CPT** May 2015 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2017

76770 **Ultrasound, retroperitoneal (eg, renal, aorta, nodes), real time with image documentation; complete** **Global:** XXX **Issue:** Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:** 1,216,019

2023 Work RVU: 0.74
2023 NF PE RVU: 2.48
2023 Fac PE RVU: NA

RUC Recommendation: 0.74 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76775 **Ultrasound, retroperitoneal (eg, renal, aorta, nodes), real time with image documentation; limited**

Global: XXX **Issue:** Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:** 448,875

2023 Work RVU: 0.58
2023 NF PE RVU: 1.14
2023 Fac PE RVU: NA

RUC Recommendation: 0.58 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76819 **Fetal biophysical profile; without non-stress testing**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 10,377

2023 Work RVU: 0.77
2023 NF PE RVU: 1.72
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

76830 **Ultrasound, transvaginal**

Global: XXX **Issue:** Transvaginal and Transrectal Ultrasound **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 44 **Specialty Developing Recommendation:** ACOG, ACR, AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 386,332

2023 Work RVU: 0.69
2023 NF PE RVU: 2.87
2023 Fac PE RVU: NA

RUC Recommendation: 0.69 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76856 **Ultrasound, pelvic (nonobstetric), real time with image documentation; complete**

Global: XXX **Issue:** Ultrasound **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** April 2011 **2021 Medicare Utilization:** 369,449

2023 Work RVU: 0.69
2023 NF PE RVU: 2.44
2023 Fac PE RVU: NA

RUC Recommendation: 0.69 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76857 **Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)**

Global: XXX **Issue:** Ultrasound **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 13 **Specialty Developing Recommendation:** ACR **First Identified:** April 2013 **2021 Medicare Utilization:** 190,635

2023 Work RVU: 0.50
2023 NF PE RVU: 0.93
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

76870 **Ultrasound, scrotum and contents**

Global: XXX **Issue:** Ultrasound Exam - Scrotum **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 28 **Specialty Developing Recommendation:** ACR, AUA **First Identified:** April 2016 **2021 Medicare Utilization:** 130,406

2023 Work RVU: 0.64
2023 NF PE RVU: 2.35
2023 Fac PE RVU: NA

RUC Recommendation: 0.64 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76872 **Ultrasound, transrectal;**

Global: XXX **Issue:** Transvaginal and Transrectal Ultrasound **Screen:** CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ACOG, ACR, AUA **First Identified:** September 2011 **2021 Medicare Utilization:** 197,470

2023 Work RVU: 0.69
2023 NF PE RVU: 5.30
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT. 0.69 **Referred to CPT** May 2023 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76880 **Deleted from CPT**

Global: **Issue:** Lower Extremity Ultrasound **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 26 **Specialty Developing Recommendation:** APMA, ACR **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

76881 **Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation**

Global: XXX **Issue:** Neuromuscular Ultrasound (PE Only) **Screen:** CMS Fastest Growing / New Technology/New Services / CMS Request-Final Rule for 2023 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 19 **Specialty Developing Recommendation:** AAN, AANEM, AAPM&R, ACR, ACRh, APMA **First Identified:** April 2010 **2021 Medicare Utilization:** 181,541

2023 Work RVU: 0.90
2023 NF PE RVU: 0.66
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 0.90 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Clinical Examples of Radiology Winter 2011; Apr 2016

76882 **Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation**

Global: XXX **Issue:** Neuromuscular Ultrasound (PE Only) **Screen:** CMS Fastest Growing / New Technology/New Services / CMS Request-Final Rule for 2023 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 19 **Specialty Developing Recommendation:** AAN, AANEM, AAPM&R, ACR, ACRh, APMA **First Identified:** April 2010 **2021 Medicare Utilization:** 279,657

2023 Work RVU: 0.69
2023 NF PE RVU: 0.52
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 0.69 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Clinical Examples of Radiology Summer and Winter 2011; Apr 2016

Status Report: CMS Requests and Relativity Assessment Issues

76883 **Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity**

Global: XXX **Issue:** Neuromuscular Ultrasound (PE Only) **Screen:** New Technology/New Services / CMS Request-Final Rule for 2023 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 19 **Specialty Developing Recommendation:** AAN, AANEM, AAPM&R, ACR, ACRh, APMA **First Identified:** October 2021 **2021 Medicare Utilization:**

2023 Work RVU: 1.21
2023 NF PE RVU: 0.87
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 1.21 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

76930 **Ultrasonic guidance for pericardiocentesis, imaging supervision and interpretation**

Global: **Issue:** Pericardiocentesis and Pericardial Drainage **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 04 **Specialty Developing Recommendation:** ACC **First Identified:** July 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

76932 **Ultrasonic guidance for endomyocardial biopsy, imaging supervision and interpretation**

Global: YYY **Issue:** Ultrasound Guidance **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 34 **Specialty Developing Recommendation:** ACC **First Identified:** July 2013 **2021 Medicare Utilization:** 1,031

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.67 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76936 **Ultrasound guided compression repair of arterial pseudoaneurysm or arteriovenous fistulae (includes diagnostic ultrasound evaluation, compression of lesion and imaging)**

Global: XXX **Issue:** RAW **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:**

First Identified: July 2013

2021 Medicare Utilization: 593

2023 Work RVU: 1.99
2023 NF PE RVU: 5.51
2023 Fac PE RVU: NA

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

76937 **Ultrasound guidance for vascular access requiring ultrasound evaluation of potential access sites, documentation of selected vessel patency, concurrent realtime ultrasound visualization of vascular needle entry, with permanent recording and reporting (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Ultrasound Guidance for Vascular Access **Screen:** Identified in RUC review of other services **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 07 **Specialty Developing Recommendation:** ACR, SIR, SVS

First Identified: January 2018

2021 Medicare Utilization: 642,405

2023 Work RVU: 0.30
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: 0.30

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

76940 **Ultrasound guidance for, and monitoring of, parenchymal tissue ablation**

Global: YYY **Issue:** Ultrasound Guidance **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 29 **Specialty Developing Recommendation:** ACS, ACR, SIR

First Identified: July 2013

2021 Medicare Utilization: 1,199

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 2.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

76942 **Ultrasonic guidance for needle placement (eg, biopsy, aspiration, injection, localization device), imaging supervision and interpretation**

Global: XXX **Issue:** Somatic Nerve Injections **Screen:** CMS-Other - Utilization over 500,000 / CMS Request - Final Rule for 2014 / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, ACR, SIR, SIS **First Identified:** April 2011 **2021 Medicare Utilization:** 1,121,629

2023 Work RVU: 0.67
2023 NF PE RVU: 1.02
2023 Fac PE RVU: NA

RUC Recommendation: 0.67 **Referred to CPT** May 2021 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

76948 **Ultrasonic guidance for aspiration of ova, imaging supervision and interpretation**

Global: XXX **Issue:** Echo Guidance for Ova Aspiration **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 25 **Specialty Developing Recommendation:** ACOG **First Identified:** July 2013 **2021 Medicare Utilization:** 8

2023 Work RVU: 0.67
2023 NF PE RVU: 1.72
2023 Fac PE RVU: NA

RUC Recommendation: 0.85 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

76950 **Ultrasonic guidance for placement of radiation therapy fields**

Global: **Issue:** Ultrasound Guidance **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 34 **Specialty Developing Recommendation:** **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

76965 **Ultrasonic guidance for interstitial radioelement application** **Global:** XXX **Issue:** Ultrasound Guidance **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** NO INTERESET **First Identified:** July 2013 **2021 Medicare Utilization:** 4,906

2023 Work RVU: 1.34
2023 NF PE RVU: 1.40
2023 Fac PE RVU: NA

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

76970 **Ultrasound study follow-up (specify)** **Global:** **Issue:** IMRT with Ultrasound Guidance **Screen:** High Volume Growth1 / CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 17 **Specialty Developing Recommendation:** ACS, ACR, AACE **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2020 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

76998 **Ultrasonic guidance, intraoperative** **Global:** XXX **Issue:** Intraoperative Ultrasound Services **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 05 **Specialty Developing Recommendation:** AATS, ACC, ACS, ASBrS, STS **First Identified:** January 2019 **2021 Medicare Utilization:** 28,257

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** May 2022 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77001 **Fluoroscopic guidance for central venous access device placement, replacement (catheter only or complete), or removal (includes fluoroscopic guidance for vascular access and catheter manipulation, any necessary contrast injections through access site or catheter with related venography radiologic supervision and interpretation, and radiographic documentation of final catheter position) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** PICC Line Procedures **Screen:** MPC List / CMS Request - Final Rule for 2013 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 09 **Specialty Developing Recommendation:** AANS, AANEM, AAPM, AAPM&R, ACR, ASIPP, ASA, ASNR, CNS, ISIS, NASS **First Identified:** January 2012 **2021 Medicare Utilization:** 269,997

2023 Work RVU: 0.38
2023 NF PE RVU: 2.59
2023 Fac PE RVU: NA

RUC Recommendation: 0.38 **Referred to CPT** October 2015 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

77002 **Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Somatic Nerve Injections **Screen:** MPC List / CMS Request - Final Rule for 2013 / CMS Request - Final Rule for 2015 / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, ACR, SIR, SIS **First Identified:** January 2012 **2021 Medicare Utilization:** 544,134

2023 Work RVU: 0.54
2023 NF PE RVU: 2.91
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 **Referred to CPT** October 2015 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

77003 **Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural or subarachnoid) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Somatic Nerve Injections **Screen:** MPC List / CMS Request - Final Rule for 2013 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 05 **Specialty Developing Recommendation:** AAPM, AAPM&R, ACR, SIR, SIS **First Identified:** October 2010 **2021 Medicare Utilization:** 27,200

2023 Work RVU: 0.60
2023 NF PE RVU: 2.53
2023 Fac PE RVU: NA

RUC Recommendation: 0.60 **Referred to CPT** October 2015 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77011 **Computed tomography guidance for stereotactic localization**

Global: XXX **Issue:** IMRT with CT Guidance **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 15 **Specialty Developing Recommendation:** ASTRO, ACRO **First Identified:** **2021 Medicare Utilization:** 3,899

2023 Work RVU: 1.21
2023 NF PE RVU: 5.42
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77012 **Computed tomography guidance for needle placement (eg, biopsy, aspiration, injection, localization device), radiological supervision and interpretation**

Global: XXX **Issue:** Lung Biopsy-CT Guidance Bundle **Screen:** CMS-Other - Utilization over 100,000 / Codes Reported Together 75%or More-Part4 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 05 **Specialty Developing Recommendation:** ACR, SIR **First Identified:** April 2016 **2021 Medicare Utilization:** 137,969

2023 Work RVU: 1.50
2023 NF PE RVU: 2.63
2023 Fac PE RVU: NA

RUC Recommendation: Bundled 32405 and 77012. 1.50 **Referred to CPT** February 2019 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

77014 **Computed tomography guidance for placement of radiation therapy fields**

Global: XXX **Issue:** IMRT with CT Guidance **Screen:** CMS Request - Practice Expense Review / CMS-Other - Utilization over 500,000 / CMS High Expenditure Procedural Codes1 / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 20 **Specialty Developing Recommendation:** ASTRO, ACR **First Identified:** October 2010 **2021 Medicare Utilization:** 2,435,082

2023 Work RVU: 0.85
2023 NF PE RVU: 2.71
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77031 **Stereotactic localization guidance for breast biopsy or needle placement (eg, for wire localization or for injection), each lesion, radiological supervision and interpretation**

Global: **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77032 **Mammographic guidance for needle placement, breast (eg, for wire localization or for injection), each lesion, radiological supervision and interpretation**

Global: **Issue:** Breast Biopsy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 04 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77046 **Magnetic resonance imaging, breast, without contrast material; unilateral**

Global: XXX **Issue:** Breast MRI with Computer-Aided Detection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 06 **Specialty Developing Recommendation:** ACR **First Identified:** June 2017 **2021 Medicare Utilization:** 270

2023 Work RVU: 1.45
2023 NF PE RVU: 5.09
2023 Fac PE RVU: NA

RUC Recommendation: 1.45 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77047 **Magnetic resonance imaging, breast, without contrast material; bilateral**

Global: XXX **Issue:** Breast MRI with Computer-Aided Detection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 06 **Specialty Developing Recommendation:** ACR

First Identified: June 2017

2021 Medicare Utilization: 3,146

2023 Work RVU: 1.60
2023 NF PE RVU: 5.17
2023 Fac PE RVU: NA

RUC Recommendation: 1.60

Referred to CPT June 2017
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77048 **Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (cad real-time lesion detection, characterization and pharmacokinetic analysis), when performed; unilateral**

Global: XXX **Issue:** Breast MRI with Computer-Aided Detection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 06 **Specialty Developing Recommendation:** ACR

First Identified: June 2017

2021 Medicare Utilization: 980

2023 Work RVU: 2.10
2023 NF PE RVU: 8.29
2023 Fac PE RVU: NA

RUC Recommendation: 2.10

Referred to CPT June 2017
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

77049 **Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (cad real-time lesion detection, characterization and pharmacokinetic analysis), when performed; bilateral**

Global: XXX **Issue:** Breast MRI with Computer-Aided Detection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 06 **Specialty Developing Recommendation:** ACR

First Identified: June 2017

2021 Medicare Utilization: 99,387

2023 Work RVU: 2.30
2023 NF PE RVU: 8.30
2023 Fac PE RVU: NA

RUC Recommendation: 2.30

Referred to CPT June 2017
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

77051 **Computer-aided detection (computer algorithm analysis of digital image data for lesion detection) with further review for interpretation, with or without digitization of film radiographic images; diagnostic mammography (List separately in addition to code for primary procedure)**

Global: **Issue:** Mammography-Computer Aided Detection Bundling **Screen:** CMS-Other - Utilization over 250,000 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77052 **Computer-aided detection (computer algorithm analysis of digital image data for lesion detection) with further review for interpretation, with or without digitization of film radiographic images; screening mammography (List separately in addition to code for primary procedure)**

Global: **Issue:** Mammography-Computer Aided Detection Bundling **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77055 **Mammography; unilateral**

Global: **Issue:** Mammography-Computer Aided Detection Bundling **Screen:** CMS-Other - Utilization over 250,000 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77056 **Mammography; bilateral**

Global:

Issue: Mammography-Computer Aided Detection Bundling

Screen: CMS-Other - Utilization over 250,000 / Final Rule for 2015

Complete? Yes

Most Recent RUC Meeting: January 2016

Tab: 20

Specialty Developing Recommendation: ACR

First Identified: January 2014

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77057 **Screening mammography, bilateral (2-view study of each breast)**

Global:

Issue: Mammography-Computer Aided Detection Bundling

Screen: CMS-Other - Utilization over 250,000 / Final Rule for 2015

Complete? Yes

Most Recent RUC Meeting: January 2016

Tab: 20

Specialty Developing Recommendation: ACR

First Identified: January 2014

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77058 **Magnetic resonance imaging, breast, without and/or with contrast material(s); unilateral**

Global:

Issue: Breast MRI with Computer-Aided Detection

Screen: CMS High Expenditure Procedural Codes2

Complete? Yes

Most Recent RUC Meeting: October 2017

Tab: 06

Specialty Developing Recommendation: ACR

First Identified: July 2015

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT June 2017

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77059 **Magnetic resonance imaging, breast, without and/or with contrast material(s); bilateral**

Global: **Issue:** Breast MRI with Computer-Aided Detection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 06 **Specialty Developing Recommendation:** ACR **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77065 **Diagnostic mammography, including computer-aided detection (cad) when performed; unilateral**

Global: XXX **Issue:** Mammography-Computer Aided Detection Bundling **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** October 2015 **2021 Medicare Utilization:** 714,474

2023 Work RVU: 0.81
2023 NF PE RVU: 2.90
2023 Fac PE RVU: NA

RUC Recommendation: 0.81 **Referred to CPT** October 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

77066 **Diagnostic mammography, including computer-aided detection (cad) when performed; bilateral**

Global: XXX **Issue:** Mammography-Computer Aided Detection Bundling **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** October 2015 **2021 Medicare Utilization:** 560,729

2023 Work RVU: 1.00
2023 NF PE RVU: 3.69
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** October 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

77067 **Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (cad) when performed**

Global: XXX **Issue:** Mammography-Computer Aided Detection Bundling **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR **First Identified:** October 2015 **2021 Medicare Utilization:** 5,691,064

2023 Work RVU: 0.76
2023 NF PE RVU: 3.04
2023 Fac PE RVU: NA

RUC Recommendation: 0.76 **Referred to CPT** October 2015 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77073 **Bone length studies (orthoroentgenogram, scanogram)**

Global: XXX **Issue:** X-Ray Exam - Bone **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 25 **Specialty Developing Recommendation:** AAOS, ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 57,264

2023 Work RVU: 0.26
2023 NF PE RVU: 1.06
2023 Fac PE RVU: NA

RUC Recommendation: 0.26 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77074 **Radiologic examination, osseous survey; limited (eg, for metastases)**

Global: XXX **Issue:** X-Ray Exam - Bone **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 3,132

2023 Work RVU: 0.44
2023 NF PE RVU: 1.48
2023 Fac PE RVU: NA

RUC Recommendation: 0.44 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77075 **Radiologic examination, osseous survey; complete (axial and appendicular skeleton)**

Global: XXX **Issue:** X-Ray Exam - Bone **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 32,611

2023 Work RVU: 0.55
2023 NF PE RVU: 2.39
2023 Fac PE RVU: NA

RUC Recommendation: 0.55 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

77076 **Radiologic examination, osseous survey, infant**

Global: XXX **Issue:** X-Ray Exam - Bone **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 19

2023 Work RVU: 0.70
2023 NF PE RVU: 2.47
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77077 **Joint survey, single view, 2 or more joints (specify)**

Global: XXX **Issue:** X-Ray Exam - Bone **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 25 **Specialty Developing Recommendation:** ACR **First Identified:** October 2017 **2021 Medicare Utilization:** 35,153

2023 Work RVU: 0.33
2023 NF PE RVU: 1.05
2023 Fac PE RVU: NA

RUC Recommendation: 0.33 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

77079 **Computed tomography, bone mineral density study, 1 or more sites; appendicular skeleton (peripheral) (eg, radius, wrist, heel)**

Global: **Issue:** CT Bone Density Study **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** ACR, AAFP, ACP **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77080 **Dual-energy x-ray absorptiometry (dxa), bone density study, 1 or more sites; axial skeleton (eg, hips, pelvis, spine)**

Global: XXX **Issue:** Dual Energy X-Ray **Screen:** CMS Request - Final Rule for 2012 / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 07 **Specialty Developing Recommendation:** AACE, ACNM, ACR, ACRh, SNMMI, TES **First Identified:** September 2011 **2021 Medicare Utilization:** 2,615,040

2023 Work RVU: 0.20
2023 NF PE RVU: 0.92
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** May 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77081 **Dual-energy x-ray absorptiometry (dxa), bone density study, 1 or more sites; appendicular skeleton (peripheral) (eg, radius, wrist, heel)**

Global: XXX **Issue:** Dual-energy X-Ray Absorptiometry (DXA) **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 25 **Specialty Developing Recommendation:**

First Identified: April 2017

2021 Medicare Utilization: 52,608

2023 Work RVU: 0.20

2023 NF PE RVU: 0.72

2023 Fac PE RVU: NA

RUC Recommendation: 0.20

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77082 **Dual-energy X-ray absorptiometry (DXA), bone density study, 1 or more sites; vertebral fracture assessment**

Global: **Issue:** Dual Energy X-Ray **Screen:** CMS Request - Final Rule for 2012 / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 07 **Specialty Developing Recommendation:** AACE, ACNM, ACR, ACRh, SNMMI, TES

First Identified: September 2011

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT May 2013

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

77083 **Radiographic absorptiometry (eg, photodensitometry, radiogrammetry), 1 or more sites**

Global: **Issue:** Radiographic Absorptiometry **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** ACR, ACP

First Identified: October 2009

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

77085 **Dual-energy x-ray absorptiometry (dxa), bone density study, 1 or more sites; axial skeleton (eg, hips, pelvis, spine), including vertebral fracture assessment**

Global: XXX **Issue:** Dual Energy X-Ray **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 07 **Specialty Developing Recommendation:** AACE, ACNM, ACR, ACRh, SNMMI, TES **First Identified:** **2021 Medicare Utilization:** 101,080

2023 Work RVU: 0.30
2023 NF PE RVU: 1.23
2023 Fac PE RVU: NA

RUC Recommendation: 0.30 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77086 **Vertebral fracture assessment via dual-energy x-ray absorptiometry (dxa)**

Global: XXX **Issue:** Dual Energy X-Ray **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 07 **Specialty Developing Recommendation:** AACE, ACNM, ACR, ACRh, SNMMI, TES **First Identified:** **2021 Medicare Utilization:** 1,954

2023 Work RVU: 0.17
2023 NF PE RVU: 0.80
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** May 2013 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

77261 **Therapeutic radiology treatment planning; simple**

Global: XXX **Issue:** Radiation Therapy Planning **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 37 **Specialty Developing Recommendation:** ASTRO **First Identified:** July 2015 **2021 Medicare Utilization:** 8,395

2023 Work RVU: 1.30
2023 NF PE RVU: 0.72
2023 Fac PE RVU: 0.72

RUC Recommendation: 1.30 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77262 **Therapeutic radiology treatment planning; intermediate**

Global: XXX **Issue:** Radiation Therapy Planning **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 37 **Specialty Developing Recommendation:** ASTRO

First Identified: July 2015

2021 Medicare Utilization: 2,895

2023 Work RVU: 2.00
2023 NF PE RVU: 1.07
2023 Fac PE RVU: 1.07

RUC Recommendation: 2.00

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77263 **Therapeutic radiology treatment planning; complex**

Global: XXX **Issue:** Radiation Therapy Planning **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 37 **Specialty Developing Recommendation:** ASTRO

First Identified: July 2015

2021 Medicare Utilization: 283,609

2023 Work RVU: 3.14
2023 NF PE RVU: 1.63
2023 Fac PE RVU: 1.63

RUC Recommendation: 3.14

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

77280 **Therapeutic radiology simulation-aided field setting; simple**

Global: XXX **Issue:** Set Radiation Therapy Field **Screen:** Harvard Valued - Utilization over 30,000 / Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 14 **Specialty Developing Recommendation:** ASTRO

First Identified: April 2011

2021 Medicare Utilization: 371,120

2023 Work RVU: 0.70
2023 NF PE RVU: 7.32
2023 Fac PE RVU: NA

RUC Recommendation: 0.70

Referred to CPT October 2012

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

77285 **Therapeutic radiology simulation-aided field setting; intermediate**

Global: XXX **Issue:** Respiratory Motion Management Simulation **Screen:** Harvard Valued - Utilization over 30,000 / Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 14 **Specialty Developing Recommendation:** ASTRO **First Identified:** September 2011 **2021 Medicare Utilization:** 4,932

2023 Work RVU: 1.05
2023 NF PE RVU: 12.10
2023 Fac PE RVU: NA

RUC Recommendation: 1.05 **Referred to CPT** October 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

77290 **Therapeutic radiology simulation-aided field setting; complex**

Global: XXX **Issue:** Respiratory Motion Management Simulation **Screen:** MPC List / Harvard Valued - Utilization over 30,000 / Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 14 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2010 **2021 Medicare Utilization:** 183,127

2023 Work RVU: 1.56
2023 NF PE RVU: 11.89
2023 Fac PE RVU: NA

RUC Recommendation: 1.56 **Referred to CPT** October 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

77293 **Respiratory motion management simulation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Respiratory Motion Management Simulation **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 14 **Specialty Developing Recommendation:** ASTRO **First Identified:** **2021 Medicare Utilization:** 32,996

2023 Work RVU: 2.00
2023 NF PE RVU: 10.24
2023 Fac PE RVU: NA

RUC Recommendation: 2.00 **Referred to CPT** October 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77295 **3-dimensional radiotherapy plan, including dose-volume histograms**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 14 **Specialty Developing Recommendation:** ASTRO

First Identified: September 2011

2021 Medicare Utilization: 121,922

2023 Work RVU: 4.29
2023 NF PE RVU: 9.75
2023 Fac PE RVU: NA

RUC Recommendation: 4.29

Referred to CPT October 2012, October 2014

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77300 **Basic radiation dosimetry calculation, central axis depth dose calculation, tdf, nsd, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** MPC List / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** ASTRO

First Identified: October 2010

2021 Medicare Utilization: 1,190,989

2023 Work RVU: 0.62
2023 NF PE RVU: 1.30
2023 Fac PE RVU: NA

RUC Recommendation: 0.62

Referred to CPT February 2014, October 2014

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

77301 **Intensity modulated radiotherapy plan, including dose-volume histograms for target and critical structure partial tolerance specifications**

Global: XXX **Issue:** IMRT - PE Only **Screen:** CMS Fastest Growing / CMS Request - Practice Expense Review / CMS High Expenditure Procedural Codes1 / Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 28 **Specialty Developing Recommendation:** ASTRO

First Identified: October 2008

2021 Medicare Utilization: 155,356

2023 Work RVU: 7.99
2023 NF PE RVU: 46.30
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 7.99. CPT Assistant article published.

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Nov 2009

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

77305 **Teletherapy, isodose plan (whether hand or computer calculated); simple (1 or 2 parallel opposed unmodified ports directed to a single area of interest)**

Global: **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77306 **Teletherapy isodose plan; simple (1 or 2 unmodified ports directed to a single area of interest), includes basic dosimetry calculation(s)**

Global: XXX **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** October 2010 **2021 Medicare Utilization:** 1,211

2023 Work RVU: 1.40
2023 NF PE RVU: 2.93
2023 Fac PE RVU: NA

RUC Recommendation: 1.40 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77307 **Teletherapy isodose plan; complex (multiple treatment areas, tangential ports, the use of wedges, blocking, rotational beam, or special beam considerations), includes basic dosimetry calculation(s)**

Global: XXX **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** October 2010 **2021 Medicare Utilization:** 30,833

2023 Work RVU: 2.90
2023 NF PE RVU: 5.48
2023 Fac PE RVU: NA

RUC Recommendation: 2.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77310 **Teletherapy, isodose plan (whether hand or computer calculated); intermediate (3 or more treatment ports directed to a single area of interest)**

Global: **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77315 **Teletherapy, isodose plan (whether hand or computer calculated); complex (mantle or inverted Y, tangential ports, the use of wedges, compensators, complex blocking, rotational beam, or special beam considerations)**

Global: **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77316 **Brachytherapy isodose plan; simple (calculation[s] made from 1 to 4 sources, or remote afterloading brachytherapy, 1 channel), includes basic dosimetry calculation(s)**

Global: XXX **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** October 2012 **2021 Medicare Utilization:** 4,167

2023 Work RVU: 1.40
2023 NF PE RVU: 5.80
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77317 **Brachytherapy isodose plan; intermediate (calculation[s] made from 5 to 10 sources, or remote afterloading brachytherapy, 2-12 channels), includes basic dosimetry calculation(s)**

Global: XXX **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:**

First Identified: October 2012

2021 Medicare Utilization: 2,168

2023 Work RVU: 1.83

2023 NF PE RVU: 7.63

2023 Fac PE RVU: NA

RUC Recommendation: 1.83

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77318 **Brachytherapy isodose plan; complex (calculation[s] made from over 10 sources, or remote afterloading brachytherapy, over 12 channels), includes basic dosimetry calculation(s)**

Global: XXX **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 / RUC Request **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:**

First Identified: October 2012

2021 Medicare Utilization: 4,713

2023 Work RVU: 2.90

2023 NF PE RVU: 10.53

2023 Fac PE RVU: NA

RUC Recommendation: 2.90

Referred to CPT February 2014

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77326 **Brachytherapy isodose plan; simple (calculation made from single plane, 1 to 4 sources/ribbon application, remote afterloading brachytherapy, 1 to 8 sources)**

Global: **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:**

First Identified: October 2012

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2014

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

77327 **Brachytherapy isodose plan; intermediate (multiplane dosage calculations, application involving 5 to 10 sources/ribbons, remote afterloading brachytherapy, 9 to 12 sources)**

Global: **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77328 **Brachytherapy isodose plan; complex (multiplane isodose plan, volume implant calculations, over 10 sources/ribbons used, special spatial reconstruction, remote afterloading brachytherapy, over 12 sources)**

Global: **Issue:** Isodose Calculation with Isodose Planning Bundle **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77332 **Treatment devices, design and construction; simple (simple block, simple bolus)** **Global:** XXX **Issue:** RAW **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 40 **Specialty Developing Recommendation:** ASTRO **First Identified:** April 2015 **2021 Medicare Utilization:** 62,457

2023 Work RVU: 0.45
2023 NF PE RVU: 0.66
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77333 **Treatment devices, design and construction; intermediate (multiple blocks, stents, bite blocks, special bolus)**

Global: XXX **Issue:** RAW **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 40 **Specialty Developing Recommendation:** ASTRO **First Identified:** April 2015 **2021 Medicare Utilization:** 10,502

2023 Work RVU: 0.75
2023 NF PE RVU: 3.32
2023 Fac PE RVU: NA

RUC Recommendation: 0.84 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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77334 **Treatment devices, design and construction; complex (irregular blocks, special shields, compensators, wedges, molds or casts)**

Global: XXX **Issue:** **Screen:** MPC List / RUC request / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 40 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2010 **2021 Medicare Utilization:** 751,878

2023 Work RVU: 1.15
2023 NF PE RVU: 2.53
2023 Fac PE RVU: NA

RUC Recommendation: 1.24 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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77336 **Continuing medical physics consultation, including assessment of treatment parameters, quality assurance of dose delivery, and review of patient treatment documentation in support of the radiation oncologist, reported per week of therapy**

Global: XXX **Issue:** Continuing Medical Physics Consultation-PE Only **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 31 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:** 363,375

2023 Work RVU: 0.00
2023 NF PE RVU: 2.50
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

77338 **Multi-leaf collimator (mlc) device(s) for intensity modulated radiation therapy (imrt), design and construction per imrt plan**

Global: XXX **Issue:** IMRT - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 28 **Specialty Developing Recommendation:**

First Identified: October 2012 **2021 Medicare Utilization:** 173,297

2023 Work RVU: 4.29
2023 NF PE RVU: 9.31
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

77371 **Radiation treatment delivery, stereotactic radiosurgery (srs), complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source cobalt 60 based**

Global: XXX **Issue:** Radiation Treatment Delivery, Stereotactic Radiosurgery **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 30 **Specialty Developing Recommendation:** ASTRO

First Identified: NA **2021 Medicare Utilization:** 109

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: New PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

77372 **Radiation treatment delivery, stereotactic radiosurgery (srs), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:**

First Identified: October 2012 **2021 Medicare Utilization:** 726

2023 Work RVU: 0.00
2023 NF PE RVU: 28.75
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

77373 **Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 18 **Specialty Developing Recommendation:** ACR, ASTRO, ACRO **First Identified:** July 2012 **2021 Medicare Utilization:** 36,453

2023 Work RVU: 0.00
2023 NF PE RVU: 29.84
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77385 **Intensity modulated radiation treatment delivery (imrt), includes guidance and tracking, when performed; simple**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only, revised introductory guidelines **Referred to CPT** October 2013 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77386 **Intensity modulated radiation treatment delivery (imrt), includes guidance and tracking, when performed; complex**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only, revised introductory guidelines **Referred to CPT** October 2013 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77387 **Guidance for localization of target volume for delivery of radiation treatment, includes intrafraction tracking, when performed**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 0.58 **Referred to CPT** October 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77401 **Radiation treatment delivery, superficial and/or ortho voltage, per day**

Global: XXX **Issue:** Radiation Treatement Delivery (PE Only) **Screen:** High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 31 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:** 237,180

2023 Work RVU: 0.00
2023 NF PE RVU: 1.22
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** May 2019 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77402 **Radiation treatment delivery, >=1 mev; simple**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only, revised introductory guidelines **Referred to CPT** October 2013 and Feburary 2014 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77403 **Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 6-10 MeV**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77404 **Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77406 **Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 20 MeV or greater**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77407 **Radiation treatment delivery, >=1 mev; intermediate**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only, revised introductory guidelines **Referred to CPT** October 2013 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77408 **Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 6-10 MeV**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77409 **Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 11-19 MeV**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77411 **Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks; 20 MeV or greater**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77412 **Radiation treatment delivery, >=1 mev; complex**

Global: XXX **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only, revised introductory guidelines **Referred to CPT** October 2013 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77413 **Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10 MeV**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77414 **Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19 MeV**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77416 **Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20 MeV or greater**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77418 **Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic MLC, per treatment session**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** CMS Fastest Growing / Services with Stand-Alone PE Procedure Time / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Nov 2009 and Q&A - Mar 2010

Status Report: CMS Requests and Relativity Assessment Issues

77421 **Stereoscopic X-ray guidance for localization of target volume for the delivery of radiation therapy**

Global: **Issue:** Radiation Treatment Delivery - PE Only **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 14 **Specialty Developing Recommendation:** ACRO, ASTRO **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77422 **High energy neutron radiation treatment delivery; single treatment area using a single port or parallel-opposed ports with no blocks or simple blocking**

Global: **Issue:** High Energy Neutron Radiation Treatment **Screen:** CMS Request - Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 35 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Contractor Price **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77423 **High energy neutron radiation treatment delivery, 1 or more isocenter(s) with coplanar or non-coplanar geometry with blocking and/or wedge, and/or compensator(s)**

Global: XXX **Issue:** High Energy Neutron Radiation Treatment **Screen:** CMS Request - Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 35 **Specialty Developing Recommendation:** AAOS, ASPS, ASSH **First Identified:** November 2014 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Contractor Price **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77427 **Radiation treatment management, 5 treatments**

Global: XXX **Issue:** Radiation Treatment Management **Screen:** Site of Service Anomaly / High Level E/M in Global Period **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** ASTRO

First Identified: September 2007

2021 Medicare Utilization: 939,960

2023 Work RVU: 3.37
2023 NF PE RVU: 2.06
2023 Fac PE RVU: 2.06

RUC Recommendation: 3.45. Remove from high E/M screen.

Referred to CPT June 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

77435 **Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 30 **Specialty Developing Recommendation:**

First Identified: October 2016

2021 Medicare Utilization: 40,892

2023 Work RVU: 11.87
2023 NF PE RVU: 6.31
2023 Fac PE RVU: 6.31

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

77470 **Special treatment procedure (eg, total body irradiation, hemibody radiation, per oral or endocavitary irradiation)**

Global: XXX **Issue:** Special Radiation Treatment **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 41 **Specialty Developing Recommendation:** ASTRO

First Identified: July 2015

2021 Medicare Utilization: 83,022

2023 Work RVU: 2.03
2023 NF PE RVU: 2.00
2023 Fac PE RVU: NA

RUC Recommendation: 2.03

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

77520 **Proton treatment delivery; simple, without compensation**

Global: XXX **Issue:** Proton Beam Treatment Delivery (PE Only) **Screen:** Contractor Priced High Volume1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ASTRO

First Identified: October 2018 **2021 Medicare Utilization:** 153

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

77522 **Proton treatment delivery; simple, with compensation**

Global: XXX **Issue:** Proton Beam Treatment Delivery (PE Only) **Screen:** Contractor Priced High Volume1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ASTRO

First Identified: January 2018 **2021 Medicare Utilization:** 10,249

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

77523 **Proton treatment delivery; intermediate**

Global: XXX **Issue:** Proton Beam Treatment Delivery (PE Only) **Screen:** High Volume Growth4 / Contractor Priced High Volume1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ASTRO

First Identified: October 2016 **2021 Medicare Utilization:** 70,873

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

77525 **Proton treatment delivery; complex**

Global: XXX **Issue:** Proton Beam Treatment Delivery (PE Only) **Screen:** Contractor Priced High Volume1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 19 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2018 **2021 Medicare Utilization:** 12,383

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77600 **Hyperthermia, externally generated; superficial (ie, heating to a depth of 4 cm or less)**

Global: XXX **Issue:** Hyperthermia - PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** October 2012 **2021 Medicare Utilization:** 9,027

2023 Work RVU: 1.31
2023 NF PE RVU: 14.41
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

77767 **Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter up to 2.0 cm or 1 channel**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO, ACRO **First Identified:** October 2014 **2021 Medicare Utilization:** 4,110

2023 Work RVU: 1.05
2023 NF PE RVU: 6.31
2023 Fac PE RVU: NA

RUC Recommendation: 1.05 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77768 **Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter over 2.0 cm and 2 or more channels, or multiple lesions**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO, ACRO **First Identified:** October 2014 **2021 Medicare Utilization:** 6,054

2023 Work RVU: 1.40
2023 NF PE RVU: 9.34
2023 Fac PE RVU: NA

RUC Recommendation: 1.40 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77770 **Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 1 channel**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO, ACRO **First Identified:** October 2014 **2021 Medicare Utilization:** 15,268

2023 Work RVU: 1.95
2023 NF PE RVU: 8.27
2023 Fac PE RVU: NA

RUC Recommendation: 1.95 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77771 **Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 2-12 channels**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO, ACRO **First Identified:** October 2014 **2021 Medicare Utilization:** 12,435

2023 Work RVU: 3.80
2023 NF PE RVU: 13.90
2023 Fac PE RVU: NA

RUC Recommendation: 3.80 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77772 **Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; over 12 channels**

Global: XXX **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO, ACRO **First Identified:** October 2014 **2021 Medicare Utilization:** 3,720

2023 Work RVU: 5.40
2023 NF PE RVU: 20.96
2023 Fac PE RVU: NA

RUC Recommendation: 5.40 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77776 **Interstitial radiation source application; simple**

Global: **Issue:** Interstitial Radiation Source Codes **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASTRO **First Identified:** February 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77777 **Interstitial radiation source application; intermediate**

Global: **Issue:** Interstitial Radiation Source Codes **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 17 **Specialty Developing Recommendation:** ACR, ASTRO **First Identified:** February 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77778 **Interstitial radiation source application, complex, includes supervision, handling, loading of radiation source, when performed**

Global: 000 **Issue:** Interstitial Radiation Source Codes **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** ACR, ASTRO

First Identified: October 2012 **2021 Medicare Utilization:** 3,532

2023 Work RVU: 8.78
2023 NF PE RVU: 17.94
2023 Fac PE RVU: NA

RUC Recommendation: 8.78 **Referred to CPT** February 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

77781 **Deleted from CPT**

Global: **Issue:** Brachytherapy **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ASTRO

First Identified: October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77782 **Deleted from CPT**

Global: **Issue:** Brachytherapy **Screen:** High Volume Growth1 / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ASTRO

First Identified: February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77784 **Deleted from CPT**

Global: **Issue:** Brachytherapy **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ASTRO

First Identified: February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77785 **Remote afterloading high dose rate radionuclide brachytherapy; 1 channel** **Global:** **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** High Volume Growth1 / CMS Fastest Growing/CMS Request - Practice Expense / Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77786 **Remote afterloading high dose rate radionuclide brachytherapy; 2-12 channels** **Global:** **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** High Volume Growth1 / CMS Fastest Growing/CMS Request - Practice Expense / Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

77787 **Remote afterloading high dose rate radionuclide brachytherapy; over 12 channels**

Global: **Issue:** Surface Radionuclide High Does Rate Brachytherapy **Screen:** High Volume Growth1 / CMS Fastest Growing/CMS Request - Practice Expense / Services with Stand-Alone PE Procedure Time / Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASTRO **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

77790 **Supervision, handling, loading of radiation source**

Global: XXX **Issue:** Interstitial Radiation Source Codes **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** ACR, ASTRO, SIR **First Identified:** October 2012 **2021 Medicare Utilization:** 32

2023 Work RVU: 0.00
2023 NF PE RVU: 0.50
2023 Fac PE RVU: NA

RUC Recommendation: 0.00 **Referred to CPT** February 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78000 **Thyroid uptake; single determination**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78001 **Thyroid uptake; multiple determinations**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78003 **Thyroid uptake; stimulation, suppression or discharge (not including initial uptake studies)**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78006 **Thyroid imaging, with uptake; single determination**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78007 **Thyroid imaging, with uptake; multiple determinations**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** April 2011 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78010 **Thyroid imaging; only**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78011 **Thyroid imaging; with vascular flow**

Global: **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78012 **Thyroid uptake, single or multiple quantitative measurement(s) (including stimulation, suppression, or discharge, when performed)**

Global: XXX **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:** 975

2023 Work RVU: 0.19
2023 NF PE RVU: 2.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.19 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78013 **Thyroid imaging (including vascular flow, when performed);**

Global: XXX **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:** 870

2023 Work RVU: 0.37
2023 NF PE RVU: 4.91
2023 Fac PE RVU: NA

RUC Recommendation: 0.37 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78014 **Thyroid imaging (including vascular flow, when performed); with single or multiple uptake(s) quantitative measurement(s) (including stimulation, suppression, or discharge, when performed)**

Global: XXX **Issue:** Thyroid Uptake/Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 22 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** **2021 Medicare Utilization:** 12,722

2023 Work RVU: 0.50
2023 NF PE RVU: 6.10
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78070 **Parathyroid planar imaging (including subtraction, when performed);**

Global: XXX **Issue:** Parathyroid Imaging **Screen:** Harvard Valued - Utilization over 30,000 / CPT 2013 Utilization Review **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** April 2011 **2021 Medicare Utilization:** 9,919

2023 Work RVU: 0.80
2023 NF PE RVU: 7.31
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2016

78071 **Parathyroid planar imaging (including subtraction, when performed); with tomographic (spect)**

Global: XXX **Issue:** Parathyroid Imaging **Screen:** Harvard Valued - Utilization over 30,000 / CPT 2013 Utilization Review **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** April 2011 **2021 Medicare Utilization:** 6,665

2023 Work RVU: 1.20
2023 NF PE RVU: 8.48
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2016

Status Report: CMS Requests and Relativity Assessment Issues

78072 **Parathyroid planar imaging (including subtraction, when performed); with tomographic (spect), and concurrently acquired computed tomography (ct) for anatomical localization**

Global: XXX **Issue:** Parathyroid Imaging **Screen:** Harvard Valued - Utilization over 30,000 / CPT 2013 Utilization Review **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** April 2011 **2021 Medicare Utilization:** 11,357

2023 Work RVU: 1.60
2023 NF PE RVU: 10.49
2023 Fac PE RVU: NA

RUC Recommendation: 1.60 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2016

78223 **Hepatobiliary ductal system imaging, including gallbladder, with or without pharmacologic intervention, with or without quantitative measurement of gallbladder function**

Global: **Issue:** Hepatobiliary Ductal System Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SNM **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78226 **Hepatobiliary system imaging, including gallbladder when present;**

Global: XXX **Issue:** Hepatobiliary System Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SNM, ACNM **First Identified:** **2021 Medicare Utilization:** 51,132

2023 Work RVU: 0.74
2023 NF PE RVU: 8.25
2023 Fac PE RVU: NA

RUC Recommendation: 0.74 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78227 **Hepatobiliary system imaging, including gallbladder when present; with pharmacologic intervention, including quantitative measurement(s) when performed**

Global: XXX **Issue:** Hepatobiliary System Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 12 **Specialty Developing Recommendation:** ACR, SNM, ACNM **First Identified:** **2021 Medicare Utilization:** 44,564

2023 Work RVU: 0.90
2023 NF PE RVU: 11.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.90 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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78265 **Gastric emptying imaging study (eg, solid, liquid, or both); with small bowel transit**

Global: XXX **Issue:** Colon Transit Imaging **Screen:** New code for CPT 2016. **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 18 **Specialty Developing Recommendation:** ACNM, ACR, SNMMI **First Identified:** April 2015 **2021 Medicare Utilization:** 553

2023 Work RVU: 0.98
2023 NF PE RVU: 9.83
2023 Fac PE RVU: NA

RUC Recommendation: CPT Assistant article published **Referred to CPT** **Referred to CPT Asst** ☑ **Published in CPT Asst:** Dec 2015 **Result:** Not Part of RAW

78266 **Gastric emptying imaging study (eg, solid, liquid, or both); with small bowel and colon transit, multiple days**

Global: XXX **Issue:** Colon Transit Imaging **Screen:** New code for CPT 2016. **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 18 **Specialty Developing Recommendation:** ACNM, ACR, SNMMI **First Identified:** April 2015 **2021 Medicare Utilization:** 275

2023 Work RVU: 1.08
2023 NF PE RVU: 11.21
2023 Fac PE RVU: NA

RUC Recommendation: CPT Assistant article published **Referred to CPT** **Referred to CPT Asst** ☑ **Published in CPT Asst:** Dec 2015 **Result:** Not Part of RAW

78278 **Acute gastrointestinal blood loss imaging**

Global: XXX **Issue:** Acute GI Blood Loss Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 34 **Specialty Developing Recommendation:** ACR, SNM, ACNM **First Identified:** April 2011 **2021 Medicare Utilization:** 19,163

2023 Work RVU: 0.99
2023 NF PE RVU: 8.65
2023 Fac PE RVU: NA

RUC Recommendation: 0.99 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

78300 **Bone and/or joint imaging; limited area**

Global: XXX **Issue:** Bone Imaging **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 38 **Specialty Developing Recommendation:** ACNM, ACR, SNMMI **First Identified:** July 2015 **2021 Medicare Utilization:** 4,626

2023 Work RVU: 0.62
2023 NF PE RVU: 5.65
2023 Fac PE RVU: NA

RUC Recommendation: 0.62 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

78305 **Bone and/or joint imaging; multiple areas**

Global: XXX **Issue:** Bone Imaging **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 38 **Specialty Developing Recommendation:** ACNM, ACR, SNMMI **First Identified:** July 2015 **2021 Medicare Utilization:** 772

2023 Work RVU: 0.83
2023 NF PE RVU: 6.81
2023 Fac PE RVU: NA

RUC Recommendation: 0.83 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

78306 **Bone and/or joint imaging; whole body**

Global: XXX **Issue:** Bone Imaging **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 38 **Specialty Developing Recommendation:** ACNM, ACR, SNMMI **First Identified:** July 2015 **2021 Medicare Utilization:** 224,828

2023 Work RVU: 0.86
2023 NF PE RVU: 7.31
2023 Fac PE RVU: NA

RUC Recommendation: 0.86 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78429 **Myocardial imaging, positron emission tomography (pet), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study; with concurrently acquired computed tomography transmission scan**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 972

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 1.76

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

78430 **Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); single study, at rest or stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 443

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 1.67

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

78431 **Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); multiple studies at rest and stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 57,480

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 1.90

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78432 **Myocardial imaging, positron emission tomography (pet), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (eg, myocardial viability);**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 51

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 2.07 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

78433 **Myocardial imaging, positron emission tomography (pet), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (eg, myocardial viability); with concurrently acquired computed tomography transmission scan**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 1,321

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 2.26 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

78434 **Absolute quantitation of myocardial blood flow (aqmbf), positron emission tomography (pet), rest and pharmacologic stress (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 53,560

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.63 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78451 **Myocardial perfusion imaging, tomographic (spect) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)**

Global: XXX **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** NA **2021 Medicare Utilization:** 26,101

2023 Work RVU: 1.38
2023 NF PE RVU: 7.99
2023 Fac PE RVU: NA

RUC Recommendation: 1.40 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

78452 **Myocardial perfusion imaging, tomographic (spect) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection**

Global: XXX **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** NA **2021 Medicare Utilization:** 1,436,710

2023 Work RVU: 1.62
2023 NF PE RVU: 11.36
2023 Fac PE RVU: NA

RUC Recommendation: 1.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78453 **Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)**

Global: XXX **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** NA **2021 Medicare Utilization:** 1,261

2023 Work RVU: 1.00
2023 NF PE RVU: 7.08
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78454 **Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection**

Global: XXX **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** NA **2021 Medicare Utilization:** 6,679

2023 Work RVU: 1.34
2023 NF PE RVU: 10.69
2023 Fac PE RVU: NA

RUC Recommendation: 1.34 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78459 **Myocardial imaging, positron emission tomography (pet), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study;**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 795

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 1.61 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

78460 **Deleted from CPT**

Global: **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78461 **Deleted from CPT**

Global: **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78464 **Deleted from CPT**

Global: **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78465 **Deleted from CPT**

Global: **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78472 **Cardiac blood pool imaging, gated equilibrium; planar, single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing**

Global: XXX **Issue:** Cardiac Blood Pool Imaging **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 35 **Specialty Developing Recommendation:** ACC, ACR, SNM, ACNM **First Identified:** April 2011 **2021 Medicare Utilization:** 12,036

2023 Work RVU: 0.98
2023 NF PE RVU: 5.31
2023 Fac PE RVU: NA

RUC Recommendation: 0.98 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

78478 **Deleted from CPT**

Global: **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78480 **Deleted from CPT**

Global: **Issue:** Myocardial Perfusion Imaging **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 16 **Specialty Developing Recommendation:** SNM, ACR, ASNC, ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2008 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78491 **Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); single study, at rest or stress (exercise or pharmacologic)**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** May 2018 **2021 Medicare Utilization:** 455

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 1.56 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

78492 **Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); multiple studies at rest and stress (exercise or pharmacologic)**

Global: XXX **Issue:** Myocardial PET **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 13 **Specialty Developing Recommendation:** ACC, ACR, ACNM, SNMMI **First Identified:** October 2016 **2021 Medicare Utilization:** 135,259

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 1.80 **Referred to CPT** May 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

78579 **Pulmonary ventilation imaging (eg, aerosol or gas)**

Global: XXX **Issue:** Pulmonary Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SNM **First Identified:** February 2010 **2021 Medicare Utilization:** 248

2023 Work RVU: 0.49
2023 NF PE RVU: 4.73
2023 Fac PE RVU: NA

RUC Recommendation: 0.49 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78580 **Pulmonary perfusion imaging (eg, particulate)**

Global: XXX **Issue:** Pulmonary Imaging **Screen:** Harvard Valued - Utilization over 100,000 / High Volume Growth8 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:** 80,607

2023 Work RVU: 0.74
2023 NF PE RVU: 5.80
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan. 0.74 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

78582 **Pulmonary ventilation (eg, aerosol or gas) and perfusion imaging**

Global: XXX **Issue:** Pulmonary Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SNM **First Identified:** February 2010 **2021 Medicare Utilization:** 47,160

2023 Work RVU: 1.07
2023 NF PE RVU: 8.11
2023 Fac PE RVU: NA

RUC Recommendation: 1.07 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78584 **Pulmonary perfusion imaging, particulate, with ventilation; single breath**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78585 **Pulmonary perfusion imaging, particulate, with ventilation; rebreathing and washout, with or without single breath**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78586 **Pulmonary ventilation imaging, aerosol; single projection**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78587 **Deleted from CPT**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78588 **Deleted from CPT**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78591 **Deleted from CPT**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78593 **Deleted from CPT**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78594 **Deleted from CPT**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

78596 **Deleted from CPT**

Global: **Issue:** Pulmonary Perfusion Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

78597 **Quantitative differential pulmonary perfusion, including imaging when performed** **Global:** XXX **Issue:** Pulmonary Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SNM **First Identified:** February 2010 **2021 Medicare Utilization:** 2,480

2023 Work RVU: 0.75
2023 NF PE RVU: 4.80
2023 Fac PE RVU: NA

RUC Recommendation: 0.75 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78598 **Quantitative differential pulmonary perfusion and ventilation (eg, aerosol or gas), including imaging when performed** **Global:** XXX **Issue:** Pulmonary Imaging **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 13 **Specialty Developing Recommendation:** ACR, SNM **First Identified:** February 2010 **2021 Medicare Utilization:** 1,174

2023 Work RVU: 0.85
2023 NF PE RVU: 7.51
2023 Fac PE RVU: NA

RUC Recommendation: 0.85 **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

78803 **Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (spect), single area (eg, head, neck, chest, pelvis) or acquisition, single day imaging** **Global:** XXX **Issue:** RAW **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 14 **Specialty Developing Recommendation:** ACR, ACNM, SNM **First Identified:** January 2016 **2021 Medicare Utilization:** 37,154

2023 Work RVU: 1.09
2023 NF PE RVU: 9.46
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2016

Status Report: CMS Requests and Relativity Assessment Issues

78815 **Positron emission tomography (pet) with concurrently acquired computed tomography (ct) for attenuation correction and anatomical localization imaging; skull base to mid-thigh**

Global: XXX **Issue:** **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 41 **Specialty Developing Recommendation:** ACR, SNM

First Identified: October 2010

2021 Medicare Utilization: 592,418

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Reaffirmed RUC recommendation

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

79101 **Radiopharmaceutical therapy, by intravenous administration**

Global: XXX **Issue:** Radiopharmaceutical Therapy **Screen:** Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** SNM, ACR

First Identified: October 2009

2021 Medicare Utilization: 9,889

2023 Work RVU: 1.96
2023 NF PE RVU: 2.33
2023 Fac PE RVU: NA

RUC Recommendation: Article published Feb 2012

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Feb 2012

Result: Maintain

7X000

Global: **Issue:** Intraoperative Ultrasound Services **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 05 **Specialty Developing Recommendation:** AATS, ACC, STS

First Identified: May 2022

2021 Medicare Utilization:

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: 0.60

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

7X001

Global: **Issue:** Intraoperative Ultrasound Services **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 05 **Specialty Developing Recommendation:** AATS, ACC, STS **First Identified:** May 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: 1.90 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

7X002

Global: **Issue:** Intraoperative Ultrasound Services **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 05 **Specialty Developing Recommendation:** AATS, ACC, STS **First Identified:** May 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: 1.20 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

7X003

Global: **Issue:** Intraoperative Ultrasound Services **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 05 **Specialty Developing Recommendation:** AATS, ACC, STS **First Identified:** May 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: 1.55 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

80500 **Clinical pathology consultation; limited, without review of patient's history and medical records**

Global: XXX **Issue:** Pathology Clinical Consult **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 20 **Specialty Developing Recommendation:** CAP **First Identified:** January 2019 **2021 Medicare Utilization:** 16,592

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2020 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

80502 **Clinical pathology consultation; comprehensive, for a complex diagnostic problem, with review of patient's history and medical records**

Global: XXX **Issue:** Pathology Clinical Consult **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 20 **Specialty Developing Recommendation:** CAP

First Identified: January 2021 **2021 Medicare Utilization:** 10,332

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2020 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

80503 **Pathology clinical consultation; for a clinical problem, with limited review of patient's history and medical records and straightforward medical decision making when using time for code selection, 5-20 minutes of total time is spent on the date of the consultation.**

Global: XXX **Issue:** Pathology Clinical Consult **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 20 **Specialty Developing Recommendation:** CAP

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.43
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.20

RUC Recommendation: 0.50

Referred to CPT October 2020 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

80504 **Pathology clinical consultation; for a moderately complex clinical problem, with review of patient's history and medical records and moderate level of medical decision making when using time for code selection, 21-40 minutes of total time is spent on the date of the consultation.**

Global: XXX **Issue:** Pathology Clinical Consult **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 20 **Specialty Developing Recommendation:** CAP

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.91
2023 NF PE RVU: 0.62
2023 Fac PE RVU: 0.45

RUC Recommendation: 0.91

Referred to CPT October 2020 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

80505 **Pathology clinical consultation; for a highly complex clinical problem, with comprehensive review of patient's history and medical records and high level of medical decision making when using time for code selection, 41-60 minutes of total time is spent on the date of the consultation.**

Global: XXX **Issue:** Pathology Clinical Consult **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 20 **Specialty Developing Recommendation:** CAP

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 1.71
2023 NF PE RVU: 1.03
2023 Fac PE RVU: 0.85

RUC Recommendation: 1.80

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

80506 **Pathology clinical consultation; prolonged service, each additional 30 minutes (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Pathology Clinical Consult **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 20 **Specialty Developing Recommendation:** CAP

First Identified: January 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.80
2023 NF PE RVU: 0.43
2023 Fac PE RVU: NA

RUC Recommendation: 0.80

Referred to CPT October 2020
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

85060 **Blood smear, peripheral, interpretation by physician with written report**

Global: XXX **Issue:** Blood Smear Interpretation **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 30 **Specialty Developing Recommendation:** CAP

First Identified: April 2016 **2021 Medicare Utilization:** 181,850

2023 Work RVU: 0.45
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.22

RUC Recommendation: 0.45

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

85097 **Bone marrow, smear interpretation**

Global: XXX **Issue:** Bone Marrow Interpretation **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 31 **Specialty Developing Recommendation:** CAP

First Identified: April 2016

2021 Medicare Utilization: 133,378

2023 Work RVU: 0.94
2023 NF PE RVU: 1.06
2023 Fac PE RVU: 0.43

RUC Recommendation: 1.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

85390 **Fibrinolysins or coagulopathy screen, interpretation and report**

Global: XXX **Issue:** Fibrinolysins Screen **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 26 **Specialty Developing Recommendation:**

First Identified: April 2017

2021 Medicare Utilization: 34,629

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 0.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

88104 **Cytopathology, fluids, washings or brushings, except cervical or vaginal; smears with interpretation**

Global: XXX **Issue:** Cytopathology **Screen:** Harvard Valued - Utilization over 100,000 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:** AUR, ASC, CAP

First Identified: October 2009

2021 Medicare Utilization: 47,598

2023 Work RVU: 0.56
2023 NF PE RVU: 1.47
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 0.56

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

88106 **Cytopathology, fluids, washings or brushings, except cervical or vaginal; simple filter method with interpretation**

Global: XXX **Issue:** Cytopathology **Screen:** Harvard Valued - Utilization over 100,000 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:** AUR, ASC, CAP **First Identified:** February 2010 **2021 Medicare Utilization:** 2,306

2023 Work RVU: 0.37
2023 NF PE RVU: 1.69
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 0.56 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88107 **Deleted from CPT**

Global: **Issue:** Cytopathology **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 17 **Specialty Developing Recommendation:** AUR, ASC, CAP **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

88108 **Cytopathology, concentration technique, smears and interpretation (eg, saccomanno technique)**

Global: XXX **Issue:** Cytopathology Concentration Technique-PE Only **Screen:** Harvard Valued - Utilization over 100,000 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:** ACR, CAP **First Identified:** February 2010 **2021 Medicare Utilization:** 192,453

2023 Work RVU: 0.44
2023 NF PE RVU: 1.51
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 0.56 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88112 **Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal**

Global: XXX **Issue:** Cytopathology Concentration Technique-PE Only **Screen:** CMS High Expenditure Procedural Codes1 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:** ACR, CAP **First Identified:** September 2011 **2021 Medicare Utilization:** 761,461

2023 Work RVU: 0.56
2023 NF PE RVU: 1.41
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. 0.56 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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88120 **Cytopathology, in situ hybridization (eg, fish), urinary tract specimen with morphometric analysis, 3-5 molecular probes, each specimen; manual**

Global: XXX **Issue:** RAW review **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** **First Identified:** November 2012 **2021 Medicare Utilization:** 44,750

2023 Work RVU: 1.20
2023 NF PE RVU: 16.56
2023 Fac PE RVU: NA

RUC Recommendation: Utilization shift is appropriate. **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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88121 **Cytopathology, in situ hybridization (eg, fish), urinary tract specimen with morphometric analysis, 3-5 molecular probes, each specimen; using computer-assisted technology**

Global: XXX **Issue:** RAW review **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** **First Identified:** November 2012 **2021 Medicare Utilization:** 22,780

2023 Work RVU: 1.00
2023 NF PE RVU: 11.49
2023 Fac PE RVU: NA

RUC Recommendation: Utilization shift is appropriate. **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

88141 **Cytopathology, cervical or vaginal (any reporting system), requiring interpretation by physician**

Global: XXX **Issue:** Cytopathology Cervical/Vaginal **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 26 **Specialty Developing Recommendation:** CAP

First Identified: October 2017

2021 Medicare Utilization: 46,295

2023 Work RVU: 0.26
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.42

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

88160 **Cytopathology, smears, any other source; screening and interpretation**

Global: XXX **Issue:** Cytopathology Concentration Technique - PE Only **Screen:** CMS Request - Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:**

First Identified: April 2015

2021 Medicare Utilization: 5,607

2023 Work RVU: 0.50
2023 NF PE RVU: 1.71
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

88161 **Cytopathology, smears, any other source; preparation, screening and interpretation**

Global: XXX **Issue:** Cytopathology Concentration Technique - PE Only **Screen:** CMS Request - Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:**

First Identified: April 2015

2021 Medicare Utilization: 3,925

2023 Work RVU: 0.50
2023 NF PE RVU: 1.76
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

88162 **Cytopathology, smears, any other source; extended study involving over 5 slides and/or multiple stains**

Global: XXX **Issue:** Cytopathology Concentration Technique - PE Only **Screen:** CMS Request - Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 36 **Specialty Developing Recommendation:**

First Identified: April 2015

2021 Medicare Utilization: 1,282

2023 Work RVU: 0.76
2023 NF PE RVU: 2.75
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT

Result: PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

88184 **Flow cytometry, cell surface, cytoplasmic, or nuclear marker, technical component only; first marker**

Global: XXX **Issue:** Flow Cytometry **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** **Specialty Developing Recommendation:** CAP

First Identified: July 2015

2021 Medicare Utilization: 104,898

2023 Work RVU: 0.00
2023 NF PE RVU: 2.20
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. Removed from FR 2018 as misvalued.

Referred to CPT

Result: PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

88185 **Flow cytometry, cell surface, cytoplasmic, or nuclear marker, technical component only; each additional marker (list separately in addition to code for first marker)**

Global: ZZZ **Issue:** Flow Cytometry **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** **Specialty Developing Recommendation:** CAP

First Identified: July 2015

2021 Medicare Utilization: 1,956,734

2023 Work RVU: 0.00
2023 NF PE RVU: 0.71
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs. Removed from FR 2018 as misvalued.

Referred to CPT

Result: PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88187 **Flow cytometry, interpretation; 2 to 8 markers**

Global: XXX **Issue:** Flow Cytometry Interpretation **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 42 **Specialty Developing Recommendation:** CAP

First Identified: July 2015

2021 Medicare Utilization: 40,982

2023 Work RVU: 0.74
2023 NF PE RVU: 0.26
2023 Fac PE RVU: 0.26

RUC Recommendation: 0.74

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

88188 **Flow cytometry, interpretation; 9 to 15 markers**

Global: XXX **Issue:** Flow Cytometry Interpretation **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 42 **Specialty Developing Recommendation:** CAP

First Identified: July 2015

2021 Medicare Utilization: 38,785

2023 Work RVU: 1.20
2023 NF PE RVU: 0.56
2023 Fac PE RVU: 0.56

RUC Recommendation: 1.40

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

88189 **Flow cytometry, interpretation; 16 or more markers**

Global: XXX **Issue:** Flow Cytometry Interpretation **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 42 **Specialty Developing Recommendation:** CAP

First Identified: July 2015

2021 Medicare Utilization: 235,162

2023 Work RVU: 1.70
2023 NF PE RVU: 0.68
2023 Fac PE RVU: 0.68

RUC Recommendation: 1.70

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

88300 **Level i - surgical pathology, gross examination only**

Global: XXX **Issue:** Pathology Consultations **Screen:** Havard Valued - Utilization over 1 Million / Low Value-Billed in Multiple Units / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 24 **Specialty Developing Recommendation:** AAD, AGA, CAP, ASGE **First Identified:** February 2009 **2021 Medicare Utilization:** 171,872

2023 Work RVU: 0.08
2023 NF PE RVU: 0.38
2023 Fac PE RVU: NA

RUC Recommendation: 0.08 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

88302 **Level ii - surgical pathology, gross and microscopic examination appendix, incidental fallopian tube, sterilization fingers/toes, amputation, traumatic foreskin, newborn hernia sac, any location hydrocele sac nerve skin, plastic repair sympathetic ganglion testis, castration vaginal mucosa, incidental vas deferens, sterilization**

Global: XXX **Issue:** Pathology Consultations **Screen:** Havard Valued - Utilization over 1 Million / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 24 **Specialty Developing Recommendation:** AAD, AGA, CAP, ASGE **First Identified:** February 2009 **2021 Medicare Utilization:** 60,721

2023 Work RVU: 0.13
2023 NF PE RVU: 0.83
2023 Fac PE RVU: NA

RUC Recommendation: 0.13 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

88304 **Level iii - surgical pathology, gross and microscopic examination abortion, induced abscess aneurysm - arterial/ventricular anus, tag appendix, other than incidental artery, atheromatous plaque bartholin's gland cyst bone fragment(s), other than pathologic fracture bursa/synovial cyst carpal tunnel tissue cartilage, shavings cholesteatoma colon, colostomy stoma conjunctiva - biopsy/pterygium cornea diverticulum - esophagus/small intestine dupuytren's contracture tissue femoral head, other than fracture fissure/fistula foreskin, other than newborn gallbladder ganglion cyst hematoma hemorrhoids hydatid of morgagni intervertebral disc joint, loose body meniscus mucocele, salivary neuroma - morton's/traumatic pilonidal cyst/sinus polyps, inflammatory - nasal/sinusoidal skin - cyst/tag/debridement soft tissue, debridement soft tissue, lipoma spermatocele tendon/tendon sheath testicular appendage thrombus or embolus tonsil and/or adenoids varicocele vas deferens, other than sterilization vein, varicosity**

Global: XXX **Issue:** Pathology Consultations **Screen:** Havard Valued - Utilization over 1 Million / Low Value-High Volume / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 24 **Specialty Developing Recommendation:** AAD, AGA, CAP, ASGE **First Identified:** October 2008 **2021 Medicare Utilization:** 810,872

2023 Work RVU: 0.22
2023 NF PE RVU: 1.03
2023 Fac PE RVU: NA

RUC Recommendation: 0.22 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

88305 **Level iv - surgical pathology, gross and microscopic examination abortion - spontaneous/missed artery, biopsy bone marrow, biopsy bone exostosis brain/meninges, other than for tumor resection breast, biopsy, not requiring microscopic evaluation of surgical margins breast, reduction mammoplasty bronchus, biopsy cell block, any source cervix, biopsy colon, biopsy duodenum, biopsy endocervix, curettings/biopsy endometrium, curettings/biopsy esophagus, biopsy extremity, amputation, traumatic fallopian tube, biopsy fallopian tube, ectopic pregnancy femoral head, fracture fingers/toes, amputation, non-traumatic gingiva/oral mucosa, biopsy heart valve joint, resection kidney, biopsy larynx, biopsy leiomyoma(s), uterine myomectomy - without uterus lip, biopsy/wedge resection lung, transbronchial biopsy lymph node, biopsy muscle, biopsy nasal mucosa, biopsy nasopharynx/oropharynx, biopsy nerve, biopsy odontogenic/dental cyst omentum, biopsy ovary with or without tube, non-neoplastic ovary, biopsy/wedge resection parathyroid gland peritoneum, biopsy pituitary tumor placenta, other than third trimester pleura/pericardium - biopsy/tissue polyp, cervical/endometrial polyp, colorectal polyp, stomach/small intestine prostate, needle biopsy prostate, tur salivary gland, biopsy sinus, paranasal biopsy skin, other than cyst/tag/debridement/plastic repair small intestine, biopsy soft tissue, other than tumor/mass/lipoma/debridement spleen stomach, biopsy synovium testis, other than tumor/biopsy/castration thyroglossal duct/brachial cleft cyst tongue, biopsy tonsil, biopsy trachea, biopsy ureter, biopsy urethra, biopsy urinary bladder, biopsy uterus, with or without tubes and ovaries, for prolapse vagina, biopsy vulva/labia, biopsy**

Global: XXX **Issue:** Pathology Consultations **Screen:** Havard Valued - Utilization over 1 Million / CMS Request - Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 24 **Specialty Developing Recommendation:** AAD, AGA, CAP, ASGE **First Identified:** October 2008 **2021 Medicare Utilization:** 15,994,812

2023 Work RVU: 0.75
2023 NF PE RVU: 1.35
2023 Fac PE RVU: NA

RUC Recommendation: 0.75 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

88307 **Level v - surgical pathology, gross and microscopic examination adrenal, resection bone - biopsy/curettings bone fragment(s), pathologic fracture brain, biopsy brain/meninges, tumor resection breast, excision of lesion, requiring microscopic evaluation of surgical margins breast, mastectomy - partial/simple cervix, conization colon, segmental resection, other than for tumor extremity, amputation, non-traumatic eye, enucleation kidney, partial/total nephrectomy larynx, partial/total resection liver, biopsy - needle/wedge liver, partial resection lung, wedge biopsy lymph nodes, regional resection mediastinum, mass myocardium, biopsy odontogenic tumor ovary with or without tube, neoplastic pancreas, biopsy placenta, third trimester prostate, except radical resection salivary gland sentinel lymph node small intestine, resection, other than for tumor soft tissue mass (except lipoma) - biopsy/simple excision stomach - subtotal/total resection, other than for tumor testis, biopsy thymus, tumor thyroid, total/lobe ureter, resection urinary bladder, tur uterus, with or without tubes and ovaries, other than neoplastic/prolapse**

Global: XXX **Issue:** Pathology Consultations **Screen:** Havard Valued - Utilization over 1 Million / CMS Request- Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 24 **Specialty Developing Recommendation:** AAD, AGA, CAP, ASGE **First Identified:** February 2009 **2021 Medicare Utilization:** 921,197

2023 Work RVU: 1.59
2023 NF PE RVU: 6.97
2023 Fac PE RVU: NA

RUC Recommendation: 1.59 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

88309 **Level vi - surgical pathology, gross and microscopic examination bone resection breast, mastectomy - with regional lymph nodes colon, segmental resection for tumor colon, total resection esophagus, partial/total resection extremity, disarticulation fetus, with dissection larynx, partial/total resection - with regional lymph nodes lung - total/lobe/segment resection pancreas, total/subtotal resection prostate, radical resection small intestine, resection for tumor soft tissue tumor, extensive resection stomach - subtotal/total resection for tumor testis, tumor tongue/tonsil -resection for tumor urinary bladder, partial/total resection uterus, with or without tubes and ovaries, neoplastic vulva, total/subtotal resection**

Global: XXX **Issue:** Pathology Services **Screen:** Havard Valued - Utilization over 1 Million / CMS Request- Final Rule for 2012 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 24 **Specialty Developing Recommendation:** AAD, AGA, CAP, ASGE **First Identified:** February 2009 **2021 Medicare Utilization:** 135,868

2023 Work RVU: 2.80
2023 NF PE RVU: 10.15
2023 Fac PE RVU: NA

RUC Recommendation: 2.80 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

88312 **Special stain including interpretation and report; group i for microorganisms (eg, acid fast, methenamine silver)**

Global: XXX **Issue:** Special Stains **Screen:** Havard Valued - Utilization over 1 Million / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 33 **Specialty Developing Recommendation:** CAP **First Identified:** October 2008 **2021 Medicare Utilization:** 1,221,288

2023 Work RVU: 0.54
2023 NF PE RVU: 2.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 **Referred to CPT** June 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88313 **Special stain including interpretation and report; group ii, all other (eg, iron, trichrome), except stain for microorganisms, stains for enzyme constituents, or immunocytochemistry and immunohistochemistry**

Global: XXX **Issue:** Special Stains **Screen:** Havard Valued - Utilization over 1 Million / Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 33 **Specialty Developing Recommendation:** CAP **First Identified:** October 2008 **2021 Medicare Utilization:** 1,300,022

2023 Work RVU: 0.24
2023 NF PE RVU: 2.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.24 **Referred to CPT** June 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88314 **Special stain including interpretation and report; histochemical stain on frozen tissue block (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Special Stains **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 33 **Specialty Developing Recommendation:** CAP **First Identified:** February 2009 **2021 Medicare Utilization:** 23,532

2023 Work RVU: 0.45
2023 NF PE RVU: 2.23
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** June 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88318 **Deleted from CPT**

Global: **Issue:** Special Stains **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 22 **Specialty Developing Recommendation:** CAP, AAD **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

88319 **Special stain including interpretation and report; group iii, for enzyme constituents**

Global: XXX **Issue:** Special Stains **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 33 **Specialty Developing Recommendation:** CAP **First Identified:** **2021 Medicare Utilization:** 13,606

2023 Work RVU: 0.53
2023 NF PE RVU: 3.48
2023 Fac PE RVU: NA

RUC Recommendation: 0.53 **Referred to CPT** June 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88321 **Consultation and report on referred slides prepared elsewhere**

Global: XXX **Issue:** Microslide Consultation **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 43 **Specialty Developing Recommendation:** CAP, ASC **First Identified:** July 2015 **2021 Medicare Utilization:** 167,407

2023 Work RVU: 1.63
2023 NF PE RVU: 1.16
2023 Fac PE RVU: 0.74

RUC Recommendation: 1.63 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88323 **Consultation and report on referred material requiring preparation of slides**

Global: XXX **Issue:** Microslide Consultation **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 43 **Specialty Developing Recommendation:** CAP, ASC **First Identified:** July 2015 **2021 Medicare Utilization:** 33,552

2023 Work RVU: 1.83
2023 NF PE RVU: 1.53
2023 Fac PE RVU: NA

RUC Recommendation: 1.83 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88325 **Consultation, comprehensive, with review of records and specimens, with report on referred material**

Global: XXX **Issue:** Microslide Consultation **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 43 **Specialty Developing Recommendation:** CAP, ASC **First Identified:** July 2015 **2021 Medicare Utilization:** 11,472

2023 Work RVU: 2.85
2023 NF PE RVU: 1.64
2023 Fac PE RVU: 0.95

RUC Recommendation: 2.85 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Increase

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88329 **Pathology consultation during surgery;**

Global: XXX **Issue:** Pathology Consultation During Surgery **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 18 **Specialty Developing Recommendation:** CAP **First Identified:** February 2010 **2021 Medicare Utilization:** 24,809

2023 Work RVU: 0.67
2023 NF PE RVU: 0.96
2023 Fac PE RVU: 0.33

RUC Recommendation: 0.67 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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88331 **Pathology consultation during surgery; first tissue block, with frozen section(s), single specimen**

Global: XXX **Issue:** Pathology Consultation During Surgery **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 18 **Specialty Developing Recommendation:** CAP **First Identified:** October 2009 **2021 Medicare Utilization:** 363,762

2023 Work RVU: 1.19
2023 NF PE RVU: 1.81
2023 Fac PE RVU: NA

RUC Recommendation: 1.19 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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88332 **Pathology consultation during surgery; each additional tissue block with frozen section(s) (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Pathology Consultation During Surgery **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 18 **Specialty Developing Recommendation:** CAP **First Identified:** October 2009 **2021 Medicare Utilization:** 131,752

2023 Work RVU: 0.59
2023 NF PE RVU: 1.02
2023 Fac PE RVU: NA

RUC Recommendation: 0.59 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

88333 **Pathology consultation during surgery; cytologic examination (eg, touch prep, squash prep), initial site**

Global: XXX **Issue:** Pathology Consultation During Surgery **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 39 **Specialty Developing Recommendation:** ASC, CAP **First Identified:** July 2015 **2021 Medicare Utilization:** 62,814

2023 Work RVU: 1.20
2023 NF PE RVU: 1.53
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88334 **Pathology consultation during surgery; cytologic examination (eg, touch prep, squash prep), each additional site (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Pathology Consultation During Surgery **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 39 **Specialty Developing Recommendation:** ASC, CAP **First Identified:** July 2015 **2021 Medicare Utilization:** 29,401

2023 Work RVU: 0.73
2023 NF PE RVU: 0.93
2023 Fac PE RVU: NA

RUC Recommendation: 0.73 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

88341 **Immunohistochemistry or immunocytochemistry, per specimen; each additional single antibody stain procedure (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP **First Identified:** November 2013 **2021 Medicare Utilization:** 3,228,472

2023 Work RVU: 0.56
2023 NF PE RVU: 2.00
2023 Fac PE RVU: NA

RUC Recommendation: 0.65 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88342 **Immunohistochemistry or immunocytochemistry, per specimen; initial single antibody stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS-Other - Utilization over 500,000 / CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP **First Identified:** April 2011 **2021 Medicare Utilization:** 2,108,253

2023 Work RVU: 0.70
2023 NF PE RVU: 2.26
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** May 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

88343 **Immunohistochemistry or immunocytochemistry, each separately identifiable antibody per block, cytologic preparation, or hematologic smear; each additional separately identifiable antibody per slide (List separately in addition to code for primary procedure)**

Global: **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP **First Identified:** November 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

88344 **Immunohistochemistry or immunocytochemistry, per specimen; each multiplex antibody stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP **First Identified:** November 2013 **2021 Medicare Utilization:** 146,075

2023 Work RVU: 0.77
2023 NF PE RVU: 4.22
2023 Fac PE RVU: NA

RUC Recommendation: 0.77 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88346 **Immunofluorescence, per specimen; initial single antibody stain procedure** **Global:** XXX **Issue:** Immunofluorescent Studies **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 17 **Specialty Developing Recommendation:** CAP, ASC **First Identified:** April 2013 **2021 Medicare Utilization:** 57,304

2023 Work RVU: 0.74
2023 NF PE RVU: 3.77
2023 Fac PE RVU: NA

RUC Recommendation: 0.74 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

88347 **Immunofluorescent study, each antibody; indirect method** **Global:** **Issue:** Immunofluorescent Studies **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 17 **Specialty Developing Recommendation:** CAP, ASC **First Identified:** October 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

88348 **Electron microscopy, diagnostic** **Global:** XXX **Issue:** Electron Microscopy-PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 14 **Specialty Developing Recommendation:** CAP **First Identified:** October 2012 **2021 Medicare Utilization:** 16,007

2023 Work RVU: 1.51
2023 NF PE RVU: 12.49
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88349 **Electron microscopy; scanning**

Global: **Issue:** Electron Microscopy-PE Only **Screen:** Services with Stand-Alone PE Procedure Time **Complete?** Yes

Most Recent RUC Meeting: October 2013 **Tab:** 14 **Specialty Developing Recommendation:** CAP **First Identified:** October 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** Oct 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

88350 **Immunofluorescence, per specimen; each additional single antibody stain procedure (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Immunofluorescent Studies **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 17 **Specialty Developing Recommendation:** CAP, ASC **First Identified:** October 2014 **2021 Medicare Utilization:** 248,542

2023 Work RVU: 0.59
2023 NF PE RVU: 2.86
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** October 2014 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

88356 **Morphometric analysis; nerve**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 37 **Specialty Developing Recommendation:** ASCP, CAP **First Identified:** April 2013 **2021 Medicare Utilization:** 23,286

2023 Work RVU: 2.80
2023 NF PE RVU: 4.08
2023 Fac PE RVU: NA

RUC Recommendation: 2.80 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88360 **Morphometric analysis, tumor immunohistochemistry (eg, her-2/neu, estrogen receptor/progesterone receptor), quantitative or semiquantitative, per specimen, each single antibody stain procedure; manual**

Global: XXX **Issue:** Tumor Immunohistochemistry **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 40 **Specialty Developing Recommendation:** ASC, CAP **First Identified:** July 2015 **2021 Medicare Utilization:** 597,559

2023 Work RVU: 0.85
2023 NF PE RVU: 2.65
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.85

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

88361 **Morphometric analysis, tumor immunohistochemistry (eg, her-2/neu, estrogen receptor/progesterone receptor), quantitative or semiquantitative, per specimen, each single antibody stain procedure; using computer-assisted technology**

Global: XXX **Issue:** Tumor Immunohistochemistry **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 40 **Specialty Developing Recommendation:** ASC, CAP **First Identified:** July 2015 **2021 Medicare Utilization:** 155,453

2023 Work RVU: 0.95
2023 NF PE RVU: 2.55
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.95

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

88364 **In situ hybridization (eg, fish), per specimen; each additional single probe stain procedure (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** November 2013 **2021 Medicare Utilization:** 34,725

2023 Work RVU: 0.70
2023 NF PE RVU: 3.35
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.88

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88365 **In situ hybridization (eg, fish), per specimen; initial single probe stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2013 / CMS Request Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP **First Identified:** September 2011 **2021 Medicare Utilization:** 55,276

2023 Work RVU: 0.88
2023 NF PE RVU: 4.47
2023 Fac PE RVU: NA

RUC Recommendation: 0.88 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2011 & May 2012

88366 **In situ hybridization (eg, fish), per specimen; each multiplex probe stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** May 2013 **2021 Medicare Utilization:** 2,123

2023 Work RVU: 1.24
2023 NF PE RVU: 7.03
2023 Fac PE RVU: NA

RUC Recommendation: 1.24 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

88367 **Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), using computer-assisted technology, per specimen; initial single probe stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2013 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 18 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** September 2011 **2021 Medicare Utilization:** 4,250

2023 Work RVU: 0.73
2023 NF PE RVU: 2.64
2023 Fac PE RVU: NA

RUC Recommendation: 0.86 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2011 & May 2012

Status Report: CMS Requests and Relativity Assessment Issues

88368 **Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), manual, per specimen; initial single probe stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2013 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 18 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** September 2011 **2021 Medicare Utilization:** 17,611

2023 Work RVU: 0.88
2023 NF PE RVU: 3.33
2023 Fac PE RVU: NA

RUC Recommendation: 0.88 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2011 & May 2012

88373 **Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), using computer-assisted technology, per specimen; each additional single probe stain procedure (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** November 2013 **2021 Medicare Utilization:** 5,541

2023 Work RVU: 0.58
2023 NF PE RVU: 1.46
2023 Fac PE RVU: NA

RUC Recommendation: 0.86 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

88374 **Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), using computer-assisted technology, per specimen; each multiplex probe stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 21 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** **2021 Medicare Utilization:** 137,899

2023 Work RVU: 0.93
2023 NF PE RVU: 8.09
2023 Fac PE RVU: NA

RUC Recommendation: 1.04 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

88377 **Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), manual, per specimen; each multiplex probe stain procedure**

Global: XXX **Issue:** Morphometric Analysis In Situ Hybridization for Gene Rearrangement(s) **Screen:** CMS Request - Final Rule for 2012 / CMS Request - Final Rule for 2013 / PE Units Screen **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 24 **Specialty Developing Recommendation:** CAP, ASCP, ASC **First Identified:** May 2013 **2021 Medicare Utilization:** 140,599

2023 Work RVU: 1.40
2023 NF PE RVU: 10.38
2023 Fac PE RVU: NA

RUC Recommendation: 1.40 **Referred to CPT** May 2013 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

88381 **Microdissection (ie, sample preparation of microscopically identified target); manual**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth8 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ASC, AP **First Identified:** April 2022 **2021 Medicare Utilization:** 47,358

2023 Work RVU: 0.53
2023 NF PE RVU: 5.44
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

90460 **Immunization administration through 18 years of age via any route of administration, with counseling by physician or other qualified health care professional; first or only component of each vaccine or toxoid administered**

Global: XXX **Issue:** Immunization Administration **Screen:** CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** July 2020 **2021 Medicare Utilization:** 179

2023 Work RVU: 0.24
2023 NF PE RVU: 0.41
2023 Fac PE RVU: NA

RUC Recommendation: 0.24 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90461 **Immunization administration through 18 years of age via any route of administration, with counseling by physician or other qualified health care professional; each additional vaccine or toxoid component administered (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Immunization Administration **Screen:** CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** July 2020 **2021 Medicare Utilization:** 27

2023 Work RVU: 0.18
2023 NF PE RVU: 0.11
2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90465 **Deleted from CPT**

Global: **Issue:** Immunization Administration **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** R **Specialty Developing Recommendation:** AAP **First Identified:** NA **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

90467 **Deleted from CPT**

Global: **Issue:** Immunization Administration **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** R **Specialty Developing Recommendation:** AAP **First Identified:** NA **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90471 **Immunization administration (includes percutaneous, intradermal, subcutaneous, or intramuscular injections); 1 vaccine (single or combination vaccine/toxoid)**

Global: XXX **Issue:** Immunization Administration **Screen:** CMS Request - Practice Expense Review / CMS Fastest Growing / CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** February 2008 **2021 Medicare Utilization:** 261,636

2023 Work RVU: 0.17
2023 NF PE RVU: 0.42
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

90472 **Immunization administration (includes percutaneous, intradermal, subcutaneous, or intramuscular injections); each additional vaccine (single or combination vaccine/toxoid) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Immunization Administration **Screen:** CMS Request - Practice Expense Review / CMS Request – Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** February 2008 **2021 Medicare Utilization:** 19,058

2023 Work RVU: 0.15
2023 NF PE RVU: 0.27
2023 Fac PE RVU: NA

RUC Recommendation: 0.15 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

90473 **Immunization administration by intranasal or oral route; 1 vaccine (single or combination vaccine/toxoid)**

Global: XXX **Issue:** Immunization Administration **Screen:** CMS Request - Practice Expense Review / CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** NA **2021 Medicare Utilization:**

2023 Work RVU: 0.17
2023 NF PE RVU: 0.31
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90474 **Immunization administration by intranasal or oral route; each additional vaccine (single or combination vaccine/toxoid) (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Immunization Administration **Screen:** CMS Request - Practice Expense Review / CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** NA **2021 Medicare Utilization:**

2023 Work RVU: 0.15
2023 NF PE RVU: 0.19
2023 Fac PE RVU: NA

RUC Recommendation: 0.15 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

90785 **Interactive complexity (list separately in addition to the code for primary procedure)**

Global: ZZZ **Issue:** Psychotherapy for Crisis and Interactive Complexity **Screen:** CMS High Expenditure Procedural Codes1 / High Volume Growth6 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 346,678

2023 Work RVU: 0.33
2023 NF PE RVU: 0.10
2023 Fac PE RVU: 0.05

RUC Recommendation: Refer to CPT Review in 3 years (Sept 2023). 0.33 **Referred to CPT** October 2020 **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

90791 **Psychiatric diagnostic evaluation**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 712,884

2023 Work RVU: 3.84
2023 NF PE RVU: 1.22
2023 Fac PE RVU: 0.51

RUC Recommendation: 3.00 **Referred to CPT** February 2012 **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90792 **Psychiatric diagnostic evaluation with medical services**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 514,485

2023 Work RVU: 4.16
2023 NF PE RVU: 1.46
2023 Fac PE RVU: 0.74

RUC Recommendation: 3.25 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90801 **Psychiatric diagnostic interview examination**

Global: **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

90805 **Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services**

Global: **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90806 **Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient;**

Global: **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:**

First Identified: September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

90808 **Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient;**

Global: **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:**

First Identified: September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

90818 **Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient;**

Global: **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:**

First Identified: September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90832 **Psychotherapy, 30 minutes with patient**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 2,184,946

2023 Work RVU: 1.70
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.22

RUC Recommendation: 1.50 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90833 **Psychotherapy, 30 minutes with patient when performed with an evaluation and management service (list separately in addition to the code for primary procedure)**

Global: ZZZ **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 1,367,087

2023 Work RVU: 1.50
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.27

RUC Recommendation: 1.50 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90834 **Psychotherapy, 45 minutes with patient**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 4,201,662

2023 Work RVU: 2.24
2023 NF PE RVU: 0.65
2023 Fac PE RVU: 0.30

RUC Recommendation: 2.00 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90836 **Psychotherapy, 45 minutes with patient when performed with an evaluation and management service (list separately in addition to the code for primary procedure)**

Global: ZZZ **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 454,175

2023 Work RVU: 1.90
2023 NF PE RVU: 0.62
2023 Fac PE RVU: 0.34

RUC Recommendation: 1.90 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90837 **Psychotherapy, 60 minutes with patient**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 6,075,835

2023 Work RVU: 3.31
2023 NF PE RVU: 0.95
2023 Fac PE RVU: 0.43

RUC Recommendation: 3.00 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90838 **Psychotherapy, 60 minutes with patient when performed with an evaluation and management service (list separately in addition to the code for primary procedure)**

Global: ZZZ **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 95,661

2023 Work RVU: 2.50
2023 NF PE RVU: 0.83
2023 Fac PE RVU: 0.47

RUC Recommendation: 2.50 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90839 **Psychotherapy for crisis; first 60 minutes** **Global:** XXX **Issue:** Psychotherapy for Crisis and Interactive Complexity **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 35 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 21,022

2023 Work RVU: 3.13
2023 NF PE RVU: 0.94
2023 Fac PE RVU: 0.46

RUC Recommendation: 3.13 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90840 **Psychotherapy for crisis; each additional 30 minutes (list separately in addition to code for primary service)** **Global:** ZZZ **Issue:** Psychotherapy for Crisis and Interactive Complexity **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 35 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 8,005

2023 Work RVU: 1.50
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.27

RUC Recommendation: 1.50 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90845 **Psychoanalysis** **Global:** XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2011 **Tab:** **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 9,551

2023 Work RVU: 2.10
2023 NF PE RVU: 0.63
2023 Fac PE RVU: 0.31

RUC Recommendation: 2.10 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90846 **Family psychotherapy (without the patient present), 50 minutes** **Global:** XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 24,871

2023 Work RVU: 2.40
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.34

RUC Recommendation: 2.40 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90847 **Family psychotherapy (conjoint psychotherapy) (with patient present), 50 minutes**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 132,346

2023 Work RVU: 2.50
2023 NF PE RVU: 0.37
2023 Fac PE RVU: 0.36

RUC Recommendation: 2.50 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90853 **Group psychotherapy (other than of a multiple-family group)**

Global: XXX **Issue:** Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 26 **Specialty Developing Recommendation:** APA, APA (HCPAC), NASW **First Identified:** April 2013 **2021 Medicare Utilization:** 458,295

2023 Work RVU: 0.59
2023 NF PE RVU: 0.18
2023 Fac PE RVU: 0.08

RUC Recommendation: 0.59 **Referred to CPT** February 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

90862 **Pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy**

Global: **Issue:** RAW review **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90863 **Pharmacologic management, including prescription and review of medication, when performed with psychotherapy services (list separately in addition to the code for primary procedure)**

Global: XXX **Issue:** Pharmacologic Management with Psychotherapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 40 **Specialty Developing Recommendation:** APA (HCPAC) **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU: 0.48
2023 NF PE RVU: 0.23
2023 Fac PE RVU: 0.19

RUC Recommendation: 0.48 **Referred to CPT** February 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90868 **Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; subsequent delivery and management, per session**

Global: 000 **Issue:** RAW **Screen:** Contractor Priced High Volume / Contractor Priced High Volume2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** APA (psychiatry) **First Identified:** January 2018 **2021 Medicare Utilization:** 224,895

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

90870 **Electroconvulsive therapy (includes necessary monitoring)**

Global: 000 **Issue:** Electroconvulsive Therapy **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 41 **Specialty Developing Recommendation:** APA **First Identified:** October 2009 **2021 Medicare Utilization:** 95,284

2023 Work RVU: 2.50
2023 NF PE RVU: 2.51
2023 Fac PE RVU: 0.51

RUC Recommendation: 2.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90911 **Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry**

Global: **Issue:** Biofeedback Training **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 15 **Specialty Developing Recommendation:** ACOG, AUA **First Identified:** April 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

90912 **Biofeedback training, perineal muscles, anorectal or urethral sphincter, including emg and/or manometry, when performed; initial 15 minutes of one-on-one physician or other qualified health care professional contact with the patient**

Global: 000 **Issue:** Biofeedback Training **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 15 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 22,282

2023 Work RVU: 0.90
2023 NF PE RVU: 1.46
2023 Fac PE RVU: 0.32

RUC Recommendation: 0.90 **Referred to CPT** February 2019-EC **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90913 **Biofeedback training, perineal muscles, anorectal or urethral sphincter, including emg and/or manometry, when performed; each additional 15 minutes of one-on-one physician or other qualified health care professional contact with the patient (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Biofeedback Training **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 15 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** 14,519

2023 Work RVU: 0.50
2023 NF PE RVU: 0.42
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.50 **Referred to CPT** February 2019-EC **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90935 **Hemodialysis procedure with single evaluation by a physician or other qualified health care professional**

Global: 000 **Issue:** Hemodialysis-Dialysis Services **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 30 **Specialty Developing Recommendation:** RPA **First Identified:** October 2008 **2021 Medicare Utilization:** 796,339

2023 Work RVU: 1.48
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.53

RUC Recommendation: 1.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

90937 **Hemodialysis procedure requiring repeated evaluation(s) with or without substantial revision of dialysis prescription**

Global: 000 **Issue:** Hemodialysis-Dialysis Services **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 30 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 35,544

2023 Work RVU: 2.11
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.77

RUC Recommendation: 2.11 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

90945 **Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies), with single evaluation by a physician or other qualified health care professional**

Global: 000 **Issue:** Hemodialysis-Dialysis Services **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 30 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 146,794

2023 Work RVU: 1.56
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.86

RUC Recommendation: 1.56 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90947 **Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies) requiring repeated evaluations by a physician or other qualified health care professional, with or without substantial revision of dialysis prescription**

Global: 000 **Issue:** Hemodialysis-Dialysis Services **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 30 **Specialty Developing Recommendation:** RPA

First Identified: February 2009

2021 Medicare Utilization: 11,765

2023 Work RVU: 2.52
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.91

RUC Recommendation: 2.52

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

90951 **End-stage renal disease (esrd) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA

First Identified: February 2009

2021 Medicare Utilization: 38

2023 Work RVU: 23.92
2023 NF PE RVU: 9.10
2023 Fac PE RVU: 9.10

RUC Recommendation: RUC Recommended revised clinical staff time

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

90952 **End-stage renal disease (esrd) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA

First Identified: February 2009

2021 Medicare Utilization: 5

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: RUC Recommended revised clinical staff time

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

90953 **End-stage renal disease (esrd) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 1

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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90954 **End-stage renal disease (esrd) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 426

2023 Work RVU: 20.86
2023 NF PE RVU: 7.51
2023 Fac PE RVU: 7.51

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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90955 **End-stage renal disease (esrd) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 93

2023 Work RVU: 10.32
2023 NF PE RVU: 4.43
2023 Fac PE RVU: 4.43

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

90956 **End-stage renal disease (esrd) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 43

2023 Work RVU: 6.64
2023 NF PE RVU: 3.21
2023 Fac PE RVU: 3.21

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

90957 **End-stage renal disease (esrd) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 1,361

2023 Work RVU: 15.46
2023 NF PE RVU: 6.27
2023 Fac PE RVU: 6.27

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

90958 **End-stage renal disease (esrd) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 495

2023 Work RVU: 9.87
2023 NF PE RVU: 4.28
2023 Fac PE RVU: 4.28

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90959 **End-stage renal disease (esrd) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 279

2023 Work RVU: 6.19
2023 NF PE RVU: 3.01
2023 Fac PE RVU: 3.01

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

90960 **End-stage renal disease (esrd) related services monthly, for patients 20 years of age and older; with 4 or more face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 1,684,812

2023 Work RVU: 6.77
2023 NF PE RVU: 3.24
2023 Fac PE RVU: 3.24

RUC Recommendation: RUC Recommended revised physician and clinical staff time **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

90961 **End-stage renal disease (esrd) related services monthly, for patients 20 years of age and older; with 2-3 face-to-face visits by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 561,187

2023 Work RVU: 5.52
2023 NF PE RVU: 2.80
2023 Fac PE RVU: 2.80

RUC Recommendation: RUC Recommended revised physician and clinical staff time **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90962 **End-stage renal disease (esrd) related services monthly, for patients 20 years of age and older; with 1 face-to-face visit by a physician or other qualified health care professional per month**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 167,843

2023 Work RVU: 3.57
2023 NF PE RVU: 2.17
2023 Fac PE RVU: 2.17
Result: PE Only

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

90963 **End-stage renal disease (esrd) related services for home dialysis per full month, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 182

2023 Work RVU: 12.09
2023 NF PE RVU: 5.06
2023 Fac PE RVU: 5.06
Result: PE Only

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

90964 **End-stage renal disease (esrd) related services for home dialysis per full month, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 810

2023 Work RVU: 10.25
2023 NF PE RVU: 4.46
2023 Fac PE RVU: 4.46
Result: PE Only

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

90965 **End-stage renal disease (esrd) related services for home dialysis per full month, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 1,070

2023 Work RVU: 9.80
2023 NF PE RVU: 4.32
2023 Fac PE RVU: 4.32

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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90966 **End-stage renal disease (esrd) related services for home dialysis per full month, for patients 20 years of age and older**

Global: XXX **Issue:** End-Stage Renal Disease **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 29 **Specialty Developing Recommendation:** RPA **First Identified:** February 2009 **2021 Medicare Utilization:** 351,039

2023 Work RVU: 5.52
2023 NF PE RVU: 2.79
2023 Fac PE RVU: 2.79

RUC Recommendation: RUC Recommended revised clinical staff time **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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91038 **Esophageal function test, gastroesophageal reflux test with nasal catheter intraluminal impedance electrode(s) placement, recording, analysis and interpretation; prolonged (greater than 1 hour, up to 24 hours)**

Global: 000 **Issue:** Gastroenterological Tests **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 23 **Specialty Developing Recommendation:** AGA, ASGE **First Identified:** February 2010 **2021 Medicare Utilization:** 4,122

2023 Work RVU: 1.10
2023 NF PE RVU: 11.10
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

91110 **Gastrointestinal tract imaging, intraluminal (eg, capsule endoscopy), esophagus through ileum, with interpretation and report**

Global: XXX **Issue:** Gastrointestinal Tract Imaging **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 44 **Specialty Developing Recommendation:** ACG, AGA, ASGE **First Identified:** July 2015 **2021 Medicare Utilization:** 45,759

2023 Work RVU: 2.24
2023 NF PE RVU: 20.01
2023 Fac PE RVU: NA

RUC Recommendation: 2.49 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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91111 **Gastrointestinal tract imaging, intraluminal (eg, capsule endoscopy), esophagus with interpretation and report**

Global: XXX **Issue:** Gastrointestinal Tract Imaging **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 44 **Specialty Developing Recommendation:** ACG, AGA, ASGE **First Identified:** July 2015 **2021 Medicare Utilization:** 145

2023 Work RVU: 0.90
2023 NF PE RVU: 25.84
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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91132 **Electrogastrography, diagnostic, transcutaneous;**

Global: XXX **Issue:** Electrogastrography **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 24 **Specialty Developing Recommendation:** AGA, ACG, ASGE **First Identified:** **2021 Medicare Utilization:** 175

2023 Work RVU: 0.52
2023 NF PE RVU: 12.81
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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91133 **Electrogastrography, diagnostic, transcutaneous; with provocative testing**

Global: XXX **Issue:** Electrogastrography **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 24 **Specialty Developing Recommendation:** AGA, ACG, ASGE **First Identified:** **2021 Medicare Utilization:** 51

2023 Work RVU: 0.66
2023 NF PE RVU: 13.37
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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Status Report: CMS Requests and Relativity Assessment Issues

92065 **Orthoptic training; performed by a physician or other qualified health care professional**

Global: XXX **Issue:** Orthoptic Training **Screen:** Harvard Valued - Utilization over 30,000-Part4 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 10 **Specialty Developing Recommendation:** AAO, AOA (optometry) **First Identified:** October 2019 **2021 Medicare Utilization:** 27,946

2023 Work RVU: 0.71
2023 NF PE RVU: 0.49
2023 Fac PE RVU: NA

RUC Recommendation: 0.71 **Referred to CPT** February 2021 May 2020-Tab 37 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92066 **Orthoptic training; under supervision of a physician or other qualified health care professional**

Global: XXX **Issue:** Orthoptic Training **Screen:** Harvard Valued - Utilization over 30,000-Part4 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 10 **Specialty Developing Recommendation:** AAO, AOA (optometry) **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.76
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

92081 **Visual field examination, unilateral or bilateral, with interpretation and report; limited examination (eg, tangent screen, autoplot, arc perimeter, or single stimulus level automated test, such as octopus 3 or 7 equivalent)**

Global: XXX **Issue:** Visual Field Examination **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 42 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** October 2009 **2021 Medicare Utilization:** 78,884

2023 Work RVU: 0.30
2023 NF PE RVU: 0.67
2023 Fac PE RVU: NA

RUC Recommendation: 0.30 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92082 **Visual field examination, unilateral or bilateral, with interpretation and report; intermediate examination (eg, at least 2 isopters on goldmann perimeter, or semiquantitative, automated suprathreshold screening program, humphrey suprathreshold automatic diagnostic test, octopus program 33)**

Global: XXX **Issue:** Visual Field Examination **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 42 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** October 2009 **2021 Medicare Utilization:** 105,241

2023 Work RVU: 0.40
2023 NF PE RVU: 0.97
2023 Fac PE RVU: NA

RUC Recommendation: 0.40 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92083 **Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 deg, or quantitative, automated threshold perimetry, octopus program g-1, 32 or 42, humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)**

Global: XXX **Issue:** Visual Field Examination **Screen:** MPC List / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 46 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** October 2010 **2021 Medicare Utilization:** 2,670,714

2023 Work RVU: 0.50
2023 NF PE RVU: 1.34
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

92100 **Serial tonometry (separate procedure) with multiple measurements of intraocular pressure over an extended time period with interpretation and report, same day (eg, diurnal curve or medical treatment of acute elevation of intraocular pressure)**

Global: XXX **Issue:** Serial Tonometry **Screen:** Harvard Valued - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 36 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** April 2011 **2021 Medicare Utilization:** 25,855

2023 Work RVU: 0.61
2023 NF PE RVU: 1.91
2023 Fac PE RVU: 0.32

RUC Recommendation: 0.61 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92133 **Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; optic nerve**

Global: XXX **Issue:** Computerized Scanning Ophthalmology Diagnostic Imaging **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 23 **Specialty Developing Recommendation:** AAO, AOA (eye) **First Identified:** October 2009 **2021 Medicare Utilization:** 2,628,575

2023 Work RVU: 0.40
2023 NF PE RVU: 0.67
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92134 **Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; retina**

Global: XXX **Issue:** Computerized Scanning Ophthalmology Diagnostic Imaging **Screen:** CMS Fastest Growing / Codes Reported Together 75% or More-Part5 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAO, AOA (eye) **First Identified:** October 2008 **2021 Medicare Utilization:** 7,384,135

2023 Work RVU: 0.45
2023 NF PE RVU: 0.73
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92135 **Deleted from CPT**

Global: **Issue:** Ophthalmic Diagnostic Imaging **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 31 **Specialty Developing Recommendation:** AAO, AOA **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92136 **Ophthalmic biometry by partial coherence interferometry with intraocular lens power calculation**

Global: XXX **Issue:** Ophthalmic Biometry **Screen:** CMS Fastest Growing / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 36 **Specialty Developing Recommendation:** AAO **First Identified:** October 2008 **2021 Medicare Utilization:** 1,571,536

2023 Work RVU: 0.54
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

92140 **Provocative tests for glaucoma, with interpretation and report, without tonography**

Global: **Issue:** Glaucoma Provacative Tests **Screen:** Harvard Valued - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 41 **Specialty Developing Recommendation:** AAO, AOA (optometry) **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92201 **Ophthalmoscopy, extended; with retinal drawing and scleral depression of peripheral retinal disease (eg, for retinal tear, retinal detachment, retinal tumor) with interpretation and report, unilateral or bilateral**

Global: XXX **Issue:** Ophthalmoscopy **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAO, AOA (Optometry), ASRS **First Identified:** February 2018 **2021 Medicare Utilization:** 461,255

2023 Work RVU: 0.40
2023 NF PE RVU: 0.31
2023 Fac PE RVU: 0.24

RUC Recommendation: 0.40 **Referred to CPT** February 2018 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92202 **Ophthalmoscopy, extended; with drawing of optic nerve or macula (eg, for glaucoma, macular pathology, tumor) with interpretation and report, unilateral or bilateral**

Global: XXX **Issue:** Ophthalmoscopy **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAO, AOA (Optometry), ASRS **First Identified:** February 2018 **2021 Medicare Utilization:** 715,800

2023 Work RVU: 0.26
2023 NF PE RVU: 0.19
2023 Fac PE RVU: 0.16

RUC Recommendation: 0.26 **Referred to CPT** February 2018 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92225 **Ophthalmoscopy, extended, with retinal drawing (eg, for retinal detachment, melanoma), with interpretation and report; initial**

Global: **Issue:** Ophthalmoscopy **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAO, AOA (Optometry), ASRS **First Identified:** April 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92226 **Ophthalmoscopy, extended, with retinal drawing (eg, for retinal detachment, melanoma), with interpretation and report; subsequent**

Global: **Issue:** Ophthalmoscopy **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 05 **Specialty Developing Recommendation:** AAO, AOA (Optometry), ASRS **First Identified:** February 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92235 **Fluorescein angiography (includes multiframe imaging) with interpretation and report, unilateral or bilateral**

Global: XXX **Issue:** Ophthalmoscopic Angiography **Screen:** Harvard Valued - Utilization over 30,000 / CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** April 2011 **2021 Medicare Utilization:** 337,073

2023 Work RVU: 0.75
2023 NF PE RVU: 3.32
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.75 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:**

92240 **Indocyanine-green angiography (includes multiframe imaging) with interpretation and report, unilateral or bilateral**

Global: XXX **Issue:** Ophthalmoscopic Angiography **Screen:** Codes Reported Together 75% or More-Part3 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** January 2015 **2021 Medicare Utilization:** 8,086

2023 Work RVU: 0.80
2023 NF PE RVU: 4.80
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.80 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:**

92242 **Fluorescein angiography and indocyanine-green angiography (includes multiframe imaging) performed at the same patient encounter with interpretation and report, unilateral or bilateral**

Global: XXX **Issue:** Ophthalmoscopic Angiography **Screen:** Codes Reported Together 75% or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 21 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** October 2015 **2021 Medicare Utilization:** 33,308

2023 Work RVU: 0.95
2023 NF PE RVU: 6.72
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.95 **Referred to CPT** October 2015 **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92250 **Fundus photography with interpretation and report**

Global: XXX **Issue:** Fundus Photography **Screen:** MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 45 **Specialty Developing Recommendation:** AAO, ASRS, AOA (optometry) **First Identified:** October 2010 **2021 Medicare Utilization:** 3,321,369

2023 Work RVU: 0.40
2023 NF PE RVU: 0.69
2023 Fac PE RVU: NA

RUC Recommendation: 0.40 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92270 **Electro-oculography with interpretation and report**

Global: XXX **Issue:** Electro-oculography **Screen:** High Volume Growth1 / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** February 2008 **2021 Medicare Utilization:** 1,521

2023 Work RVU: 0.81
2023 NF PE RVU: 2.41
2023 Fac PE RVU: NA

RUC Recommendation: CPT Assistant article published. **Referred to CPT** February 2014 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Aug 2008 and Q&A Jun 2009

92273 **Electroretinography (erg), with interpretation and report; full field (ie, fferg, flash erg, ganzfeld erg)**

Global: XXX **Issue:** Electroretinography **Screen:** CMS High Expenditure Procedural Codes2 / Work Neutrality 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** September 2017 **2021 Medicare Utilization:** 93,455

2023 Work RVU: 0.69
2023 NF PE RVU: 3.06
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan. 0.80 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92274 **Electroretinography (erg), with interpretation and report; multifocal (mferg)**

Global: XXX **Issue:** Electroretinography **Screen:** CMS High Expenditure Procedural Codes2 / Work Neutrality 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: September 2017 **2021 Medicare Utilization:** 4,761

2023 Work RVU: 0.61
2023 NF PE RVU: 2.02
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan. 0.72

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

92275 **Electroretinography with interpretation and report**

Global: **Issue:** Electroretinography **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 17 **Specialty Developing Recommendation:** AAO, ASRS, AOA (optometry)

First Identified: July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT June 2017
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

92284 **Diagnostic dark adaptation examination with interpretation and report**

Global: XXX **Issue:** Dark Adaption Eye Exam **Screen:** Harvard Valued - Utilization over 30,000-Part5 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 20 **Specialty Developing Recommendation:** AAO, AOA (optometry), ASRS

First Identified: October 2020 **2021 Medicare Utilization:** 40,706

2023 Work RVU: 0.00
2023 NF PE RVU: 1.37
2023 Fac PE RVU: NA

RUC Recommendation: 0.14. Review Technology

Referred to CPT May 2021
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

92285 **External ocular photography with interpretation and report for documentation of medical progress (eg, close-up photography, slit lamp photography, goniophotography, stereo-photography)**

Global: XXX **Issue:** Ocular Photography **Screen:** CMS Fastest Growing, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 32 **Specialty Developing Recommendation:** AAO, AOA **First Identified:** October 2008 **2021 Medicare Utilization:** 390,304

2023 Work RVU: 0.05
2023 NF PE RVU: 0.62
2023 Fac PE RVU: NA

RUC Recommendation: 0.05 and new PE inputs **Referred to CPT** February 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92286 **Anterior segment imaging with interpretation and report; with specular microscopy and endothelial cell analysis**

Global: XXX **Issue:** Anterior Segment Imaging **Screen:** Harvard Valued - Utilization over 30,000 / Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 28 **Specialty Developing Recommendation:** AAO, AOA (optometric) **First Identified:** April 2011 **2021 Medicare Utilization:** 100,570

2023 Work RVU: 0.40
2023 NF PE RVU: 0.74
2023 Fac PE RVU: NA

RUC Recommendation: 0.40 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92287 **Anterior segment imaging with interpretation and report; with fluorescein angiography**

Global: XXX **Issue:** Anterior Segment Imaging **Screen:** Harvard Valued - Utilization over 30,000 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 21 **Specialty Developing Recommendation:** AAO, ASRS **First Identified:** **2021 Medicare Utilization:** 4,600

2023 Work RVU: 0.40
2023 NF PE RVU: 3.89
2023 Fac PE RVU: NA

RUC Recommendation: 0.40 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2013

Status Report: CMS Requests and Relativity Assessment Issues

92504 **Binocular microscopy (separate diagnostic procedure)**

Global: XXX **Issue:** Binocular Microscopy **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 43 **Specialty Developing Recommendation:** AAO-HNS

First Identified: October 2009

2021 Medicare Utilization: 224,957

2023 Work RVU: 0.18

2023 NF PE RVU: 0.68

2023 Fac PE RVU: 0.09

RUC Recommendation: 0.18

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

92506 **Evaluation of speech, language, voice, communication, and/or auditory processing**

Global: **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 28 **Specialty Developing Recommendation:** ASHA

First Identified:

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2012

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

92507 **Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual**

Global: XXX **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request / High Volume Growth 3 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 54 **Specialty Developing Recommendation:** ASHA

First Identified: October 2015

2021 Medicare Utilization: 449,244

2023 Work RVU: 1.30

2023 NF PE RVU: 0.94

2023 Fac PE RVU: NA

RUC Recommendation: 1.30 work RVU and clinical staff time removed. Remove from High Volume screen.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

92508 **Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, 2 or more individuals**

Global: XXX **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 28 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 2,278

2023 Work RVU: 0.33
2023 NF PE RVU: 0.37
2023 Fac PE RVU: NA

RUC Recommendation: 0.43 work RVU and clinical staff time removed **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92521 **Evaluation of speech fluency (eg, stuttering, cluttering)**

Global: XXX **Issue:** Speech Evaluation **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 32 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 218

2023 Work RVU: 2.24
2023 NF PE RVU: 1.66
2023 Fac PE RVU: NA

RUC Recommendation: 1.75 **Referred to CPT** October 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92522 **Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria);**

Global: XXX **Issue:** Speech Evaluation **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 32 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 3,754

2023 Work RVU: 1.92
2023 NF PE RVU: 1.32
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** October 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92523 **Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria); with evaluation of language comprehension and expression (eg, receptive and expressive language)**

Global: XXX **Issue:** Speech Evaluation **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 32 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 24,897

2023 Work RVU: 3.84
2023 NF PE RVU: 2.85
2023 Fac PE RVU: NA

RUC Recommendation: 3.36 **Referred to CPT** October 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92524 **Behavioral and qualitative analysis of voice and resonance**

Global: XXX **Issue:** Speech Evaluation **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 32 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 17,456

2023 Work RVU: 1.92
2023 NF PE RVU: 1.28
2023 Fac PE RVU: NA

RUC Recommendation: 1.75 **Referred to CPT** October 2012 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92526 **Treatment of swallowing dysfunction and/or oral function for feeding**

Global: XXX **Issue:** Speech Language Pathology Services (HCPAC) **Screen:** CMS Request/Speech Language Pathology Request / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 23 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 165,185

2023 Work RVU: 1.34
2023 NF PE RVU: 1.15
2023 Fac PE RVU: NA

RUC Recommendation: Maintain **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92537 **Caloric vestibular test with recording, bilateral; bithermal (ie, one warm and one cool irrigation in each ear for a total of four irrigations)**

Global: XXX **Issue:** Vestibular Caloric Irrigation **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 18 **Specialty Developing Recommendation:** AAA, AAN, AAO-HNS, ASHA **First Identified:** October 2014 **2021 Medicare Utilization:** 56,804

2023 Work RVU: 0.60
2023 NF PE RVU: 0.58
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92538 **Caloric vestibular test with recording, bilateral; monothermal (ie, one irrigation in each ear for a total of two irrigations)**

Global: XXX **Issue:** Vestibular Caloric Irrigation **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 18 **Specialty Developing Recommendation:** AAA, AAN, AAO-HNS, ASHA **First Identified:** October 2014 **2021 Medicare Utilization:** 5,808

2023 Work RVU: 0.30
2023 NF PE RVU: 0.35
2023 Fac PE RVU: NA

RUC Recommendation: 0.55 **Referred to CPT** October 2014 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92540 **Basic vestibular evaluation, includes spontaneous nystagmus test with eccentric gaze fixation nystagmus, with recording, positional nystagmus test, minimum of 4 positions, with recording, optokinetic nystagmus test, bidirectional foveal and peripheral stimulation, with recording, and oscillating tracking test, with recording**

Global: XXX **Issue:** EOG VNG **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ASHA, AAO-HNS, AAA **First Identified:** **2021 Medicare Utilization:** 72,645

2023 Work RVU: 1.50
2023 NF PE RVU: 1.69
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92541 **Spontaneous nystagmus test, including gaze and fixation nystagmus, with recording**

Global: XXX **Issue:** EOG VNG **Screen:** Codes Reported Together 95% or More / Harvard Valued - Utilization over 100,000 / CMS-Other Source – Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ASHA, AAO-HNS, AAA **First Identified:** February 2008 **2021 Medicare Utilization:** 11,711

2023 Work RVU: 0.40
2023 NF PE RVU: 0.33
2023 Fac PE RVU: NA

RUC Recommendation: 0.40 **Referred to CPT** February 2009 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

92542 **Positional nystagmus test, minimum of 4 positions, with recording**

Global: XXX **Issue:** EOG VNG **Screen:** Codes Reported Together 95% or More / CMS-Other Source – Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ASHA, AAO-HNS, AAA **First Identified:** February 2008 **2021 Medicare Utilization:** 16,253

2023 Work RVU: 0.48
2023 NF PE RVU: 0.36
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** February 2009 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92543 **Caloric vestibular test, each irrigation (binaural, bithermal stimulation constitutes 4 tests), with recording**

Global: **Issue:** Vestibular Caloric Irrigation **Screen:** Codes Reported Together 95% or More / Low Value-High Volume / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2015 **Tab:** 18 **Specialty Developing Recommendation:** AAA, AAN, AAO-HNS, ASHA **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2014 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92544 **Optokinetic nystagmus test, bidirectional, foveal or peripheral stimulation, with recording**

Global: XXX **Issue:** EOG VNG **Screen:** Codes Reported Together 95% or More / CMS-Other Source – Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ASHA, AAO-HNS, AAA **First Identified:** February 2008 **2021 Medicare Utilization:** 2,578

2023 Work RVU: 0.27
2023 NF PE RVU: 0.24
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 0.27 **Referred to CPT** February 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

92545 **Oscillating tracking test, with recording**

Global: XXX **Issue:** EOG VNG **Screen:** Codes Reported Together 95% or More / CMS-Other Source – Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ASHA, AAO-HNS, AAA **First Identified:** February 2008 **2021 Medicare Utilization:** 4,130

2023 Work RVU: 0.25
2023 NF PE RVU: 0.23
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 0.25 **Referred to CPT** February 2009
Referred to CPT Asst ☐ **Published in CPT Asst:**

92546 **Sinusoidal vertical axis rotational testing**

Global: XXX **Issue:** EOG VNG **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:** **First Identified:** February 2014 **2021 Medicare Utilization:** 35,961

2023 Work RVU: 0.29
2023 NF PE RVU: 3.47
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: Editorial change only **Referred to CPT** February 2014
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92547 **Use of vertical electrodes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** EOG VNG **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 24 **Specialty Developing Recommendation:**

First Identified: February 2014 **2021 Medicare Utilization:** 22,400

2023 Work RVU: 0.00
2023 NF PE RVU: 0.32
2023 Fac PE RVU: NA

RUC Recommendation: Editorial change only

Referred to CPT February 2014

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

92548 **Computerized dynamic posturography sensory organization test (cdp-sot), 6 conditions (ie, eyes open, eyes closed, visual sway, platform sway, eyes closed platform sway, platform and visual sway), including interpretation and report;**

Global: XXX **Issue:** Computerized Dynamic Posturography **Screen:** CMS-Other - Utilization over 250,000 / Negative IWPUT / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 16 **Specialty Developing Recommendation:** AAA, AAN, ASHA

First Identified: February 2014 **2021 Medicare Utilization:** 32,836

2023 Work RVU: 0.67
2023 NF PE RVU: 0.71
2023 Fac PE RVU: NA

RUC Recommendation: 0.76

Referred to CPT September 2018 / February 2014

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

92549 **Computerized dynamic posturography sensory organization test (cdp-sot), 6 conditions (ie, eyes open, eyes closed, visual sway, platform sway, eyes closed platform sway, platform and visual sway), including interpretation and report; with motor control test (mct) and adaptation test (adt)**

Global: XXX **Issue:** Computerized Dynamic Posturography **Screen:** CMS-Other - Utilization over 250,000 / Negative IWPUT / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 16 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 6,600

2023 Work RVU: 0.87
2023 NF PE RVU: 1.04
2023 Fac PE RVU: NA

RUC Recommendation: 0.96

Referred to CPT September 2018

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

92550 **Tympanometry and reflex threshold measurements** **Global:** XXX **Issue:** Bundled Audiology Tests **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 22 **Specialty Developing Recommendation:** ASHA, AAO-HNS, AAA **First Identified:** **2021 Medicare Utilization:** 190,130

2023 Work RVU: 0.35
2023 NF PE RVU: 0.30
2023 Fac PE RVU: NA

RUC Recommendation: 0.35 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92557 **Comprehensive audiometry threshold evaluation and speech recognition (92553 and 92556 combined)** **Global:** XXX **Issue:** Bundled Audiology Tests **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 22 **Specialty Developing Recommendation:** ASHA, AAO-HNS, AAN **First Identified:** February 2008 **2021 Medicare Utilization:** 1,145,427

2023 Work RVU: 0.60
2023 NF PE RVU: 0.48
2023 Fac PE RVU: 0.32

RUC Recommendation: 0.60 work RVU and clinical staff time removed **Referred to CPT** February 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92558 **Evoked otoacoustic emissions, screening (qualitative measurement of distortion product or transient evoked otoacoustic emissions), automated analysis** **Global:** XXX **Issue:** Otoacoustic Emissions Measurement **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 35 **Specialty Developing Recommendation:** ASHA **First Identified:** February 2011 **2021 Medicare Utilization:**

2023 Work RVU: 0.17
2023 NF PE RVU: 0.10
2023 Fac PE RVU: 0.07

RUC Recommendation: 0.17 **Referred to CPT** February 2011 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92567 **Tympanometry (impedance testing)** **Global:** XXX **Issue:** Bundled Audiology Tests **Screen:** Codes Reported Together 95% or More / Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 22 **Specialty Developing Recommendation:** ASHA, AAO-HNS, AAN **First Identified:** February 2008 **2021 Medicare Utilization:** 840,849

2023 Work RVU: 0.20
2023 NF PE RVU: 0.28
2023 Fac PE RVU: 0.11

RUC Recommendation: 0.20 work RVU and clinical staff time removed **Referred to CPT** February 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92568 **Acoustic reflex testing, threshold** **Global:** XXX **Issue:** Bundled Audiology Tests **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 22 **Specialty Developing Recommendation:** ASHA, AAO-HNS, AAN **First Identified:** February 2008 **2021 Medicare Utilization:** 3,376

2023 Work RVU: 0.29
2023 NF PE RVU: 0.15
2023 Fac PE RVU: 0.14

RUC Recommendation: 0.29 work RVU and clinical staff time removed **Referred to CPT** February 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92569 **Deleted from CPT** **Global:** **Issue:** Bundled Audiology Tests **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 22 **Specialty Developing Recommendation:** ASHA, AAO-HNS, AAN **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92570 **Acoustic immittance testing, includes tympanometry (impedance testing), acoustic reflex threshold testing, and acoustic reflex decay testing**

Global: XXX **Issue:** Bundled Audiology Tests **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 21 **Specialty Developing Recommendation:** ASHA, AAO-HNS, AAA **First Identified:** **2021 Medicare Utilization:** 29,992

2023 Work RVU: 0.55
2023 NF PE RVU: 0.39
2023 Fac PE RVU: 0.29

RUC Recommendation: 0.55 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92584 **Electrocochleography**

Global: XXX **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAO-HNS, ASHA **First Identified:** February 2019 **2021 Medicare Utilization:** 9,643

2023 Work RVU: 1.00
2023 NF PE RVU: 2.34
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92585 **Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive**

Global: **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAO-HNS, ASHA **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92586 **Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; limited**

Global: **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAO-HNS, ASHA **First Identified:** February 2019 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92587 **Distortion product evoked otoacoustic emissions; limited evaluation (to confirm the presence or absence of hearing disorder, 3-6 frequencies) or transient evoked otoacoustic emissions, with interpretation and report**

Global: XXX **Issue:** Otoacoustic Emissions Measurement **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 35 **Specialty Developing Recommendation:** ASHA **First Identified:** October 2008 **2021 Medicare Utilization:** 43,146

2023 Work RVU: 0.35
2023 NF PE RVU: 0.28
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** October 2010 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92588 **Distortion product evoked otoacoustic emissions; comprehensive diagnostic evaluation (quantitative analysis of outer hair cell function by cochlear mapping, minimum of 12 frequencies), with interpretation and report**

Global: XXX **Issue:** Otoacoustic Emissions Measurement **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 35 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 81,054

2023 Work RVU: 0.55
2023 NF PE RVU: 0.44
2023 Fac PE RVU: NA

RUC Recommendation: 0.60 **Referred to CPT** February 2011 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92597 **Evaluation for use and/or fitting of voice prosthetic device to supplement oral speech**

Global: XXX **Issue:** Speech Language Pathology Services (RUC) **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 30 **Specialty Developing Recommendation:** ASHA **First Identified:** NA **2021 Medicare Utilization:** 2,051

2023 Work RVU: 1.26
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: 1.48 work RVU and clinical staff time removed **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92605 **Evaluation for prescription of non-speech-generating augmentative and alternative communication device, face-to-face with the patient; first hour**

Global: XXX **Issue:** Eval of Rx for Non-Speech Generating Device **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 35 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU: 1.75
2023 NF PE RVU: 0.85
2023 Fac PE RVU: 0.68

RUC Recommendation: 1.75 **Referred to CPT** February 2011 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92606 **Therapeutic service(s) for the use of non-speech-generating device, including programming and modification**

Global: XXX **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 28 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU: 1.40
2023 NF PE RVU: 0.88
2023 Fac PE RVU: 0.54

RUC Recommendation: 1.40 work RVU and clinical staff time removed **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92607 **Evaluation for prescription for speech-generating augmentative and alternative communication device, face-to-face with the patient; first hour**

Global: XXX **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 28 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 531

2023 Work RVU: 1.85
2023 NF PE RVU: 1.80
2023 Fac PE RVU: NA

RUC Recommendation: 1.85 work RVU and clinical staff time removed **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92608 **Evaluation for prescription for speech-generating augmentative and alternative communication device, face-to-face with the patient; each additional 30 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 28 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 347

2023 Work RVU: 0.70
2023 NF PE RVU: 0.73
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 0.70 work RVU and clinical staff time removed **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

92609 **Therapeutic services for the use of speech-generating device, including programming and modification**

Global: XXX **Issue:** Speech Language Pathology Services **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 28 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:** 12,752

2023 Work RVU: 1.50
2023 NF PE RVU: 1.54
2023 Fac PE RVU: NA
Result: Decrease

RUC Recommendation: 1.50 work RVU and clinical staff time removed **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

92610 **Evaluation of oral and pharyngeal swallowing function**

Global: XXX **Issue:** Speech Language Pathology Services (RUC) **Screen:** CMS Request/Speech Language Pathology Request / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 23 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 24,492

2023 Work RVU: 1.30
2023 NF PE RVU: 1.19
2023 Fac PE RVU: 0.74
Result: Decrease

RUC Recommendation: Maintain **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92611 **Motion fluoroscopic evaluation of swallowing function by cine or video recording** **Global:** XXX **Issue:** Speech Language Pathology Services (HCPAC) **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 39 **Specialty Developing Recommendation:** ASHA **First Identified:** NA **2021 Medicare Utilization:** 9,936

2023 Work RVU: 1.34
2023 NF PE RVU: 1.31
2023 Fac PE RVU: NA

RUC Recommendation: 1.34 work RVU and clinical staff time removed **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92618 **Evaluation for prescription of non-speech-generating augmentative and alternative communication device, face-to-face with the patient; each additional 30 minutes (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Eval of Rx for Non-Speech Generating Device **Screen:** CMS Request/Speech Language Pathology Request **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 35 **Specialty Developing Recommendation:** ASHA **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU: 0.65
2023 NF PE RVU: 0.26
2023 Fac PE RVU: 0.25

RUC Recommendation: 0.65 **Referred to CPT** February 2011 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92620 **Evaluation of central auditory function, with report; initial 60 minutes** **Global:** XXX **Issue:** Audiology Services **Screen:** CMS Request - Audiology Services **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 17 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 1,006

2023 Work RVU: 1.50
2023 NF PE RVU: 1.08
2023 Fac PE RVU: 0.79

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92621 **Evaluation of central auditory function, with report; each additional 15 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Audiology Services **Screen:** CMS Request - Audiology Services **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 17 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 38

2023 Work RVU: 0.35
2023 NF PE RVU: 0.29
2023 Fac PE RVU: 0.19

RUC Recommendation: 0.35 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92625 **Assessment of tinnitus (includes pitch, loudness matching, and masking)**

Global: XXX **Issue:** Audiology Services **Screen:** CMS Request - Audiology Services **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 17 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 8,388

2023 Work RVU: 1.15
2023 NF PE RVU: 0.84
2023 Fac PE RVU: 0.62

RUC Recommendation: 1.15 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92626 **Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour**

Global: XXX **Issue:** Audiology Services **Screen:** CMS Request - Audiology Services / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 30 **Specialty Developing Recommendation:** AAA, ASHA **First Identified:** NA **2021 Medicare Utilization:** 19,748

2023 Work RVU: 1.40
2023 NF PE RVU: 1.15
2023 Fac PE RVU: 0.77

RUC Recommendation: 1.40 **Referred to CPT** May 2018 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** July 2014

Status Report: CMS Requests and Relativity Assessment Issues

92627 **Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Audiology Services **Screen:** CMS Request - Audiology Services **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 30 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 5,166

2023 Work RVU: 0.33
2023 NF PE RVU: 0.27
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.33 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92640 **Diagnostic analysis with programming of auditory brainstem implant, per hour**

Global: XXX **Issue:** Audiology Services **Screen:** CMS Request - Audiology Services **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 17 **Specialty Developing Recommendation:** ASHA, AAO-HNS **First Identified:** NA **2021 Medicare Utilization:** 18

2023 Work RVU: 1.76
2023 NF PE RVU: 1.47
2023 Fac PE RVU: 0.97

RUC Recommendation: 1.76 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92650 **Auditory evoked potentials; screening of auditory potential with broadband stimuli, automated analysis**

Global: XXX **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAO-HNS, ASHA **First Identified:** February 2019 **2021 Medicare Utilization:**

2023 Work RVU: 0.25
2023 NF PE RVU: 0.56
2023 Fac PE RVU: NA

RUC Recommendation: 0.25 **Referred to CPT** February 2019 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92651 **Auditory evoked potentials; for hearing status determination, broadband stimuli, with interpretation and report** **Global:** XXX **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAO-HNS, ASHA **First Identified:** February 2019 **2021 Medicare Utilization:** 1,107

2023 Work RVU: 1.00
2023 NF PE RVU: 1.49
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** February 2019 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92652 **Auditory evoked potentials; for threshold estimation at multiple frequencies, with interpretation and report** **Global:** XXX **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAO-HNS, ASHA **First Identified:** February 2019 **2021 Medicare Utilization:** 5,603

2023 Work RVU: 1.50
2023 NF PE RVU: 1.80
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** February 2019 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92653 **Auditory evoked potentials; neurodiagnostic, with interpretation and report** **Global:** XXX **Issue:** Auditory Evoked Potentials **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 06 **Specialty Developing Recommendation:** AAA, AAN, AAO-HNS, ACNS, ASHA **First Identified:** February 2019 **2021 Medicare Utilization:** 22,364

2023 Work RVU: 1.05
2023 NF PE RVU: 1.41
2023 Fac PE RVU: NA

RUC Recommendation: 1.05 **Referred to CPT** February 2019 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

92920 **Percutaneous transluminal coronary angioplasty; single major coronary artery or branch** **Global:** 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:** 20,592

2023 Work RVU: 9.85
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.38

RUC Recommendation: 9.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92921 **Percutaneous transluminal coronary angioplasty; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92924 **Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch**

Global: 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:** 1,959

2023 Work RVU: 11.74
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.03

RUC Recommendation: 11.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92925 **Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 5.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92928 **Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch**

Global: 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:** 207,572

2023 Work RVU: 10.96
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.76

RUC Recommendation: 10.49 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92929 **Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 4.44 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92933 **Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch**

Global: 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:** 17,941

2023 Work RVU: 12.29
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.21

RUC Recommendation: 12.32 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

92934 **Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 5.50 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92937 **Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel**

Global: 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: October 2010 **2021 Medicare Utilization:** 14,099

2023 Work RVU: 10.95
2023 NF PE RVU: NA
2023 Fac PE RVU: 3.75

RUC Recommendation: 10.49

Referred to CPT October 2011
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

92938 **Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; each additional branch subtended by the bypass graft (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: October 2010 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 6.00

Referred to CPT October 2011
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

92941 **Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel**

Global: 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: October 2010 **2021 Medicare Utilization:** 33,927

2023 Work RVU: 12.31
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.23

RUC Recommendation: 12.32

Referred to CPT October 2011
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

92943 **Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel**

Global: 000 **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: October 2010 **2021 Medicare Utilization:** 8,050

2023 Work RVU: 12.31
2023 NF PE RVU: NA
2023 Fac PE RVU: 4.22

RUC Recommendation: 12.32

Referred to CPT October 2011
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

92944 **Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; each additional coronary artery, coronary artery branch, or bypass graft (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC

First Identified: October 2010 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 6.00

Referred to CPT October 2011
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

92960 **Cardioversion, elective, electrical conversion of arrhythmia; external**

Global: 000 **Issue:** Cardioversion **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 19 **Specialty Developing Recommendation:** ACC

First Identified: October 2009 **2021 Medicare Utilization:** 191,225

2023 Work RVU: 2.00
2023 NF PE RVU: 2.45
2023 Fac PE RVU: 1.02

RUC Recommendation: 2.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

92973 **Percutaneous transluminal coronary thrombectomy mechanical (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** RAW **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** **First Identified:** April 2013 **2021 Medicare Utilization:** 2,331

2023 Work RVU: 3.28
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.12

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

92980 **Transcatheter placement of an intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; single vessel** **Global:** **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

92981 **Transcatheter placement of an intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; each additional vessel (List separately in addition to code for primary procedure)** **Global:** **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92982 **Percutaneous transluminal coronary balloon angioplasty; single vessel** **Global:** **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List / Harvard-Valued Annual Allowed Charges Greater than $10 million **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92984 **Percutaneous transluminal coronary balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure)** **Global:** **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92986 **Percutaneous balloon valvuloplasty; aortic valve** **Global:** 090 **Issue:** Valvuloplasty **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** October 2008 **2021 Medicare Utilization:** 2,322

2023 Work RVU: 22.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 11.07

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

92992 **Atrial septectomy or septostomy; transvenous method, balloon (eg, Rashkind type) (includes cardiac catheterization)**

Global: **Issue:** Atrial Septostomy **Screen:** CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 13 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92993 **Atrial septectomy or septostomy; blade method (Park septostomy) (includes cardiac catheterization)**

Global: **Issue:** Atrial Septostomy **Screen:** CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 13 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92995 **Percutaneous transluminal coronary atherectomy, by mechanical or other method, with or without balloon angioplasty; single vessel**

Global: **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

92996 **Percutaneous transluminal coronary atherectomy, by mechanical or other method, with or without balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure)**

Global: **Issue:** Percutaneous Coronary Intervention **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 10 **Specialty Developing Recommendation:** ACC **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93000 **Electrocardiogram, routine ecg with at least 12 leads; with interpretation and report**

Global: XXX **Issue:** Complete Electrocardiogram **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 20 **Specialty Developing Recommendation:** ACC

First Identified: September 2011 **2021 Medicare Utilization:** 10,271,235

2023 Work RVU: 0.17
2023 NF PE RVU: 0.24
2023 Fac PE RVU: NA

RUC Recommendation: 0.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

93005 **Electrocardiogram, routine ecg with at least 12 leads; tracing only, without interpretation and report**

Global: XXX **Issue:** Complete Electrocardiogram **Screen:** High Volume Growth1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 20 **Specialty Developing Recommendation:** ACC

First Identified: February 2008 **2021 Medicare Utilization:** 416,453

2023 Work RVU: 0.00
2023 NF PE RVU: 0.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

93010 **Electrocardiogram, routine ecg with at least 12 leads; interpretation and report only**

Global: XXX **Issue:** Complete Electrocardiogram **Screen:** MPC List / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 20 **Specialty Developing Recommendation:** ACC

First Identified: October 2010 **2021 Medicare Utilization:** 16,114,629

2023 Work RVU: 0.17
2023 NF PE RVU: 0.06
2023 Fac PE RVU: 0.06

RUC Recommendation: 0.17

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

93012 **Deleted from CPT**

Global: **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93014 **Deleted from CPT**

Global: **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93015 **Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report**

Global: XXX **Issue:** Cardiovascular Stress Tests **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 47 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 851,302

2023 Work RVU: 0.75

2023 NF PE RVU: 1.31

2023 Fac PE RVU: NA

RUC Recommendation: 0.75. CPT Assistant published. **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2010

Status Report: CMS Requests and Relativity Assessment Issues

93016 **Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; supervision only, without interpretation and report**

Global: XXX **Issue:** Cardiovascular Stress Tests **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 47 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 827,798

2023 Work RVU: 0.45
2023 NF PE RVU: 0.16
2023 Fac PE RVU: 0.16

RUC Recommendation: 0.45 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93017 **Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; tracing only, without interpretation and report**

Global: XXX **Issue:** Cardiovascular Stress Tests **Screen:** High Volume Growth1 / CMS Request - Practice Expense Review / Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:** 78,787

2023 Work RVU: 0.00
2023 NF PE RVU: 1.05
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

93018 **Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only**

Global: XXX **Issue:** Cardiovascular Stress Tests and Echocardiography **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 47 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 988,540

2023 Work RVU: 0.30
2023 NF PE RVU: 0.10
2023 Fac PE RVU: 0.10

RUC Recommendation: 0.30 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2010

Status Report: CMS Requests and Relativity Assessment Issues

93025 **Microvolt t-wave alternans for assessment of ventricular arrhythmias**

Global: XXX **Issue:** Microvolt T-Wave Assessment **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 18 **Specialty Developing Recommendation:** ACC

First Identified: NA

2021 Medicare Utilization: 124

2023 Work RVU: 0.75
2023 NF PE RVU: 2.83
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

93040 **Rhythm ecg, 1-3 leads; with interpretation and report**

Global: XXX **Issue:** Rhythm EKG **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 34 **Specialty Developing Recommendation:** ACC

First Identified: February 2009

2021 Medicare Utilization: 80,784

2023 Work RVU: 0.15
2023 NF PE RVU: 0.21
2023 Fac PE RVU: NA

RUC Recommendation: 0.15

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

93041 **Rhythm ecg, 1-3 leads; tracing only without interpretation and report**

Global: XXX **Issue:** Rhythm EKG **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 34 **Specialty Developing Recommendation:** ACC

First Identified: February 2009

2021 Medicare Utilization: 13,114

2023 Work RVU: 0.00
2023 NF PE RVU: 0.17
2023 Fac PE RVU: NA

RUC Recommendation: 0.00 (PE only)

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

93042 **Rhythm ecg, 1-3 leads; interpretation and report only**

Global: XXX **Issue:** Rhythm EKG **Screen:** Havard Valued - Utilization over 1 Million **Complete?** Yes

Most Recent RUC Meeting: October 2009 **Tab:** 34 **Specialty Developing Recommendation:** ACC, ACEP

First Identified: October 2008

2021 Medicare Utilization: 310,510

2023 Work RVU: 0.15
2023 NF PE RVU: 0.04
2023 Fac PE RVU: 0.04

RUC Recommendation: 0.15

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

93224 **External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 192,428

2023 Work RVU: 0.39
2023 NF PE RVU: 1.75
2023 Fac PE RVU: NA

RUC Recommendation: 0.52 **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93225 **External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; recording (includes connection, recording, and disconnection)**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 77,725

2023 Work RVU: 0.00
2023 NF PE RVU: 0.54
2023 Fac PE RVU: NA

RUC Recommendation: N/A no physician work **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93226 **External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; scanning analysis with report**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 126,782

2023 Work RVU: 0.00
2023 NF PE RVU: 1.07
2023 Fac PE RVU: NA

RUC Recommendation: N/A no physician work **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93227 **External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; review and interpretation by a physician or other qualified health care professional**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC

First Identified: October 2009 **2021 Medicare Utilization:** 248,956

2023 Work RVU: 0.39
2023 NF PE RVU: 0.14
2023 Fac PE RVU: 0.14

RUC Recommendation: 0.52 **Referred to CPT** Feburary 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93228 **External mobile cardiovascular telemetry with electrocardiographic recording, concurrent computerized real time data analysis and greater than 24 hours of accessible ecg data storage (retrievable with query) with ecg triggered and patient selected events transmitted to a remote attended surveillance center for up to 30 days; review and interpretation with report by a physician or other qualified health care professional**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 / High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 20 **Specialty Developing Recommendation:** ACC, HRS

First Identified: October 2009 **2021 Medicare Utilization:** 222,551

2023 Work RVU: 0.48
2023 NF PE RVU: 0.23
2023 Fac PE RVU: 0.23

RUC Recommendation: 0.52 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93229 **External mobile cardiovascular telemetry with electrocardiographic recording, concurrent computerized real time data analysis and greater than 24 hours of accessible ecg data storage (retrievable with query) with ecg triggered and patient selected events transmitted to a remote attended surveillance center for up to 30 days; technical support for connection and patient instructions for use, attended surveillance, analysis and transmission of daily and emergent data reports as prescribed by a physician or other qualified health care professional**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 / High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: October 2020 **Tab:** 20 **Specialty Developing Recommendation:** ACC, HRS

First Identified: October 2009 **2021 Medicare Utilization:** 320,448

2023 Work RVU: 0.00
2023 NF PE RVU: 24.97
2023 Fac PE RVU: NA

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93230 **Deleted from CPT**

Global: **Issue:** Cardiac Device Monitoring **Screen:** CMS Request - 2009 Final Rule, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC

First Identified: NA **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

93231 **Deleted from CPT**

Global: **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:**

First Identified: October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

93232 **Deleted from CPT**

Global: **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:**

First Identified: October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

93233 **Deleted from CPT**

Global: **Issue:** Cardiac Device Monitoring **Screen:** CMS Request - 2009 Final Rule, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC

First Identified: NA **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

93235 **Deleted from CPT**

Global: **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:**

First Identified: October 2009 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

93236 **Deleted from CPT**

Global: **Issue:** Cardiovascular Stress Test **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACC

First Identified: February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2010

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

93237 **Deleted from CPT**

Global: **Issue:** Wearable Cardiac Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2010 **Tab:** 31 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93268 **External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; includes transmission, review and interpretation by a physician or other qualified health care professional**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 10,933

2023 Work RVU: 0.52
2023 NF PE RVU: 4.77
2023 Fac PE RVU: NA

RUC Recommendation: 0.52 **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93270 **External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; recording (includes connection, recording, and disconnection)**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 32,455

2023 Work RVU: 0.00
2023 NF PE RVU: 0.24
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** February 2010 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93271 **External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; transmission and analysis**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 42,065

2023 Work RVU: 0.00
2023 NF PE RVU: 4.36
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** February 2010 **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

93272 **External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; review and interpretation by a physician or other qualified health care professional**

Global: XXX **Issue:** External Cardiovascular Device Monitoring **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 25 **Specialty Developing Recommendation:** ACC **First Identified:** October 2009 **2021 Medicare Utilization:** 92,623

2023 Work RVU: 0.52
2023 NF PE RVU: 0.17
2023 Fac PE RVU: 0.17

RUC Recommendation: 0.52 **Referred to CPT** February 2010 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

93279 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system or leadless pacemaker system in one cardiac chamber**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 111,766

2023 Work RVU: 0.65
2023 NF PE RVU: 1.35
2023 Fac PE RVU: NA

RUC Recommendation: 0.65 **Referred to CPT** February 2017 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93280 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 776,133

2023 Work RVU: 0.77
2023 NF PE RVU: 1.58
2023 Fac PE RVU: NA

RUC Recommendation: 0.77 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93281 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 66,325

2023 Work RVU: 0.85
2023 NF PE RVU: 1.64
2023 Fac PE RVU: NA

RUC Recommendation: 0.85 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93282 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 79,997

2023 Work RVU: 0.85
2023 NF PE RVU: 1.52
2023 Fac PE RVU: NA

RUC Recommendation: 0.85 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93283 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 158,873

2023 Work RVU: 1.15
2023 NF PE RVU: 1.75
2023 Fac PE RVU: NA

RUC Recommendation: 1.15 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93284 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 191,788

2023 Work RVU: 1.25
2023 NF PE RVU: 1.88
2023 Fac PE RVU: NA

RUC Recommendation: 1.25 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93285 **Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; subcutaneous cardiac rhythm monitor system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 35,450

2023 Work RVU: 0.52
2023 NF PE RVU: 1.27
2023 Fac PE RVU: NA

RUC Recommendation: 0.52 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93286 **Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system, or leadless pacemaker system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 26,384

2023 Work RVU: 0.30
2023 NF PE RVU: 1.06
2023 Fac PE RVU: NA

RUC Recommendation: 0.30 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93287 **Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 13,517

2023 Work RVU: 0.45
2023 NF PE RVU: 1.13
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93288 **Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system, or leadless pacemaker system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 179,111

2023 Work RVU: 0.43
2023 NF PE RVU: 1.24
2023 Fac PE RVU: NA

RUC Recommendation: 0.43 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93289 **Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 69,223

2023 Work RVU: 0.75
2023 NF PE RVU: 1.38
2023 Fac PE RVU: NA

RUC Recommendation: 0.75 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93290 **Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 83,336

2023 Work RVU: 0.43
2023 NF PE RVU: 1.15
2023 Fac PE RVU: NA

RUC Recommendation: 0.43 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93291 **Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; subcutaneous cardiac rhythm monitor system, including heart rhythm derived data analysis**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 58,066

2023 Work RVU: 0.37
2023 NF PE RVU: 1.10
2023 Fac PE RVU: NA

RUC Recommendation: 0.37 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93292 **Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 1,082

2023 Work RVU: 0.43
2023 NF PE RVU: 1.07
2023 Fac PE RVU: NA

RUC Recommendation: 0.43 **Referred to CPT** February 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93293 **Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 23 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 20,156

2023 Work RVU: 0.31
2023 NF PE RVU: 1.03
2023 Fac PE RVU: NA

RUC Recommendation: 0.31 **Referred to CPT** February 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93294 **Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, or leadless pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 23 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 1,531,037

2023 Work RVU: 0.60
2023 NF PE RVU: 0.24
2023 Fac PE RVU: 0.24

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93295 **Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 23 **Specialty Developing Recommendation:** ACC, HRS

First Identified: July 2015

2021 Medicare Utilization: 704,136

2023 Work RVU: 0.74
2023 NF PE RVU: 0.30
2023 Fac PE RVU: 0.30

RUC Recommendation: 0.74

Referred to CPT

Result: Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93296 **Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, leadless pacemaker system, or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results**

Global: XXX **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 25 **Specialty Developing Recommendation:** ACC, HRS

First Identified: July 2015

2021 Medicare Utilization: 1,614,139

2023 Work RVU: 0.00
2023 NF PE RVU: 0.66
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs and Refer to CPT

Referred to CPT February 2017

Result: PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

93297 **Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional**

Global: XXX **Issue:** Remote Interrogation Deviec Evaluation - Cardiovascular (PE Only) **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 20 **Specialty Developing Recommendation:** ACC, HRS

First Identified: July 2015

2021 Medicare Utilization: 542,980

2023 Work RVU: 0.52
2023 NF PE RVU: 0.20
2023 Fac PE RVU: 0.20

RUC Recommendation: 0.52 and PE Inputs

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93298 **Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional**

Global: XXX **Issue:** Remote Interrogation Deviec Evaluation - Cardiovascular (PE Only) **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 20 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:** 957,280

2023 Work RVU: 0.52
2023 NF PE RVU: 0.21
2023 Fac PE RVU: 0.21

RUC Recommendation: 0.52 and PE Inputs **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93299 **Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results**

Global: **Issue:** Cardiac Electrophysiology Device Monitoring Services **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 22 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93306 **Echocardiography, transthoracic, real-time with image documentation (2d), includes m-mode recording, when performed, complete, with spectral doppler echocardiography, and with color flow doppler echocardiography**

Global: XXX **Issue:** Complete Transthoracic Echocardiography (TTE) with Doppler **Screen:** CMS High Expenditure Procedural Codes2 / CMS Request - Final Rule for 2019 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 21 **Specialty Developing Recommendation:** ACC, ASE **First Identified:** July 2015 **2021 Medicare Utilization:** 6,696,461

2023 Work RVU: 1.46
2023 NF PE RVU: 4.32
2023 Fac PE RVU: NA

RUC Recommendation: 1.46 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93307 **Echocardiography, transthoracic, real-time with image documentation (2d), includes m-mode recording, when performed, complete, without spectral or color doppler echocardiography**

Global: XXX **Issue:** Transthoracic Echocardiography (TTE) **Screen:** CMS Request - Practice Expense Review / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 42 **Specialty Developing Recommendation:** ACC

First Identified: NA

2021 Medicare Utilization: 23,830

2023 Work RVU: 0.92

2023 NF PE RVU: 3.11

2023 Fac PE RVU: NA

RUC Recommendation: 0.92

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

93308 **Echocardiography, transthoracic, real-time with image documentation (2d), includes m-mode recording, when performed, follow-up or limited study**

Global: XXX **Issue:** Transthoracic Echocardiography (TTE) **Screen:** CMS Fastest Growing, Harvard Valued - Utilization over 100,000 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 42 **Specialty Developing Recommendation:** ACC

First Identified: October 2008

2021 Medicare Utilization: 490,174

2023 Work RVU: 0.53

2023 NF PE RVU: 2.37

2023 Fac PE RVU: NA

RUC Recommendation: 0.53

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

93320 **Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (list separately in addition to codes for echocardiographic imaging); complete**

Global: ZZZ **Issue:** Doppler Echocardiography **Screen:** CMS Request - Practice Expense Review / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 30 **Specialty Developing Recommendation:** ACC

First Identified: February 2009

2021 Medicare Utilization: 316,852

2023 Work RVU: 0.38

2023 NF PE RVU: 1.11

2023 Fac PE RVU: NA

RUC Recommendation: 0.38

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

93321 **Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (list separately in addition to codes for echocardiographic imaging); follow-up or limited study (list separately in addition to codes for echocardiographic imaging)**

Global: ZZZ **Issue:** Doppler Echocardiography **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 30 **Specialty Developing Recommendation:** ACC

First Identified: October 2013

2021 Medicare Utilization: 271,170

2023 Work RVU: 0.15
2023 NF PE RVU: 0.59
2023 Fac PE RVU: NA

RUC Recommendation: 0.15

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93325 **Doppler echocardiography color flow velocity mapping (list separately in addition to codes for echocardiography)**

Global: ZZZ **Issue:** Doppler Echocardiography **Screen:** CMS Request - Practice Expense Review / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 30 **Specialty Developing Recommendation:** ACC

First Identified: February 2009

2021 Medicare Utilization: 591,854

2023 Work RVU: 0.07
2023 NF PE RVU: 0.63
2023 Fac PE RVU: NA

RUC Recommendation: 0.07

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93350 **Echocardiography, transthoracic, real-time with image documentation (2d), includes m-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report;**

Global: XXX **Issue:** Stress Transthoracic Echocardiography (TTE) Complete **Screen:** Other - Identified by RUC / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 26 **Specialty Developing Recommendation:** ACC, ASE

First Identified: April 2008

2021 Medicare Utilization: 73,875

2023 Work RVU: 1.46
2023 NF PE RVU: 4.02
2023 Fac PE RVU: NA

RUC Recommendation: 1.46; CPT Assistant article published

Referred to CPT October 2010

Result: Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2010

Status Report: CMS Requests and Relativity Assessment Issues

93351 **Echocardiography, transthoracic, real-time with image documentation (2d), includes m-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report; including performance of continuous electrocardiographic monitoring, with supervision by a physician or other qualified health care professional**

Global: XXX **Issue:** Stress Transthoracic Echocardiography (TTE) Complete **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 26 **Specialty Developing Recommendation:** ACC, ASE **First Identified:** July 2015 **2021 Medicare Utilization:** 188,627

2023 Work RVU: 1.75
2023 NF PE RVU: 5.08
2023 Fac PE RVU: NA

RUC Recommendation: 1.75 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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93451 **Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / Modifier -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 42,360

2023 Work RVU: 2.47
2023 NF PE RVU: 23.06
2023 Fac PE RVU: NA

RUC Recommendation: Remove from Modifier -51 exempt list. 3.02 **Referred to CPT** October 2009 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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93452 **Left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 3,145

2023 Work RVU: 4.50
2023 NF PE RVU: 21.66
2023 Fac PE RVU: NA

RUC Recommendation: 4.32 **Referred to CPT** October 2009 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

Status Report: CMS Requests and Relativity Assessment Issues

93453 **Combined right and left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 2,028

2023 Work RVU: 5.99
2023 NF PE RVU: 27.20
2023 Fac PE RVU: NA

RUC Recommendation: 5.98 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93454 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation;**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 106,945

2023 Work RVU: 4.54
2023 NF PE RVU: 21.70
2023 Fac PE RVU: NA

RUC Recommendation: 4.95 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93455 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 21,092

2023 Work RVU: 5.29
2023 NF PE RVU: 23.90
2023 Fac PE RVU: NA

RUC Recommendation: 6.15 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93456 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right heart catheterization**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / Modifier -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 20,308

2023 Work RVU: 5.90
2023 NF PE RVU: 26.71
2023 Fac PE RVU: NA

RUC Recommendation: Remove from Modifier -51 Exempt List. 6.00 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93457 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography and right heart catheterization**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 3,563

2023 Work RVU: 6.64
2023 NF PE RVU: 28.86
2023 Fac PE RVU: NA

RUC Recommendation: 7.66 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93458 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 415,368

2023 Work RVU: 5.60
2023 NF PE RVU: 24.48
2023 Fac PE RVU: NA

RUC Recommendation: 6.51 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93459 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 67,014

2023 Work RVU: 6.35
2023 NF PE RVU: 25.95
2023 Fac PE RVU: NA

RUC Recommendation: 7.34 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93460 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 79,581

2023 Work RVU: 7.10
2023 NF PE RVU: 28.77
2023 Fac PE RVU: NA

RUC Recommendation: 7.88 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93461 **Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography**

Global: 000 **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 11,803

2023 Work RVU: 7.85
2023 NF PE RVU: 31.69
2023 Fac PE RVU: NA

RUC Recommendation: 9.00 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93462 **Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 7,044

2023 Work RVU: 3.73
2023 NF PE RVU: 1.56
2023 Fac PE RVU: 1.56

RUC Recommendation: 3.73 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93463 **Pharmacologic agent administration (eg, inhaled nitric oxide, intravenous infusion of nitroprusside, dobutamine, milrinone, or other agent) including assessing hemodynamic measurements before, during, after and repeat pharmacologic agent administration, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 5,368

2023 Work RVU: 2.00
2023 NF PE RVU: 0.70
2023 Fac PE RVU: 0.70

RUC Recommendation: 2.00 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93464 **Physiologic exercise study (eg, bicycle or arm ergometry) including assessing hemodynamic measurements before and after (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 1,274

2023 Work RVU: 1.80
2023 NF PE RVU: 4.62
2023 Fac PE RVU: NA

RUC Recommendation: 1.80 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93501 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93503 **Insertion and placement of flow directed catheter (eg, swan-ganz) for monitoring purposes**

Global: 000 **Issue:** Insertion of Catheter **Screen:** CMS High Expenditure Procedural Codes2 / Codes Reported Together 75%or More-Part4 / Modifier -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** ACR, ASA **First Identified:** July 2015 **2021 Medicare Utilization:** 54,329

2023 Work RVU: 2.00

2023 NF PE RVU: NA

2023 Fac PE RVU: 0.40

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93508 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93510 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More/ CMS Request - Practice Expense Review, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93511 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93514 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93524 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93526 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93527 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93528 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93529 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93539 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93540 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93541 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93542 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93543 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / CMS Request - Practice Expense Review, Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93544 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93545 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93555 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93556 **Deleted from CPT**

Global: **Issue:** Cardiac Catheterization **Screen:** Codes Reported Together 95% or More / CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 31 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2009 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93561 **Indicator dilution studies such as dye or thermodilution, including arterial and/or venous catheterization; with cardiac output measurement (separate procedure)**

Global: ZZZ **Issue:** Cardiac Output Measurement **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 27 **Specialty Developing Recommendation:** **First Identified:** October 2017 **2021 Medicare Utilization:** 12

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: 0.77 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

93562 **Indicator dilution studies such as dye or thermodilution, including arterial and/or venous catheterization; subsequent measurement of cardiac output**

Global: ZZZ **Issue:** Cardiac Output Measurement **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 27 **Specialty Developing Recommendation:** **First Identified:** October 2017 **2021 Medicare Utilization:** 3

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: 0.95 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93563 **Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective coronary angiography during congenital heart catheterization (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 146

2023 Work RVU: 1.00
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.35

RUC Recommendation: 2.00 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93564 **Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective opacification of aortocoronary venous or arterial bypass graft(s) (eg, aortocoronary saphenous vein, free radial artery, or free mammary artery graft) to one or more coronary arteries and in situ arterial conduits (eg, internal mammary), whether native or used for bypass to one or more coronary arteries during congenital heart catheterization, when performed (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Pulmonary Angiography **Screen:** Codes Reported Together 95% or More / Survey Below 30 Threshold **Complete?** No

Most Recent RUC Meeting: October 2021 **Tab:** 08 **Specialty Developing Recommendation:** ACC, SCAI **First Identified:** October 2021 **2021 Medicare Utilization:** 11

2023 Work RVU: 1.03
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.35

RUC Recommendation: Review action plan **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93565 **Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective left ventricular or left atrial angiography (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 72

2023 Work RVU: 0.50
2023 NF PE RVU: 0.17
2023 Fac PE RVU: 0.17

RUC Recommendation: 1.90 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93566 **Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective right ventricular or right atrial angiography (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 303

2023 Work RVU: 0.50
2023 NF PE RVU: 0.18
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.96 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93567 **Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for supravalvular aortography (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 20,363

2023 Work RVU: 0.70
2023 NF PE RVU: 0.24
2023 Fac PE RVU: 0.24

RUC Recommendation: 0.97 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93568 **Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for nonselective pulmonary arterial angiography (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Diagnostic Cardiac Catheterization **Screen:** Codes Reported Together 95% or More **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 28 **Specialty Developing Recommendation:** ACC **First Identified:** **2021 Medicare Utilization:** 1,197

2023 Work RVU: 0.88
2023 NF PE RVU: 0.31
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.98 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93571 **Intravascular doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Coronary Flow Reserve Measurement **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 13 **Specialty Developing Recommendation:** ACC, SCAI **First Identified:** October 2016 **2021 Medicare Utilization:** 67,025

2023 Work RVU: 0.00
2023 NF PE RVU: NA
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93572 **Intravascular doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; each additional vessel (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Coronary Flow Reserve Measurement **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 13 **Specialty Developing Recommendation:** ACC, SCAI **First Identified:** October 2017 **2021 Medicare Utilization:** 12,923

2023 Work RVU: 0.00
2023 NF PE RVU: NA
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93613 **Intracardiac electrophysiologic 3-dimensional mapping (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cardiac Ablation Services Bundling **Screen:** CMS Fastest Growing / High Volume Growth2 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2008 **2021 Medicare Utilization:** 86,612

2023 Work RVU: 5.23
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.22

RUC Recommendation: 5.23 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93620 **Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, his bundle recording**

Global: 000 **Issue:** Intracardiac Catheter Ablation **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACC

First Identified: February 2010 **2021 Medicare Utilization:** 6,937

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 11.57

Referred to CPT October 2011
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

93621 **Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left atrial pacing and recording from coronary sinus or left atrium (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cardiac Ablation Services Bundling **Screen:** High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS

First Identified: October 2019 **2021 Medicare Utilization:** 25,997

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 1.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

93623 **Programmed stimulation and pacing after intravenous drug infusion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Pacing Heart Stimulation **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 22 **Specialty Developing Recommendation:** ACC, HRS

First Identified: October 2018 **2021 Medicare Utilization:** 38,723

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Referral to CPT for parenthetical. 2.04

Referred to CPT May 2019
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

93641 **Electrophysiologic evaluation of single or dual chamber pacing cardioverter-defibrillator leads including defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing for arrhythmia termination) at time of initial implantation or replacement; with testing of single or dual chamber pacing cardioverter-defibrillator pulse generator**

Global: 000 **Issue:** Insertion/Removal of Pacemaker or Pacing Carioverter-Defibillator **Screen:** Codes Reported Together 75% or More-Part1 / Pre-Time Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 21 **Specialty Developing Recommendation:** ACC **First Identified:** February 2010 **2021 Medicare Utilization:** 9,237

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Maintain work RVU and adjust the times from pre-time package 2B.

Referred to CPT February 2011

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93651 **Intracardiac catheter ablation of arrhythmogenic focus; for treatment of supraventricular tachycardia by ablation of fast or slow atrioventricular pathways, accessory atrioventricular connections or other atrial foci, singly or in combination**

Global: **Issue:** Bundling EPS with Transcatheter Ablation **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 11 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2011

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93652 **Intracardiac catheter ablation of arrhythmogenic focus; for treatment of ventricular tachycardia**

Global: **Issue:** Bundling EPS with Transcatheter Ablation **Screen:** CMS Fastest Growing/Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 11 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT October 2011

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93653 **Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording and catheter ablation of arrhythmogenic focus, including intracardiac electrophysiologic 3-dimensional mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and his bundle recording, when performed; with treatment of supraventricular tachycardia by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry**

Global: 000 **Issue:** Cardiac Ablation Services Bundling **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2011 **2021 Medicare Utilization:** 27,745

2023 Work RVU: 15.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 6.37

RUC Recommendation: 15.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93654 **Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording and catheter ablation of arrhythmogenic focus, including intracardiac electrophysiologic 3-dimensional mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and his bundle recording, when performed; with treatment of ventricular tachycardia or focus of ventricular ectopy including left ventricular pacing and recording, when performed**

Global: 000 **Issue:** Cardiac Ablation Services Bundling **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2011 **2021 Medicare Utilization:** 7,824

2023 Work RVU: 18.10
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.65

RUC Recommendation: 18.10 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93655 **Intracardiac catheter ablation of a discrete mechanism of arrhythmia which is distinct from the primary ablated mechanism, including repeat diagnostic maneuvers, to treat a spontaneous or induced arrhythmia (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cardiac Ablation Services Bundling **Screen:** Codes Reported Together 75% or More-Part1 /High Volume Growth7 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2011 **2021 Medicare Utilization:** 40,338

2023 Work RVU: 5.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.35

RUC Recommendation: 7.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93656 **Comprehensive electrophysiologic evaluation including transseptal catheterizations, insertion and repositioning of multiple electrode catheters with intracardiac catheter ablation of atrial fibrillation by pulmonary vein isolation, including intracardiac electrophysiologic 3-dimensional mapping, intracardiac echocardiography including imaging supervision and interpretation, induction or attempted induction of an arrhythmia including left or right atrial pacing/recording, right ventricular pacing/recording, and his bundle recording, when performed**

Global: 000 **Issue:** Cardiac Ablation Services Bundling **Screen:** Codes Reported Together 75% or More-Part1 / High Volume Growth6 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2011 **2021 Medicare Utilization:** 61,319

2023 Work RVU: 17.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 7.23

RUC Recommendation: 17.00 **Referred to CPT** October 2020 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93657 **Additional linear or focal intracardiac catheter ablation of the left or right atrium for treatment of atrial fibrillation remaining after completion of pulmonary vein isolation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cardiac Ablation Services Bundling **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** October 2011 **2021 Medicare Utilization:** 30,645

2023 Work RVU: 5.50
2023 NF PE RVU: NA
2023 Fac PE RVU: 2.35

RUC Recommendation: 7.00 **Referred to CPT** October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93662 **Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Cardiac Ablation Services Bundling **Screen:** High Volume Growth1 / High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 07 **Specialty Developing Recommendation:** ACC, HRS

First Identified: February 2008

2021 Medicare Utilization: 74,158

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: 2.53

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

93668 **Peripheral arterial disease (pad) rehabilitation, per session**

Global: XXX **Issue:** Peripheral Artery Disease (PAD) Rehabilitation (PE Only) **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 28 **Specialty Developing Recommendation:**

First Identified: July 2017

2021 Medicare Utilization: 1,383

2023 Work RVU: 0.00
2023 NF PE RVU: 0.42
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

93701 **Bioimpedance-derived physiologic cardiovascular analysis**

Global: XXX **Issue:** **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: October 2010

2021 Medicare Utilization: 4,590

2023 Work RVU: 0.00
2023 NF PE RVU: 0.78
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

93731 **Deleted from CPT**

Global: **Issue:** Cardiology Services **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACC

First Identified: October 2008

2021 Medicare Utilization:

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

93732 **Deleted from CPT** **Global:** **Issue:** Cardiology Services **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93733 **Deleted from CPT** **Global:** **Issue:** Cardiology Services **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93743 **Deleted from CPT** **Global:** **Issue:** Cardiology Services **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93744 **Deleted from CPT** **Global:** **Issue:** Cardiology Services **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2008 **Tab:** 26 **Specialty Developing Recommendation:** ACC **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93750 **Interrogation of ventricular assist device (vad), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report**

Global: XXX **Issue:** Ventricular Assist Device (VAD) Interrogation **Screen:** High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 24 **Specialty Developing Recommendation:** AATS, ACC, STS **First Identified:** October 2018 **2021 Medicare Utilization:** 84,303

2023 Work RVU: 0.75
2023 NF PE RVU: 0.63
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.85 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

93792 **Patient/caregiver training for initiation of home international normalized ratio (inr) monitoring under the direction of a physician or other qualified health care professional, face-to-face, including use and care of the inr monitor, obtaining blood sample, instructions for reporting home inr test results, and documentation of patient's/caregiver's ability to perform testing and report results**

Global: XXX **Issue:** Home INR Monitoring **Screen:** High Volume Growth3 / Work Neutrality 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** September 2016 **2021 Medicare Utilization:** 1,208

2023 Work RVU: 0.00
2023 NF PE RVU: 2.06
2023 Fac PE RVU: NA

RUC Recommendation: Review in 3 years. 0.00 PE Only **Referred to CPT** September 2016 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

93793 **Anticoagulant management for a patient taking warfarin, must include review and interpretation of a new home, office, or lab international normalized ratio (inr) test result, patient instructions, dosage adjustment (as needed), and scheduling of additional test(s), when performed**

Global: XXX **Issue:** Home INR Monitoring **Screen:** High Volume Growth3 / Work Neutrality 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** September 2016 **2021 Medicare Utilization:** 1,643,960

2023 Work RVU: 0.18
2023 NF PE RVU: 0.15
2023 Fac PE RVU: NA

RUC Recommendation: Review in 3 years. 0.18 **Referred to CPT** September 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93875 **Deleted from CPT**

Global: **Issue:** Noninvasive Vascular Diagnostic Studies **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** AAN, ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** SS in process of developing draft of CPT Asst article (Aug 2011). Code was deleted

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93880 **Duplex scan of extracranial arteries; complete bilateral study**

Global: XXX **Issue:** Duplex Scans **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACR, ACC, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 1,780,271

2023 Work RVU: 0.80
2023 NF PE RVU: 4.82
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** October 2010 **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Addressed in CPT Coding Changes

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93882 **Duplex scan of extracranial arteries; unilateral or limited study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS High Expenditure Procedural Codes1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACC, ACR, SVS **First Identified:** January 2012 **2021 Medicare Utilization:** 25,981

2023 Work RVU: 0.50
2023 NF PE RVU: 3.13
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93886 **Transcranial doppler study of the intracranial arteries; complete study** **Global:** XXX **Issue:** Duplex Scans **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2014 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACC, ACR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 88,929

2023 Work RVU: 0.91
2023 NF PE RVU: 7.10
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: Refer to CPT for code bundling solution **Referred to CPT** May 2023
Referred to CPT Asst ☐ **Published in CPT Asst:**

93888 **Transcranial doppler study of the intracranial arteries; limited study** **Global:** XXX **Issue:** Duplex Scans **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** AAN, ACC, ACR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 8,637

2023 Work RVU: 0.50
2023 NF PE RVU: 4.21
2023 Fac PE RVU: NA
Result: Increase

RUC Recommendation: 0.70 **Referred to CPT** October 2010
Referred to CPT Asst ☐ **Published in CPT Asst:**

93890 **Transcranial doppler study of the intracranial arteries; vasoreactivity study** **Global:** XXX **Issue:** **Screen:** High Volume Growth6 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACR, ASNR **First Identified:** October 2019 **2021 Medicare Utilization:** 45,280

2023 Work RVU: 1.00
2023 NF PE RVU: 7.24
2023 Fac PE RVU: NA
Result:

RUC Recommendation: Refer to CPT for code bundling solution. **Referred to CPT** May 2023
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93892 **Transcranial doppler study of the intracranial arteries; emboli detection without intravenous microbubble injection**

Global: XXX **Issue:** **Screen:** High Volume Growth6 / Codes Reported Together 75% or More-Part5 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACR, ASNR **First Identified:** October 2019 **2021 Medicare Utilization:** 47,422

2023 Work RVU: 1.15
2023 NF PE RVU: 8.29
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT for code bundling solution. **Referred to CPT** May 2023 **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

93895 **Quantitative carotid intima media thickness and carotid atheroma evaluation, bilateral**

Global: XXX **Issue:** Carotid Intima-Media Thickness Ultrasound **Screen:** New Code in CPT 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 37 **Specialty Developing Recommendation:** No Interest **First Identified:** April 2014 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Rescind April 2014 recommendation, contractor price. **Referred to CPT** **Result:** Not Part of RAW

Referred to CPT Asst ☐ **Published in CPT Asst:**

93922 **Limited bilateral noninvasive physiologic studies of upper or lower extremity arteries, (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus bidirectional, doppler waveform recording and analysis at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus volume plethysmography at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries with, transcutaneous oxygen tension measurement at 1-2 levels)**

Global: XXX **Issue:** Extremity Non-Invasive Arterial Physiologic Studies **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 27 **Specialty Developing Recommendation:** SVS, ACR, ACC **First Identified:** October 2008 **2021 Medicare Utilization:** 600,988

2023 Work RVU: 0.25
2023 NF PE RVU: 2.15
2023 Fac PE RVU: NA

RUC Recommendation: 0.25 **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93923 **Complete bilateral noninvasive physiologic studies of upper or lower extremity arteries, 3 or more levels (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental blood pressure measurements with bidirectional doppler waveform recording and analysis, at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental volume plethysmography at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental transcutaneous oxygen tension measurements at 3 or more levels), or single level study with provocative functional maneuvers (eg, measurements with postural provocative tests, or measurements with reactive hyperemia)**

Global: XXX **Issue:** Extremity Non-Invasive Arterial Physiologic Studies **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 27 **Specialty Developing Recommendation:** SVS, ACR, ACC **First Identified:** February 2009 **2021 Medicare Utilization:** 349,633

2023 Work RVU: 0.45
2023 NF PE RVU: 3.31
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93924 **Noninvasive physiologic studies of lower extremity arteries, at rest and following treadmill stress testing, (ie, bidirectional doppler waveform or volume plethysmography recording and analysis at rest with ankle/brachial indices immediately after and at timed intervals following performance of a standardized protocol on a motorized treadmill plus recording of time of onset of claudication or other symptoms, maximal walking time, and time to recovery) complete bilateral study**

Global: XXX **Issue:** Extremity Non-Invasive Arterial Physiologic Studies **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 27 **Specialty Developing Recommendation:** SVS, ACR, ACC **First Identified:** February 2009 **2021 Medicare Utilization:** 44,407

2023 Work RVU: 0.50
2023 NF PE RVU: 4.12
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** February 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93925 **Duplex scan of lower extremity arteries or arterial bypass grafts; complete bilateral study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS-Other - Utilization over 500,000 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACC, ACR, SVS **First Identified:** April 2011 **2021 Medicare Utilization:** 610,883

2023 Work RVU: 0.80
2023 NF PE RVU: 6.30
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

93926 **Duplex scan of lower extremity arteries or arterial bypass grafts; unilateral or limited study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS-Other - Utilization over 500,000 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACC, ACR, SVS **First Identified:** April 2011 **2021 Medicare Utilization:** 230,525

2023 Work RVU: 0.50
2023 NF PE RVU: 3.72
2023 Fac PE RVU: NA

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

93930 **Duplex scan of upper extremity arteries or arterial bypass grafts; complete bilateral study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** AAN, ACC, ACR, SIR, SVS **First Identified:** November 2013 **2021 Medicare Utilization:** 20,894

2023 Work RVU: 0.80
2023 NF PE RVU: 4.95
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93931 **Duplex scan of upper extremity arteries or arterial bypass grafts; unilateral or limited study**

Global: XXX **Issue:** Duplex Scans **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** AAN, ACC, ACR, SIR, SVS **First Identified:** February 2010 **2021 Medicare Utilization:** 43,637

2023 Work RVU: 0.50
2023 NF PE RVU: 3.14
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** October 2010 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

93965 **Noninvasive physiologic studies of extremity veins, complete bilateral study (eg, Doppler waveform analysis with responses to compression and other maneuvers, phleborheography, impedance plethysmography)**

Global: **Issue:** Non-invasive Physiologic Studies of Extremity Veins **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 47 **Specialty Developing Recommendation:** ACC, ACR, SCAI, SVS **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

93970 **Duplex scan of extremity veins including responses to compression and other maneuvers; complete bilateral study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS-Other - Utilization over 500,000 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACC, ACR, SVS **First Identified:** April 2011 **2021 Medicare Utilization:** 1,534,961

2023 Work RVU: 0.70
2023 NF PE RVU: 4.85
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

93971 **Duplex scan of extremity veins including responses to compression and other maneuvers; unilateral or limited study**

Global: XXX **Issue:** Duplex Scans **Screen:** Low Value-High Volume / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACR, SVS, ACC **First Identified:** October 2010 **2021 Medicare Utilization:** 1,546,507

2023 Work RVU: 0.45
2023 NF PE RVU: 3.07
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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93975 **Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; complete study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACR, SVS, ACC **First Identified:** November 2013 **2021 Medicare Utilization:** 203,708

2023 Work RVU: 1.16
2023 NF PE RVU: 6.68
2023 Fac PE RVU: NA

RUC Recommendation: 1.30 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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93976 **Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; limited study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS Fastest Growing / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:** ACR **First Identified:** October 2008 **2021 Medicare Utilization:** 153,116

2023 Work RVU: 0.80
2023 NF PE RVU: 3.89
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Decrease

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Status Report: CMS Requests and Relativity Assessment Issues

93978 **Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts; complete study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS-Other - Utilization over 250,000 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:**

First Identified: April 2013

2021 Medicare Utilization: 249,599

2023 Work RVU: 0.80

2023 NF PE RVU: 4.47

2023 Fac PE RVU: NA

RUC Recommendation: 0.97

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

93979 **Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts; unilateral or limited study**

Global: XXX **Issue:** Duplex Scans **Screen:** CMS-Other - Utilization over 250,000 / CMS Request - Final Rule for 2014 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 33 **Specialty Developing Recommendation:**

First Identified: October 2013

2021 Medicare Utilization: 57,275

2023 Work RVU: 0.50

2023 NF PE RVU: 2.95

2023 Fac PE RVU: NA

RUC Recommendation: 0.70

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

93982 **Noninvasive physiologic study of implanted wireless pressure sensor in aneurysmal sac following endovascular repair, complete study including recording, analysis of pressure and waveform tracings, interpretation and report**

Global: **Issue:** Endovascular Repair Procedures (EVAR) **Screen:** Codes Reported Together 75%or More-Part3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 10 **Specialty Developing Recommendation:** SVS, SIR, STS, AATS

First Identified: January 2017

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

93985 **Duplex scan of arterial inflow and venous outflow for preoperative vessel assessment prior to creation of hemodialysis access; complete bilateral study**

Global: XXX **Issue:** Duplex Scan Arterial Inflow-Venous Outflow Upper Extremity **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: October 2018 **2021 Medicare Utilization:** 19,354

2023 Work RVU: 0.80
2023 NF PE RVU: 6.48
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

93986 **Duplex scan of arterial inflow and venous outflow for preoperative vessel assessment prior to creation of hemodialysis access; complete unilateral study**

Global: XXX **Issue:** Duplex Scan Arterial Inflow-Venous Outflow Upper Extremity **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: October 2018 **2021 Medicare Utilization:** 6,364

2023 Work RVU: 0.50
2023 NF PE RVU: 3.84
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** September 2018 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

93990 **Duplex scan of hemodialysis access (including arterial inflow, body of access and venous outflow)**

Global: XXX **Issue:** Doppler Flow Testing **Screen:** CMS Fastest Growing / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2014 **Tab:** 40 **Specialty Developing Recommendation:** ACR, SVS

First Identified: October 2008 **2021 Medicare Utilization:** 106,664

2023 Work RVU: 0.50
2023 NF PE RVU: 3.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94010 **Spirometry, including graphic record, total and timed vital capacity, expiratory flow rate measurement(s), with or without maximal voluntary ventilation**

Global: XXX **Issue:** Spirometry **Screen:** Low Value-High Volume **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 12 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2010 **2021 Medicare Utilization:** 776,623

2023 Work RVU: 0.17
2023 NF PE RVU: 0.61
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

94014 **Patient-initiated spirometric recording per 30-day period of time; includes reinforced education, transmission of spirometric tracing, data capture, analysis of transmitted data, periodic recalibration and review and interpretation by a physician or other qualified health care professional**

Global: XXX **Issue:** Pulmonary Tests **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACCP/ATS **First Identified:** February 2008 **2021 Medicare Utilization:** 201

2023 Work RVU: 0.52
2023 NF PE RVU: 1.09
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen - RUC articulated concerns regarding claims reporting to CMS **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

94015 **Patient-initiated spirometric recording per 30-day period of time; recording (includes hook-up, reinforced education, data transmission, data capture, trend analysis, and periodic recalibration)**

Global: XXX **Issue:** Pulmonary Tests **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACCP/ATS **First Identified:** February 2008 **2021 Medicare Utilization:** 56

2023 Work RVU: 0.00
2023 NF PE RVU: 0.91
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen - RUC articulated concerns regarding claims reporting to CMS **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94016 **Patient-initiated spirometric recording per 30-day period of time; review and interpretation only by a physician or other qualified health care professional**

Global: XXX **Issue:** Pulmonary Tests **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACCP/ATS **First Identified:** April 2008 **2021 Medicare Utilization:** 6,642

2023 Work RVU: 0.52
2023 NF PE RVU: 0.18
2023 Fac PE RVU: 0.18

RUC Recommendation: Remove from screen - RUC articulated concerns regarding claims reporting to CMS

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

94060 **Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration**

Global: XXX **Issue:** Spirometry **Screen:** MPC List / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 12 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2010 **2021 Medicare Utilization:** 767,711

2023 Work RVU: 0.22
2023 NF PE RVU: 0.91
2023 Fac PE RVU: NA

RUC Recommendation: 0.22

Referred to CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2014

Result: Decrease

94200 **Maximum breathing capacity, maximal voluntary ventilation**

Global: XXX **Issue:** Lung Function Test **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 28 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** October 2017 **2021 Medicare Utilization:** 49,931

2023 Work RVU: 0.05
2023 NF PE RVU: 0.37
2023 Fac PE RVU: NA

RUC Recommendation: 0.05

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

94240 **Deleted from CPT**

Global: **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

94250 **Expired gas collection, quantitative, single procedure (separate procedure)**

Global: **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 17 **Specialty Developing Recommendation:** **First Identified:** January 2019 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

94260 **Deleted from CPT**

Global: **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 / **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94350 **Deleted from CPT**

Global: **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

94360 **Deleted from CPT**

Global: **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

94370 **Determination of airway closing volume, single breath tests**

Global: **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94400 **Breathing response to CO2 (CO2 response curve)**

Global: **Issue:** Evaluation of Wheezing **Screen:** Codes Reported Together 75% or More-Part2 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 25 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2014

94450 **Breathing response to hypoxia (hypoxia response curve)**

Global: XXX **Issue:** Pulmonary Tests **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACCP/ATS **First Identified:** February 2008 **2021 Medicare Utilization:** 474

2023 Work RVU: 0.40
2023 NF PE RVU: 2.01
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen - RUC articulated concerns regarding claims reporting to CMS **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

94617 **Exercise test for bronchospasm, including pre- and post-spirometry and pulse oximetry; with electrocardiographic recording(s)**

Global: XXX **Issue:** Pulmonary Diagnostic Tests **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 05 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** February 2016 **2021 Medicare Utilization:** 9,576

2023 Work RVU: 0.70
2023 NF PE RVU: 1.87
2023 Fac PE RVU: NA

RUC Recommendation: 0.70 **Referred to CPT** February 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94618 **Pulmonary stress testing (eg, 6-minute walk test), including measurement of heart rate, oximetry, and oxygen titration, when performed**

Global: XXX **Issue:** Pulmonary Diagnostic Tests **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 05 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** February 2016 **2021 Medicare Utilization:** 243,917

2023 Work RVU: 0.48
2023 NF PE RVU: 0.49
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** February 2016 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

94620 **Pulmonary stress testing; simple (eg, 6-minute walk test, prolonged exercise test for bronchospasm with pre- and post-spirometry and oximetry)**

Global: **Issue:** Pulmonary Diagnostic Tests **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 05 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

94621 **Cardiopulmonary exercise testing, including measurements of minute ventilation, co2 production, o2 uptake, and electrocardiographic recordings**

Global: XXX **Issue:** Pulmonary Diagnostic Tests **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 05 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** January 2016 **2021 Medicare Utilization:** 16,432

2023 Work RVU: 1.42
2023 NF PE RVU: 3.02
2023 Fac PE RVU: NA

RUC Recommendation: 1.42 **Referred to CPT** February 2016 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94640 **Pressurized or nonpressurized inhalation treatment for acute airway obstruction for therapeutic purposes and/or for diagnostic purposes such as sputum induction with an aerosol generator, nebulizer, metered dose inhaler or intermittent positive pressure breathing (ippb) device**

Global: XXX **Issue:** Evaluation of Wheezing **Screen:** Codes Reported Together 75% or More-Part2 /CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 25 **Specialty Developing Recommendation:** AAFP, ATS, CHEST, **First Identified:** **2021 Medicare Utilization:** 126,227

2023 Work RVU: 0.00
2023 NF PE RVU: 0.26
2023 Fac PE RVU: NA
Result: PE Only

RUC Recommendation: New PE Inputs **Referred to CPT**

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2014

94667 **Manipulation chest wall, such as cupping, percussing, and vibration to facilitate lung function; initial demonstration and/or evaluation**

Global: XXX **Issue:** Evaluation of Wheezing **Screen:** CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 25 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** April 2019 **2021 Medicare Utilization:** 3,342

2023 Work RVU: 0.00
2023 NF PE RVU: 0.68
2023 Fac PE RVU: NA
Result: PE Only

RUC Recommendation: New PE Inputs **Referred to CPT**

Referred to CPT Asst ☐ **Published in CPT Asst:**

94668 **Manipulation chest wall, such as cupping, percussing, and vibration to facilitate lung function; subsequent**

Global: XXX **Issue:** Evaluation of Wheezing **Screen:** Codes Reported Together 75% or More-Part2 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 25 **Specialty Developing Recommendation:** AAFP, ATS, CHEST, **First Identified:** **2021 Medicare Utilization:** 5,926

2023 Work RVU: 0.00
2023 NF PE RVU: 1.07
2023 Fac PE RVU: NA
Result: PE Only

RUC Recommendation: New PE Inputs CPT Assistant article published **Referred to CPT**

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2014

Status Report: CMS Requests and Relativity Assessment Issues

94669 **Mechanical chest wall oscillation to facilitate lung function, per session** **Global:** XXX **Issue:** Evaluation of Wheezing **Screen:** CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 25 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** April 2019 **2021 Medicare Utilization:** 180

2023 Work RVU: 0.00
2023 NF PE RVU: 0.56
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

94681 **Oxygen uptake, expired gas analysis; including co2 output, percentage oxygen extracted** **Global:** XXX **Issue:** Pulmonary Tests **Screen:** High Volume Growth1 / CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 51 **Specialty Developing Recommendation:** AACE, TES, ACCP/ATS **First Identified:** February 2008 **2021 Medicare Utilization:** 4,466

2023 Work RVU: 0.20
2023 NF PE RVU: 1.17
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen
Referred to CPT Asst ☐ **Published in CPT Asst:**

94720 **Carbon monoxide diffusing capacity (eg, single breath, steady state)** **Global:** **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94725 **Membrane diffusion capacity**

Global: **Issue:** Pulmonary Tests **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 45 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2010 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

94726 **Plethysmography for determination of lung volumes and, when performed, airway resistance**

Global: XXX **Issue:** Pulmonary Function Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 19 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:** 572,303

2023 Work RVU: 0.26
2023 NF PE RVU: 1.33
2023 Fac PE RVU: NA

RUC Recommendation: 0.31 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

94727 **Gas dilution or washout for determination of lung volumes and, when performed, distribution of ventilation and closing volumes**

Global: XXX **Issue:** Pulmonary Function Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 19 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:** 270,002

2023 Work RVU: 0.26
2023 NF PE RVU: 1.02
2023 Fac PE RVU: NA

RUC Recommendation: 0.31 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94728 **Airway resistance by oscillometry** **Global:** XXX **Issue:** Pulmonary Function Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 19 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:** 4,406

2023 Work RVU: 0.26
2023 NF PE RVU: 0.90
2023 Fac PE RVU: NA

RUC Recommendation: 0.31 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

94729 **Diffusing capacity (eg, carbon monoxide, membrane) (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Pulmonary Function Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 19 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** February 2010 **2021 Medicare Utilization:** 917,478

2023 Work RVU: 0.19
2023 NF PE RVU: 1.48
2023 Fac PE RVU: NA

RUC Recommendation: 0.19 **Referred to CPT** February 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

94750 **Pulmonary compliance study (eg, plethysmography, volume and pressure measurements)** **Global:** **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 17 **Specialty Developing Recommendation:** **First Identified:** January 2019 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94760 **Noninvasive ear or pulse oximetry for oxygen saturation; single determination**

Global: XXX **Issue:** Measure Blood Oxygen Level **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 32 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** NA **2021 Medicare Utilization:** 14,911

2023 Work RVU: 0.00
2023 NF PE RVU: 0.06
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

94761 **Noninvasive ear or pulse oximetry for oxygen saturation; multiple determinations (eg, during exercise)**

Global: XXX **Issue:** Measure Blood Oxygen Level **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 32 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** NA **2021 Medicare Utilization:** 9,556

2023 Work RVU: 0.00
2023 NF PE RVU: 0.10
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

94762 **Noninvasive ear or pulse oximetry for oxygen saturation; by continuous overnight monitoring (separate procedure)**

Global: XXX **Issue:** Measure Blood Oxygen Level **Screen:** CMS Fastest Growing, CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 32 **Specialty Developing Recommendation:** ACCP, ATS **First Identified:** October 2008 **2021 Medicare Utilization:** 122,272

2023 Work RVU: 0.00
2023 NF PE RVU: 0.75
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

94770 **Carbon dioxide, expired gas determination by infrared analyzer**

Global: **Issue:** Evaluation of Wheezing **Screen:** High Volume Growth1 / Codes Reported Together 75% or More-Part2 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 25 **Specialty Developing Recommendation:** ATS, CHEST **First Identified:** February 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Mar 2014

95004 **Percutaneous tests (scratch, puncture, prick) with allergenic extracts, immediate type reaction, including test interpretation and report, specify number of tests**

Global: XXX **Issue:** Percutaneous Allergy Tests **Screen:** Low Value-Billed in Multiple Units / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 27 **Specialty Developing Recommendation:** AAAAI, AAOA, ACAAI **First Identified:** October 2010 **2021 Medicare Utilization:** 8,361,486

2023 Work RVU: 0.01
2023 NF PE RVU: 0.10
2023 Fac PE RVU: NA

RUC Recommendation: 0.01 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95010 **Percutaneous tests (scratch, puncture, prick) sequential and incremental, with drugs, biologicals or venoms, immediate type reaction, including test interpretation and report by a physician, specify number of tests**

Global: **Issue:** Percutaneous Allergy Tests **Screen:** Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 31 **Specialty Developing Recommendation:** JCAAI, ACAAI, AAAAI **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95012 **Nitric oxide expired gas determination** **Global:** XXX **Issue:** Exhaled Nitric Oxide Measurement (PE Only) **Screen:** High Volume Growth5 **Complete?** Yes

Most Recent RUC Meeting: April 2019 **Tab:** 26 **Specialty Developing Recommendation:** AAAAI, ACAAI, ATS, CHEST **First Identified:** October 2018 **2021 Medicare Utilization:** 76,958

2023 Work RVU: 0.00
2023 NF PE RVU: 0.55
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

95015 **Intracutaneous (intradermal) tests, sequential and incremental, with drugs, biologicals, or venoms, immediate type reaction, including test interpretation and report by a physician, specify number of tests** **Global:** **Issue:** Intracutaneous Allgery Tests **Screen:** Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 31 **Specialty Developing Recommendation:** JCAAI, ACAAI, AAAAI **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2012 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

95017 **Allergy testing, any combination of percutaneous (scratch, puncture, prick) and intracutaneous (intradermal), sequential and incremental, with venoms, immediate type reaction, including test interpretation and report, specify number of tests** **Global:** XXX **Issue:** Percutaneous Allergy Testing **Screen:** Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 29 **Specialty Developing Recommendation:** JCAAI **First Identified:** October 2010 **2021 Medicare Utilization:** 25,904

2023 Work RVU: 0.07
2023 NF PE RVU: 0.18
2023 Fac PE RVU: 0.03

RUC Recommendation: 0.07 **Referred to CPT** February 2012 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95018 **Allergy testing, any combination of percutaneous (scratch, puncture, prick) and intracutaneous (intradermal), sequential and incremental, with drugs or biologicals, immediate type reaction, including test interpretation and report, specify number of tests**

Global: XXX **Issue:** Percutaneous Allergy Testing **Screen:** Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 29 **Specialty Developing Recommendation:** JCAAI **First Identified:** October 2010 **2021 Medicare Utilization:** 113,122

2023 Work RVU: 0.14
2023 NF PE RVU: 0.45
2023 Fac PE RVU: 0.06

RUC Recommendation: 0.14 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95024 **Intracutaneous (intradermal) tests with allergenic extracts, immediate type reaction, including test interpretation and report, specify number of tests**

Global: XXX **Issue:** Intracutaneous Allgery Tests **Screen:** Low Value-Billed in Multiple Units / Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** JCAAI, ACAAI, AAAAI, AAOA **First Identified:** October 2010 **2021 Medicare Utilization:** 1,449,502

2023 Work RVU: 0.01
2023 NF PE RVU: 0.22
2023 Fac PE RVU: 0.01

RUC Recommendation: New PE Inputs. **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95027 **Intracutaneous (intradermal) tests, sequential and incremental, with allergenic extracts for airborne allergens, immediate type reaction, including test interpretation and report, specify number of tests**

Global: XXX **Issue:** Intracutaneous Allgery Tests **Screen:** Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 41 **Specialty Developing Recommendation:** JCAAI, ACAAI, AAAAI **First Identified:** October 2010 **2021 Medicare Utilization:** 126,261

2023 Work RVU: 0.01
2023 NF PE RVU: 0.13
2023 Fac PE RVU: NA

RUC Recommendation: 0.01 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95115 **Professional services for allergen immunotherapy not including provision of allergenic extracts; single injection**

Global: XXX **Issue:** Immunotherapy Injections **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 48 **Specialty Developing Recommendation:** JCAAI, AAOA **First Identified:** January 2012 **2021 Medicare Utilization:** 820,003

2023 Work RVU: 0.00
2023 NF PE RVU: 0.29
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95117 **Professional services for allergen immunotherapy not including provision of allergenic extracts; 2 or more injections**

Global: XXX **Issue:** Immunotherapy Injections **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 48 **Specialty Developing Recommendation:** JCAAI, AAOA **First Identified:** September 2011 **2021 Medicare Utilization:** 2,467,399

2023 Work RVU: 0.00
2023 NF PE RVU: 0.34
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95144 **Professional services for the supervision of preparation and provision of antigens for allergen immunotherapy, single dose vial(s) (specify number of vials)**

Global: XXX **Issue:** Antigen Therapy Services **Screen:** Low Value-Billed in Multiple Units / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 49 **Specialty Developing Recommendation:** AAOHNS, AAOA, ACAAI **First Identified:** October 2010 **2021 Medicare Utilization:** 155,366

2023 Work RVU: 0.06
2023 NF PE RVU: 0.43
2023 Fac PE RVU: 0.03

RUC Recommendation: 0.06 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95148 **Professional services for the supervision of preparation and provision of antigens for allergen immunotherapy (specify number of doses); 4 single stinging insect venoms**

Global: XXX **Issue:** **Screen:** Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 73 **Specialty Developing Recommendation:** **First Identified:** October 2010 **2021 Medicare Utilization:** 18,727

2023 Work RVU: 0.06
2023 NF PE RVU: 2.53
2023 Fac PE RVU: 0.02

RUC Recommendation: 0.06 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95165 **Professional services for the supervision of preparation and provision of antigens for allergen immunotherapy; single or multiple antigens (specify number of doses)**

Global: XXX **Issue:** Antigen Therapy Services **Screen:** MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 49 **Specialty Developing Recommendation:** AAOHNS, AAOA, ACAAI **First Identified:** October 2010 **2021 Medicare Utilization:** 6,638,389

2023 Work RVU: 0.06
2023 NF PE RVU: 0.38
2023 Fac PE RVU: 0.03

RUC Recommendation: 0.06 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95249 **Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; patient-provided equipment, sensor placement, hook-up, calibration of monitor, patient training, and printout of recording**

Global: XXX **Issue:** Continuous Glucose Monitoring **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AACE, ES, ACP **First Identified:** **2021 Medicare Utilization:** 14,677

2023 Work RVU: 0.00
2023 NF PE RVU: 1.78
2023 Fac PE RVU: NA

RUC Recommendation: PE Only **Referred to CPT** June 2017 **Result:** PE Only

Referred to CPT Asst ☑ **Published in CPT Asst:** June 2018

Status Report: CMS Requests and Relativity Assessment Issues

95250 **Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; physician or other qualified health care professional (office) provided equipment, sensor placement, hook-up, calibration of monitor, patient training, removal of sensor, and printout of recording**

Global: XXX **Issue:** Continuous Glucose Monitoring **Screen:** High Volume Growth2 / Work Neutrality 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AACE, ES

First Identified: October 2013 **2021 Medicare Utilization:** 45,743

2023 Work RVU: 0.00
2023 NF PE RVU: 4.30
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs

Referred to CPT October 2015 & February 2017

Result: PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95251 **Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; analysis, interpretation and report**

Global: XXX **Issue:** Continuous Glucose Monitoring **Screen:** High Volume Growth / Work Neutrality 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AACE, ES

First Identified: April 2013 **2021 Medicare Utilization:** 440,819

2023 Work RVU: 0.70
2023 NF PE RVU: 0.28
2023 Fac PE RVU: 0.28

RUC Recommendation: 0.70.

Referred to CPT February 2017

Result: Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95700 **Electroencephalogram (eeg) continuous recording, with video when performed, setup, patient education, and takedown when performed, administered in person by eeg technologist, minimum of 8 channels**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 / Contractor Priced High Volume2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS

First Identified: May 2018 **2021 Medicare Utilization:** 14,757

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review action plan. PE Only

Referred to CPT

Result: PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95705 **Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, 2-12 hours; unmonitored** **Global:** XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 749

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

95706 **Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, 2-12 hours; with intermittent monitoring and maintenance** **Global:** XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 257

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

95707 **Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, 2-12 hours; with continuous, real-time monitoring and maintenance** **Global:** XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 128

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

95708 **Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, each increment of 12-26 hours; unmonitored** **Global:** XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 8,123

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95709 **Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 1,311

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95710 **Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, each increment of 12-26 hours; with continuous, real-time monitoring and maintenance**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 170

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95711 **Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, 2-12 hours; unmonitored**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 142

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95712 **Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, 2-12 hours; with intermittent monitoring and maintenance**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 1,156

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95713 **Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, 2-12 hours; with continuous, real-time monitoring and maintenance**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 1,764

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95714 **Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, each increment of 12-26 hours; unmonitored**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 4,351

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95715 **Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 / Contractor Priced High Volume2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 16,469

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Review action plan. PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95716 **Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, each increment of 12-26 hours; with continuous, real-time monitoring and maintenance**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 2,289

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

95717 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation and report, 2-12 hours of eeg recording; without video**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 2,674

2023 Work RVU: 2.00
2023 NF PE RVU: 0.88
2023 Fac PE RVU: 0.85

RUC Recommendation: 2.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95718 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation and report, 2-12 hours of eeg recording; with video (veeg)**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 31,495

2023 Work RVU: 2.50
2023 NF PE RVU: 1.28
2023 Fac PE RVU: 1.21

RUC Recommendation: 2.50 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95719 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, each increment of greater than 12 hours, up to 26 hours of eeg recording, interpretation and report after each 24-hour period; without video**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 5,951

2023 Work RVU: 3.00
2023 NF PE RVU: 1.44
2023 Fac PE RVU: 1.38

RUC Recommendation: 3.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95720 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, each increment of greater than 12 hours, up to 26 hours of eeg recording, interpretation and report after each 24-hour period; with video (veeg)**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 129,650

2023 Work RVU: 3.86
2023 NF PE RVU: 1.98
2023 Fac PE RVU: 1.87

RUC Recommendation: 3.86 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95721 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 36 hours, up to 60 hours of eeg recording, without video**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 2,560

2023 Work RVU: 3.86
2023 NF PE RVU: 1.97
2023 Fac PE RVU: 1.85

RUC Recommendation: 3.86 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95722 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 36 hours, up to 60 hours of eeg recording, with video (veeg)**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 1,997

2023 Work RVU: 4.70
2023 NF PE RVU: 2.38
2023 Fac PE RVU: 2.24

RUC Recommendation: 4.70 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95723 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 60 hours, up to 84 hours of eeg recording, without video**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 2,590

2023 Work RVU: 4.75
2023 NF PE RVU: 2.38
2023 Fac PE RVU: 2.24

RUC Recommendation: 4.75 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95724 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 60 hours, up to 84 hours of eeg recording, with video (veeg)**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 4,054

2023 Work RVU: 6.00
2023 NF PE RVU: 2.98
2023 Fac PE RVU: 2.82

RUC Recommendation: 6.00 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95725 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 84 hours of eeg recording, without video**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 229

2023 Work RVU: 5.40
2023 NF PE RVU: 2.75
2023 Fac PE RVU: 2.57

RUC Recommendation: 5.40 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95726 **Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 84 hours of eeg recording, with video (veeg)**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:** 624

2023 Work RVU: 7.58
2023 NF PE RVU: 3.82
2023 Fac PE RVU: 3.60

RUC Recommendation: 7.58 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95800 **Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (eg, by airflow or peripheral arterial tone), and sleep time**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 50,031

2023 Work RVU: 0.85
2023 NF PE RVU: 3.54
2023 Fac PE RVU: NA

RUC Recommendation: 1.05 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95801 **Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (eg, by airflow or peripheral arterial tone)**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 237

2023 Work RVU: 0.85
2023 NF PE RVU: 1.86
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95803 **Actigraphy testing, recording, analysis, interpretation, and report (minimum of 72 hours to 14 consecutive days of recording)**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** NA **2021 Medicare Utilization:** 181

2023 Work RVU: 0.90
2023 NF PE RVU: 3.22
2023 Fac PE RVU: NA

RUC Recommendation: 0.90 and New PE inputs **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95805 **Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 1,910

2023 Work RVU: 1.20
2023 NF PE RVU: 11.14
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95806 **Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (eg, thoracoabdominal movement)**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 93,817

2023 Work RVU: 0.93
2023 NF PE RVU: 1.75
2023 Fac PE RVU: NA

RUC Recommendation: 1.28 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95807 **Sleep study, simultaneous recording of ventilation, respiratory effort, ecg or heart rate, and oxygen saturation, attended by a technologist**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 1,205

2023 Work RVU: 1.28
2023 NF PE RVU: 10.13
2023 Fac PE RVU: NA

RUC Recommendation: 1.25 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95808 **Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 1,007

2023 Work RVU: 1.74
2023 NF PE RVU: 14.49
2023 Fac PE RVU: NA

RUC Recommendation: 1.74 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95810 **Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing / MPC List **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** February 2010 **2021 Medicare Utilization:** 179,842

2023 Work RVU: 2.50
2023 NF PE RVU: 15.41
2023 Fac PE RVU: NA

RUC Recommendation: 2.50 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95811 **Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bilevel ventilation, attended by a technologist**

Global: XXX **Issue:** Sleep Testing **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: April 2010 **Tab:** 28 **Specialty Developing Recommendation:** ACNS, AAN, ACCP/ATS, AASM **First Identified:** October 2009 **2021 Medicare Utilization:** 195,976

2023 Work RVU: 2.60
2023 NF PE RVU: 16.12
2023 Fac PE RVU: NA

RUC Recommendation: 2.60 **Referred to CPT** October 2009 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95812 **Electroencephalogram (eeg) extended monitoring; 41-60 minutes**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** July 2015 **2021 Medicare Utilization:** 21,275

2023 Work RVU: 1.08
2023 NF PE RVU: 9.16
2023 Fac PE RVU: NA

RUC Recommendation: 1.08 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95813 **Electroencephalogram (eeg) extended monitoring; 61-119 minutes**

Global: XXX **Issue:** Long-Term EEG Monitoring **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS

First Identified: July 2015 **2021 Medicare Utilization:** 23,070

2023 Work RVU: 1.63
2023 NF PE RVU: 11.08
2023 Fac PE RVU: NA

RUC Recommendation: 1.63

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

95816 **Electroencephalogram (eeg); including recording awake and drowsy**

Global: XXX **Issue:** Electroencephalogram **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 22 **Specialty Developing Recommendation:**

First Identified: January 2012 **2021 Medicare Utilization:** 236,062

2023 Work RVU: 1.08
2023 NF PE RVU: 10.28
2023 Fac PE RVU: NA

RUC Recommendation: 1.08

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

95819 **Electroencephalogram (eeg); including recording awake and asleep**

Global: XXX **Issue:** Electroencephalogram **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 22 **Specialty Developing Recommendation:** AAN, ACNS

First Identified: September 2011 **2021 Medicare Utilization:** 161,385

2023 Work RVU: 1.08
2023 NF PE RVU: 12.11
2023 Fac PE RVU: NA

RUC Recommendation: 1.08

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

95822 **Electroencephalogram (eeg); recording in coma or sleep only**

Global: XXX **Issue:** Electroencephalogram **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 22 **Specialty Developing Recommendation:** AAN, ACNS

First Identified: January 2012 **2021 Medicare Utilization:** 23,857

2023 Work RVU: 1.08
2023 NF PE RVU: 11.27
2023 Fac PE RVU: NA

RUC Recommendation: 1.08

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

95827 **Electroencephalogram (EEG); all night recording** **Global:** **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** May 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

95831 **Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk** **Global:** **Issue:** Muscle Testing **Screen:** High Volume Growth3 / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** AAN, AANEM, AAPM, AAPMR, ACP, APTA **First Identified:** October 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

95832 **Muscle testing, manual (separate procedure) with report; hand, with or without comparison with normal side** **Global:** **Issue:** Muscle Testing **Screen:** High Volume Growth3 / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** AAN, AANEM, AAPM, AAPMR, ACP, APTA **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95833 **Muscle testing, manual (separate procedure) with report; total evaluation of body, excluding hands**

Global: **Issue:** Muscle Testing **Screen:** High Volume Growth3 / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** AAN, AANEM, AAPM, AAPMR, ACP, APTA **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95834 **Muscle testing, manual (separate procedure) with report; total evaluation of body, including hands**

Global: **Issue:** Muscle Testing **Screen:** High Volume Growth3 / CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** AAN, AANEM, AAPM, AAPMR, ACP, APTA **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95851 **Range of motion measurements and report (separate procedure); each extremity (excluding hand) or each trunk section (spine)**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000-Part3 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** APTA **First Identified:** April 2022 **2021 Medicare Utilization:** 28,905

2023 Work RVU: 0.16
2023 NF PE RVU: 0.46
2023 Fac PE RVU: 0.06

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95860 **Needle electromyography; 1 extremity with or without related paraspinal areas** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Harvard Valued - Utilization over 100,000 / Codes Reported Together 75% or More-Part1 / Harvard-Valued Annual Allowed Charges over $10 million **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** October 2009 **2021 Medicare Utilization:** 2,639

2023 Work RVU: 0.96
2023 NF PE RVU: 2.34
2023 Fac PE RVU: NA

RUC Recommendation: 0.96 **Referred to CPT** February 2011 & October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95861 **Needle electromyography; 2 extremities with or without related paraspinal areas** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 45,050

2023 Work RVU: 1.54
2023 NF PE RVU: 3.17
2023 Fac PE RVU: NA

RUC Recommendation: 1.54 **Referred to CPT** February 2011 & October 2011 & February 2012 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95863 **Needle electromyography; 3 extremities with or without related paraspinal areas** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 135

2023 Work RVU: 1.87
2023 NF PE RVU: 4.26
2023 Fac PE RVU: NA

RUC Recommendation: 1.87 **Referred to CPT** February 2011 & October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95864 **Needle electromyography; 4 extremities with or without related paraspinal areas** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 1,488

2023 Work RVU: 1.99
2023 NF PE RVU: 4.87
2023 Fac PE RVU: NA

RUC Recommendation: 1.99 **Referred to CPT** February 2011 & October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95867 **Needle electromyography; cranial nerve supplied muscle(s), unilateral** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 1,320

2023 Work RVU: 0.79
2023 NF PE RVU: 2.36
2023 Fac PE RVU: NA

RUC Recommendation: 0.79 **Referred to CPT** October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95868 **Needle electromyography; cranial nerve supplied muscles, bilateral** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 4,055

2023 Work RVU: 1.18
2023 NF PE RVU: 2.93
2023 Fac PE RVU: NA

RUC Recommendation: 1.18 **Referred to CPT** October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95869 **Needle electromyography; thoracic paraspinal muscles (excluding t1 or t12)** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** October 2011 **2021 Medicare Utilization:** 450

2023 Work RVU: 0.37
2023 NF PE RVU: 2.47
2023 Fac PE RVU: NA

RUC Recommendation: 0.37 **Referred to CPT** October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95870 **Needle electromyography; limited study of muscles in 1 extremity or non-limb (axial) muscles (unilateral or bilateral), other than thoracic paraspinal, cranial nerve supplied muscles, or sphincters** **Global:** XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 / Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 19 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** October 2011 **2021 Medicare Utilization:** 54,575

2023 Work RVU: 0.37
2023 NF PE RVU: 2.09
2023 Fac PE RVU: NA

RUC Recommendation: 0.37 **Referred to CPT** October 2011 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95885 **Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; limited (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 20 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, ACNS, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 125,139

2023 Work RVU: 0.35
2023 NF PE RVU: 1.49
2023 Fac PE RVU: NA

RUC Recommendation: 0.35 **Referred to CPT** February 2011 and October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95886 **Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; complete, five or more muscles studied, innervated by three or more nerves or four or more spinal levels (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 20 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, ACNS, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 855,049

2023 Work RVU: 0.86
2023 NF PE RVU: 2.01
2023 Fac PE RVU: NA

RUC Recommendation: 0.92 **Referred to CPT** February 2011 and October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95887 **Needle electromyography, non-extremity (cranial nerve supplied or axial) muscle(s) done with nerve conduction, amplitude and latency/velocity study (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2011 **Tab:** 20 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, ACNS, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 14,550

2023 Work RVU: 0.71
2023 NF PE RVU: 1.75
2023 Fac PE RVU: NA

RUC Recommendation: 0.73 **Referred to CPT** February 2011 and October 2011 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95900 **Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study**

Global: **Issue:** EMG in Conjunction with Nerve Testing **Screen:** MPC List / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** October 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011& February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95903 **Nerve conduction, amplitude and latency/velocity study, each nerve; motor, with F-wave study**

Global: **Issue:** EMG in Conjunction with Nerve Testing **Screen:** CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** September 2011 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 and February 2012 & February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95904 **Nerve conduction, amplitude and latency/velocity study, each nerve; sensory**

Global: **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 / Low Value-Billed in Multiple Units **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2011 & October 2011 & February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95907 **Nerve conduction studies; 1-2 studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 5,830

2023 Work RVU: 1.00
2023 NF PE RVU: 1.62
2023 Fac PE RVU: NA

RUC Recommendation: 1.00 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95908 **Nerve conduction studies; 3-4 studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 48,008

2023 Work RVU: 1.25
2023 NF PE RVU: 2.02
2023 Fac PE RVU: NA

RUC Recommendation: 1.37 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95909 **Nerve conduction studies; 5-6 studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 113,947

2023 Work RVU: 1.50
2023 NF PE RVU: 2.42
2023 Fac PE RVU: NA

RUC Recommendation: 1.77 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95910 **Nerve conduction studies; 7-8 studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 133,327

2023 Work RVU: 2.00
2023 NF PE RVU: 3.13
2023 Fac PE RVU: NA

RUC Recommendation: 2.80 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95911 **Nerve conduction studies; 9-10 studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 157,280

2023 Work RVU: 2.50
2023 NF PE RVU: 3.69
2023 Fac PE RVU: NA

RUC Recommendation: 3.34 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95912 **Nerve conduction studies; 11-12 studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 69,190

2023 Work RVU: 3.00
2023 NF PE RVU: 4.23
2023 Fac PE RVU: NA

RUC Recommendation: 4.00 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95913 **Nerve conduction studies; 13 or more studies**

Global: XXX **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** AAN, AAPMR, AANEM, APTA **First Identified:** **2021 Medicare Utilization:** 76,286

2023 Work RVU: 3.56
2023 NF PE RVU: 4.79
2023 Fac PE RVU: NA

RUC Recommendation: 4.20 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95921 **Testing of autonomic nervous system function; cardiovagal innervation (parasympathetic function), including 2 or more of the following: heart rate response to deep breathing with recorded r-r interval, valsalva ratio, and 30:15 ratio**

Global: XXX **Issue:** Autonomic Function Testing **Screen:** Different Performing Specialty from Survey / Codes Reported Together 75% or More-Part1 / Different Performing Specialty from Survey3 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAFP, AAN, AANEM, ACNS, ACP **First Identified:** October 2009 **2021 Medicare Utilization:** 47,812

2023 Work RVU: 0.90
2023 NF PE RVU: 1.66
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 0.90 **Referred to CPT** February 2012 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2020

95922 **Testing of autonomic nervous system function; vasomotor adrenergic innervation (sympathetic adrenergic function), including beat-to-beat blood pressure and r-r interval changes during valsalva maneuver and at least 5 minutes of passive tilt**

Global: XXX **Issue:** Autonomic Function Testing **Screen:** High Volume Growth1 / CMS Fastest Growing / Different Performing Specialty from Survey / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAFP, AAN, AANEM, ACNS, ACP **First Identified:** February 2008 **2021 Medicare Utilization:** 1,791

2023 Work RVU: 0.96
2023 NF PE RVU: 1.87
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 0.96 **Referred to CPT** February 2012 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2008; Sep 2020

95923 **Testing of autonomic nervous system function; sudomotor, including 1 or more of the following: quantitative sudomotor axon reflex test (qsart), silastic sweat imprint, thermoregulatory sweat test, and changes in sympathetic skin potential**

Global: XXX **Issue:** Autonomic Function Testing **Screen:** Codes Reported Together 75% or More-Part1 / High Volume Growth6 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAFP, AAN, AANEM, ACNS, ACP **First Identified:** October 2019 **2021 Medicare Utilization:** 94,672

2023 Work RVU: 0.90
2023 NF PE RVU: 2.73
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 0.90 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2020

Status Report: CMS Requests and Relativity Assessment Issues

95924 **Testing of autonomic nervous system function; combined parasympathetic and sympathetic adrenergic function testing with at least 5 minutes of passive tilt**

Global: XXX **Issue:** Autonomic Function Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAFP, AAN, AANEM, ACNS, ACP **First Identified:** **2021 Medicare Utilization:** 14,658

2023 Work RVU: 1.73
2023 NF PE RVU: 2.68
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT Assistant. 1.73 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2020

95925 **Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper limbs**

Global: XXX **Issue:** Evoked Potentials and Reflex Studies **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** AAN, AANEM, ACNS, AAPMR **First Identified:** February 2010 **2021 Medicare Utilization:** 5,126

2023 Work RVU: 0.54
2023 NF PE RVU: 4.70
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 and New PE Inputs **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95926 **Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in lower limbs**

Global: XXX **Issue:** Evoked Potentials and Reflex Studies **Screen:** Codes Reported Together 75% or More-Part1/ CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** AAN, AANEM, ACNS, AAPMR **First Identified:** February 2010 **2021 Medicare Utilization:** 4,812

2023 Work RVU: 0.54
2023 NF PE RVU: 4.04
2023 Fac PE RVU: NA

RUC Recommendation: 0.54 and New PE Inputs **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95928 **Central motor evoked potential study (transcranial motor stimulation); upper limbs**

Global: XXX **Issue:** Evoked Potentials and Reflex Studies **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 36 **Specialty Developing Recommendation:** AAN, AANEM, AAPMR, ACNS **First Identified:** February 2010 **2021 Medicare Utilization:** 419

2023 Work RVU: 1.50
2023 NF PE RVU: 5.45
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 1.50 **Referred to CPT** October 2010
Referred to CPT Asst ☐ **Published in CPT Asst:**

95929 **Central motor evoked potential study (transcranial motor stimulation); lower limbs**

Global: XXX **Issue:** Evoked Potentials and Reflex Studies **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request to Re-Review Families of Recently Reviewed CPT Codes / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: April 2013 **Tab:** 36 **Specialty Developing Recommendation:** AAN, AANEM, AAPMR, ACNS **First Identified:** February 2010 **2021 Medicare Utilization:** 1,373

2023 Work RVU: 1.50
2023 NF PE RVU: 5.57
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 1.50 **Referred to CPT** October 2010
Referred to CPT Asst ☐ **Published in CPT Asst:**

95930 **Visual evoked potential (vep) checkerboard or flash testing, central nervous system except glaucoma, with interpretation and report**

Global: XXX **Issue:** Visual Evoked Potential Testing **Screen:** High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 11 **Specialty Developing Recommendation:** AAO, AOA (optometry), ACNS **First Identified:** October 2015 **2021 Medicare Utilization:** 39,032

2023 Work RVU: 0.35
2023 NF PE RVU: 1.61
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 0.35 **Referred to CPT** May 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95934 **H-reflex, amplitude and latency study; record gastrocnemius/soleus muscle**

Global: **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 & February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95936 **H-reflex, amplitude and latency study; record muscle other than gastrocnemius/soleus muscle**

Global: **Issue:** EMG in Conjunction with Nerve Testing **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: April 2012 **Tab:** 32 **Specialty Developing Recommendation:** **First Identified:** **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2011 & February 2012 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95938 **Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper and lower limbs**

Global: XXX **Issue:** Evoked Potentials and Reflex Studies **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** AAN, AANEM, AAPMR, ACNS **First Identified:** January 2013 **2021 Medicare Utilization:** 95,684

2023 Work RVU: 0.86

2023 NF PE RVU: 9.94

2023 Fac PE RVU: NA

RUC Recommendation: 0.86 and new PE inputs **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95939 **Central motor evoked potential study (transcranial motor stimulation); in upper and lower limbs**

Global: XXX **Issue:** Evoked Potentials and Reflex Studies **Screen:** Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 34 **Specialty Developing Recommendation:** AAN, AANEM, AAPMR, ACNS **First Identified:** January 2013 **2021 Medicare Utilization:** 45,557

2023 Work RVU: 2.25
2023 NF PE RVU: 13.92
2023 Fac PE RVU: NA

RUC Recommendation: 2.25 and new PE inputs **Referred to CPT** October 2010 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95940 **Continuous intraoperative neurophysiology monitoring in the operating room, one on one monitoring requiring personal attendance, each 15 minutes (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Intraoperative Neurophysiology Monitoring **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:** 26,130

2023 Work RVU: 0.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.60 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95941 **Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby) or for monitoring of more than one case while in the operating room, per hour (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Intraoperative Neurophysiology Monitoring **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** 12 **Specialty Developing Recommendation:** **First Identified:** January 2012 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 2.00 **Referred to CPT** February 2012 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95943 **Simultaneous, independent, quantitative measures of both parasympathetic function and sympathetic function, based on time-frequency analysis of heart rate variability concurrent with time-frequency analysis of continuous respiratory activity, with mean heart rate and blood pressure measures, during rest, paced (deep) breathing, Valsalva maneuvers, and head-up postural change**

Global: XXX **Issue:** Autonomic Function Testing **Screen:** Codes Reported Together 75% or More-Part1 / Contractor Priced High Volume1 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AAN, AANEM **First Identified:** January 2018 **2021 Medicare Utilization:** 14,326

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** October 2020 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95950 **Monitoring for identification and lateralization of cerebral seizure focus, electroencephalographic (eg, 8 channel EEG) recording and interpretation, each 24 hours**

Global: **Issue:** Long-Term EEG Monitoring **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** February 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95951 **Monitoring for localization of cerebral seizure focus by cable or radio, 16 or more channel telemetry, combined electroencephalographic (EEG) and video recording and interpretation (eg, for presurgical localization), each 24 hours**

Global: **Issue:** Long-Term EEG Monitoring **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** **First Identified:** October 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** May 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95953 **Monitoring for localization of cerebral seizure focus by computerized portable 16 or more channel EEG, electroencephalographic (EEG) recording and interpretation, each 24 hours, unattended**

Global: **Issue:** Long-Term EEG Monitoring **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** February 2009 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

95954 **Pharmacological or physical activation requiring physician or other qualified health care professional attendance during eeg recording of activation phase (eg, thiopental activation test)**

Global: XXX **Issue:** EEG Monitoring **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** S **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** February 2008 **2021 Medicare Utilization:** 461

2023 Work RVU: 2.45
2023 NF PE RVU: 9.43
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

95956 **Monitoring for localization of cerebral seizure focus by cable or radio, 16 or more channel telemetry, electroencephalographic (EEG) recording and interpretation, each 24 hours, attended by a technologist or nurse**

Global: **Issue:** Long-Term EEG Monitoring **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 13 **Specialty Developing Recommendation:** AAN, ACNS **First Identified:** October 2008 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2009

Status Report: CMS Requests and Relativity Assessment Issues

95957 **Digital analysis of electroencephalogram (eeg) (eg, for epileptic spike analysis)** **Global:** XXX **Issue:** Electroencephalogram (EEG) Exended Monitoring **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 50 **Specialty Developing Recommendation:** AAN **First Identified:** July 2015 **2021 Medicare Utilization:** 35,208

2023 Work RVU: 1.98
2023 NF PE RVU: 6.12
2023 Fac PE RVU: NA

RUC Recommendation: 1.98 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95970 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with brain, cranial nerve, spinal cord, peripheral nerve, or sacral nerve, neurostimulator pulse generator/transmitter, without programming** **Global:** XXX **Issue:** Neurostimulator Services **Screen:** Harvard Valued - Utilization over 100,000 / CMS Request - Final Rule for 2016 / High Volume Growth3 / CPT Assistant Analysis 2018 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** February 2010 **2021 Medicare Utilization:** 27,748

2023 Work RVU: 0.35
2023 NF PE RVU: 0.17
2023 Fac PE RVU: 0.16

RUC Recommendation: 0.45 **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Jul 2016

95971 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple spinal cord or peripheral nerve (eg, sacral nerve) neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional** **Global:** XXX **Issue:** Neurostimulator Services **Screen:** Harvard Valued - Utilization over 100,000 / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** AUA, ACOG, AAPM, SIS, ACNS **First Identified:** October 2009 **2021 Medicare Utilization:** 18,280

2023 Work RVU: 0.78
2023 NF PE RVU: 0.57
2023 Fac PE RVU: 0.30

RUC Recommendation: 0.78 **Referred to CPT** February 2015, June 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95972 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with complex spinal cord or peripheral nerve (eg, sacral nerve) neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional**

Global: XXX **Issue:** Neurostimulator Services **Screen:** Harvard Valued - Utilization over 100,000 / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** AUA, ACOG, AAPM, SIS, ACNS **First Identified:** February 2010 **2021 Medicare Utilization:** 39,855

2023 Work RVU: 0.80
2023 NF PE RVU: 0.78
2023 Fac PE RVU: 0.30

RUC Recommendation: 0.80 **Referred to CPT** May 2014 February , June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

95973 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex spinal cord, or peripheral (ie, peripheral nerve, sacral nerve, neuromuscular) (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)**

Global: **Issue:** Implanted Neurostimulator Electronic Analysis **Screen:** Harvard Valued - Utilization over 100,000 / Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: April 2015 **Tab:** 21 **Specialty Developing Recommendation:** AANS/CNS, ACOG, ASA, AUA, ISIS **First Identified:** February 2010 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** February 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95974 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour**

Global: **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Jul 2016

95975 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)**

Global: **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Jul 2016

Status Report: CMS Requests and Relativity Assessment Issues

95976 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple cranial nerve neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional**

Global: XXX **Issue:** Neurostimulator Services **Screen:** High Volume Growth2 / CMS Request - Final Rule for 2016 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** June 2017 **2021 Medicare Utilization:** 6,886

2023 Work RVU: 0.73
2023 NF PE RVU: 0.38
2023 Fac PE RVU: 0.35

RUC Recommendation: 0.95 **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** February 2019

95977 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with complex cranial nerve neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional**

Global: XXX **Issue:** Neurostimulator Services **Screen:** High Volume Growth2 / CMS Request - Final Rule for 2016 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** June 2017 **2021 Medicare Utilization:** 5,089

2023 Work RVU: 0.97
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.47

RUC Recommendation: 1.19 **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** February 2019

95978 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programming; first hour**

Global: **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Jul 2016

Status Report: CMS Requests and Relativity Assessment Issues

95979 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programming; each additional 30 minutes after first hour (List separately in addition to code for primary procedure)**

Global: **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Jul 2016

95980 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; intraoperative, with programming**

Global: XXX **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** No Interest **First Identified:** July 2015 **2021 Medicare Utilization:** 416

2023 Work RVU: 0.80
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.36

RUC Recommendation: Not part of family **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95981 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, without reprogramming**

Global: XXX **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 07 **Specialty Developing Recommendation:** No Interest **First Identified:** July 2015 **2021 Medicare Utilization:** 624

2023 Work RVU: 0.30
2023 NF PE RVU: 0.79
2023 Fac PE RVU: 0.17

RUC Recommendation: Not part of family **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95982 **Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, with reprogramming**

Global: XXX **Issue:** Neurostimulator Services **Screen:** CMS Request - Final Rule for 2016 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 07 **Specialty Developing Recommendation:** No Interest **First Identified:** July 2015 **2021 Medicare Utilization:** 982

2023 Work RVU: 0.65
2023 NF PE RVU: 0.98
2023 Fac PE RVU: 0.31

RUC Recommendation: Not part of family **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95983 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with brain neurostimulator pulse generator/transmitter programming, first 15 minutes face-to-face time with physician or other qualified health care professional**

Global: XXX **Issue:** Neurostimulator Services **Screen:** High Volume Growth2 / CMS Request - Final Rule for 2016 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** June 2017 **2021 Medicare Utilization:** 37,366

2023 Work RVU: 0.91
2023 NF PE RVU: 0.48
2023 Fac PE RVU: 0.45

RUC Recommendation: 1.25 **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** February 2019

Status Report: CMS Requests and Relativity Assessment Issues

95984 **Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with brain neurostimulator pulse generator/transmitter programming, each additional 15 minutes face-to-face time with physician or other qualified health care professional (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Neurostimulator Services **Screen:** High Volume Growth2 / CMS Request - Final Rule for 2016 / CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAN, AANS/CNS, ACNS **First Identified:** June 2017 **2021 Medicare Utilization:** 50,959

2023 Work RVU: 0.80
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.40

RUC Recommendation: 1.00 **Referred to CPT** June 2017 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** February 2019

95990 **Refilling and maintenance of implantable pump or reservoir for drug delivery, spinal (intrathecal, epidural) or brain (intraventricular), includes electronic analysis of pump, when performed;**

Global: XXX **Issue:** Electronic Analysis Implanted Pump **Screen:** Different Performing Specialty from Survey / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 07 **Specialty Developing Recommendation:** ASA, AAPM, NASS, AAMP&R, AANS/CNS, ISIS **First Identified:** April 2010 **2021 Medicare Utilization:** 908

2023 Work RVU: 0.00
2023 NF PE RVU: 2.64
2023 Fac PE RVU: NA

RUC Recommendation: 0.00 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

95991 **Refilling and maintenance of implantable pump or reservoir for drug delivery, spinal (intrathecal, epidural) or brain (intraventricular), includes electronic analysis of pump, when performed; requiring skill of a physician or other qualified health care professional**

Global: XXX **Issue:** Electronic Analysis Implanted Pump **Screen:** High Volume Growth1 / Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 07 **Specialty Developing Recommendation:** ASA, AAPM **First Identified:** February 2008 **2021 Medicare Utilization:** 6,550

2023 Work RVU: 0.77
2023 NF PE RVU: 2.43
2023 Fac PE RVU: 0.32

RUC Recommendation: 0.77 **Referred to CPT** October 2010 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

95992 **Canalith repositioning procedure(s) (eg, epley maneuver, semont maneuver), per day**

Global: XXX **Issue:** **Screen:** Modifier -51 Exempt **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 33 **Specialty Developing Recommendation:** **First Identified:** January 2018 **2021 Medicare Utilization:** 115,801

2023 Work RVU: 0.75
2023 NF PE RVU: 0.50
2023 Fac PE RVU: 0.28

RUC Recommendation: Remove from Modifier -51 Exempt list. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

96101 **Psychological testing (includes psychodiagnostic assessment of emotionality, intellectual abilities, personality and psychopathology, eg, MMPI, Rorschach, WAIS), per hour of the psychologist's or physician's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report**

Global: **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

96102 **Psychological testing (includes psychodiagnostic assessment of emotionality, intellectual abilities, personality and psychopathology, eg, MMPI and WAIS), with qualified health care professional interpretation and report, administered by technician, per hour of technician time, face-to-face**

Global: **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96103 **Psychological testing (includes psychodiagnostic assessment of emotionality, intellectual abilities, personality and psychopathology, eg, MMPI), administered by a computer, with qualified health care professional interpretation and report**

Global: **Issue:** Psychological and Neuro-psychological Testing **Screen:** High Volume Growth2 / Different Performing Specialty from Survey2 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

96105 **Assessment of aphasia (includes assessment of expressive and receptive speech and language function, language comprehension, speech production ability, reading, spelling, writing, eg, by boston diagnostic aphasia examination) with interpretation and report, per hour**

Global: XXX **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS Request/Speech Language Pathology Request / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** January 2016 **2021 Medicare Utilization:** 3,401

2023 Work RVU: 1.75
2023 NF PE RVU: 1.05
2023 Fac PE RVU: NA

RUC Recommendation: 1.75 **Referred to CPT** June 2017 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

96110 **Developmental screening (eg, developmental milestone survey, speech and language delay screen), with scoring and documentation, per standardized instrument**

Global: XXX **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.31
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** June 2017 **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96111 **Developmental testing, (includes assessment of motor, language, social, adaptive, and/or cognitive functioning by standardized developmental instruments) with interpretation and report**

Global: **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

96112 **Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory and/or executive functions by standardized developmental instruments when performed), by physician or other qualified health care professional, with interpretation and report; first hour**

Global: XXX **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 4,750

2023 Work RVU: 2.56
2023 NF PE RVU: 1.04
2023 Fac PE RVU: 1.00

RUC Recommendation: 2.50 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

96113 **Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory and/or executive functions by standardized developmental instruments when performed), by physician or other qualified health care professional, with interpretation and report; each additional 30 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 627

2023 Work RVU: 1.16
2023 NF PE RVU: 0.55
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.10 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96116 **Neurobehavioral status exam (clinical assessment of thinking, reasoning and judgment, [eg, acquired knowledge, attention, language, memory, planning and problem solving, and visual spatial abilities]), by physician or other qualified health care professional, both face-to-face time with the patient and time interpreting test results and preparing the report; first hour**

Global: XXX **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** July 2015 **2021 Medicare Utilization:** 135,507

2023 Work RVU: 1.86
2023 NF PE RVU: 0.81
2023 Fac PE RVU: 0.43

RUC Recommendation: 1.86 **Referred to CPT** June 2017 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

96118 **Neuropsychological testing (eg, Halstead-Reitan Neuropsychological Battery, Wechsler Memory Scales and Wisconsin Card Sorting Test), per hour of the psychologist's or physician's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report**

Global: **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

96119 **Neuropsychological testing (eg, Halstead-Reitan Neuropsychological Battery, Wechsler Memory Scales and Wisconsin Card Sorting Test), with qualified health care professional interpretation and report, administered by technician, per hour of technician time, face-to-face**

Global: **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** July 2015 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96120 **Neuropsychological testing (eg, Wisconsin Card Sorting Test), administered by a computer, with qualified health care professional interpretation and report**

Global: **Issue:** Psychological and Neuro-psychological Testing **Screen:** High Volume Growth2 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** June 2017 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

96121 **Neurobehavioral status exam (clinical assessment of thinking, reasoning and judgment, [eg, acquired knowledge, attention, language, memory, planning and problem solving, and visual spatial abilities]), by physician or other qualified health care professional, both face-to-face time with the patient and time interpreting test results and preparing the report; each additional hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 36,763

2023 Work RVU: 1.71
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.23

RUC Recommendation: 1.71 **Referred to CPT** June 2017 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

96125 **Standardized cognitive performance testing (eg, ross information processing assessment) per hour of a qualified health care professional's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report**

Global: XXX **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** January 2016 **2021 Medicare Utilization:** 5,434

2023 Work RVU: 1.70
2023 NF PE RVU: 1.29
2023 Fac PE RVU: NA

RUC Recommendation: 1.70 **Referred to CPT** June 2017 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96127 **Brief emotional/behavioral assessment (eg, depression inventory, attention-deficit/hyperactivity disorder [adhd] scale), with scoring and documentation, per standardized instrument**

Global: XXX **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** January 2016 **2021 Medicare Utilization:** 497,436

2023 Work RVU: 0.00
2023 NF PE RVU: 0.13
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** June 2017 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

96130 **Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; first hour**

Global: XXX **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 104,985

2023 Work RVU: 2.56
2023 NF PE RVU: 0.89
2023 Fac PE RVU: 0.55

RUC Recommendation: 2.50 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

96131 **Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; each additional hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 71,902

2023 Work RVU: 1.96
2023 NF PE RVU: 0.56
2023 Fac PE RVU: 0.26

RUC Recommendation: 1.90 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96132 **Neuropsychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; first hour**

Global: XXX **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 204,387

2023 Work RVU: 2.56
2023 NF PE RVU: 1.18
2023 Fac PE RVU: 0.47

RUC Recommendation: 2.50 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

96133 **Neuropsychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; each additional hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 08 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 332,219

2023 Work RVU: 1.96
2023 NF PE RVU: 0.92
2023 Fac PE RVU: 0.26

RUC Recommendation: 1.90 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

96136 **Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; first 30 minutes**

Global: XXX **Issue:** Psychological and Neuropsychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 175,704

2023 Work RVU: 0.55
2023 NF PE RVU: 0.69
2023 Fac PE RVU: 0.12

RUC Recommendation: 0.55 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96137 **Psychological or neuropsychological test administration and scoring by physician or other qualified health care professional, two or more tests, any method; each additional 30 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 328,424

2023 Work RVU: 0.46
2023 NF PE RVU: 0.69
2023 Fac PE RVU: 0.06

RUC Recommendation: 0.46 **Referred to CPT** June 2017 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

96138 **Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first 30 minutes**

Global: XXX **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 182,454

2023 Work RVU: 0.00
2023 NF PE RVU: 1.00
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** June 2017 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

96139 **Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; each additional 30 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 344,259

2023 Work RVU: 0.00
2023 NF PE RVU: 1.03
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** June 2017 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96146 **Psychological or neuropsychological test administration, with single automated, standardized instrument via electronic platform, with automated result only**

Global: XXX **Issue:** Psychological and Neuro-psychological Testing **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: October 2017 **Tab:** 20 **Specialty Developing Recommendation:** APA (psychology), AAP, ASHA, AAN **First Identified:** June 2017 **2021 Medicare Utilization:** 8,281

2023 Work RVU: 0.00
2023 NF PE RVU: 0.06
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** June 2017 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

96150 **Health and behavior assessment (eg, health-focused clinical interview, behavioral observations, psychophysiological monitoring, health-oriented questionnaires), each 15 minutes face-to-face with the patient; initial assessment**

Global: **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

96151 **Health and behavior assessment (eg, health-focused clinical interview, behavioral observations, psychophysiological monitoring, health-oriented questionnaires), each 15 minutes face-to-face with the patient; re-assessment**

Global: **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96152 **Health and behavior intervention, each 15 minutes, face-to-face; individual** **Global:** **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** **2023 Work RVU:** **2023 NF PE RVU:** **2023 Fac PE RVU:**

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

96153 **Health and behavior intervention, each 15 minutes, face-to-face; group (2 or more patients)** **Global:** **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:** **First Identified:** September 2018 **2021 Medicare Utilization:** **2023 Work RVU:** **2023 NF PE RVU:** **2023 Fac PE RVU:**

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

96154 **Health and behavior intervention, each 15 minutes, face-to-face; family (with the patient present)** **Global:** **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:** APA (psychology), NASW **First Identified:** April 2017 **2021 Medicare Utilization:** **2023 Work RVU:** **2023 NF PE RVU:** **2023 Fac PE RVU:**

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96155 **Health and behavior intervention, each 15 minutes, face-to-face; family (without the patient present)**

Global: **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

96156 **Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)**

Global: XXX **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 18,966

2023 Work RVU: 2.10
2023 NF PE RVU: 0.65
2023 Fac PE RVU: 0.33

RUC Recommendation: 2.10

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

96158 **Health behavior intervention, individual, face-to-face; initial 30 minutes**

Global: XXX **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 40,810

2023 Work RVU: 1.45
2023 NF PE RVU: 0.43
2023 Fac PE RVU: 0.20

RUC Recommendation: 1.45

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

96159 **Health behavior intervention, individual, face-to-face; each additional 15 minutes (list separately in addition to code for primary service)**

Global: ZZZ **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 36,634

2023 Work RVU: 0.50
2023 NF PE RVU: 0.15
2023 Fac PE RVU: 0.07

RUC Recommendation: 0.50

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

96164 **Health behavior intervention, group (2 or more patients), face-to-face; initial 30 minutes**

Global: XXX **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 12,608

2023 Work RVU: 0.21
2023 NF PE RVU: 0.07
2023 Fac PE RVU: 0.04

RUC Recommendation: 0.21

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

96165 **Health behavior intervention, group (2 or more patients), face-to-face; each additional 15 minutes (list separately in addition to code for primary service)**

Global: ZZZ **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 34,107

2023 Work RVU: 0.10
2023 NF PE RVU: 0.03
2023 Fac PE RVU: 0.02

RUC Recommendation: 0.10

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

96167 **Health behavior intervention, family (with the patient present), face-to-face; initial 30 minutes**

Global: XXX **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 1,275

2023 Work RVU: 1.55
2023 NF PE RVU: 0.45
2023 Fac PE RVU: 0.20

RUC Recommendation: 1.55

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

96168 **Health behavior intervention, family (with the patient present), face-to-face; each additional 15 minutes (list separately in addition to code for primary service)**

Global: ZZZ **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:** 1,123

2023 Work RVU: 0.55
2023 NF PE RVU: 0.16
2023 Fac PE RVU: 0.07

RUC Recommendation: 0.55

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

96170 **Health behavior intervention, family (without the patient present), face-to-face; initial 30 minutes**

Global: XXX **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:**

2023 Work RVU: 1.50
2023 NF PE RVU: 0.72
2023 Fac PE RVU: 0.58

RUC Recommendation: 1.50

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

96171 **Health behavior intervention, family (without the patient present), face-to-face; each additional 15 minutes (list separately in addition to code for primary service)**

Global: ZZZ **Issue:** Health and Behavior Assessment and Intervention **Screen:** Negative IWPUT **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 41 **Specialty Developing Recommendation:**

First Identified: September 2018 **2021 Medicare Utilization:**

2023 Work RVU: 0.54
2023 NF PE RVU: 0.26
2023 Fac PE RVU: 0.21

RUC Recommendation: 0.54

Referred to CPT September 2018
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

96202 **Multiple-family group behavior management/modification training for parent(s)/guardian(s)/caregiver(s) of patients with a mental or physical health diagnosis, administered by physician or other qualified health care professional (without the patient present), face-to-face with multiple sets of parent(s)/guardian(s)/caregiver(s); initial 60 minutes**

Global: XXX **Issue:** Caregiver Behavior Management Training **Screen:** RUC Flag for Review **Complete?** No

Most Recent RUC Meeting: April 2021 **Tab:** 11 **Specialty Developing Recommendation:** AACAP, AND, APA (psychology)

First Identified: April 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.43
2023 NF PE RVU: 0.23
2023 Fac PE RVU: 0.17

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Not part of RAW

96203 **Multiple-family group behavior management/modification training for parent(s)/guardian(s)/caregiver(s) of patients with a mental or physical health diagnosis, administered by physician or other qualified health care professional (without the patient present), face-to-face with multiple sets of parent(s)/guardian(s)/caregiver(s); each additional 15 minutes (list separately in addition to code for primary service)**

Global: ZZZ **Issue:** Caregiver Behavior Management Training **Screen:** RUC Flag for Review **Complete?** No

Most Recent RUC Meeting: April 2021 **Tab:** 11 **Specialty Developing Recommendation:**

First Identified: April 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.12
2023 NF PE RVU: 0.05
2023 Fac PE RVU: 0.05

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Not part of RAW

Status Report: CMS Requests and Relativity Assessment Issues

96360 **Intravenous infusion, hydration; initial, 31 minutes to 1 hour** **Global:** XXX **Issue:** IV Hydration **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 25 **Specialty Developing Recommendation:** ASCO, ASH **First Identified:** July 2015 **2021 Medicare Utilization:** 219,605

2023 Work RVU: 0.17
2023 NF PE RVU: 0.79
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** N/A **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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96361 **Intravenous infusion, hydration; each additional hour (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** IV Hydration **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 25 **Specialty Developing Recommendation:** ASCO, ASH **First Identified:** July 2015 **2021 Medicare Utilization:** 358,259

2023 Work RVU: 0.09
2023 NF PE RVU: 0.28
2023 Fac PE RVU: NA

RUC Recommendation: 0.09 **Referred to CPT** N/A **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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96365 **Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); initial, up to 1 hour** **Global:** XXX **Issue:** Intravenous Infusion Therapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 28 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ISDA **First Identified:** September 2011 **2021 Medicare Utilization:** 1,336,860

2023 Work RVU: 0.21
2023 NF PE RVU: 1.66
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

96366 **Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); each additional hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Intravenous Infusion Therapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 28 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ISDA **First Identified:** April 2013 **2021 Medicare Utilization:** 553,392

2023 Work RVU: 0.18
2023 NF PE RVU: 0.42
2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

96367 **Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); additional sequential infusion of a new drug/substance, up to 1 hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Intravenous Infusion Therapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 28 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ISDA **First Identified:** September 2011 **2021 Medicare Utilization:** 1,145,470

2023 Work RVU: 0.19
2023 NF PE RVU: 0.66
2023 Fac PE RVU: NA

RUC Recommendation: 0.19 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

96368 **Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); concurrent infusion (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Intravenous Infusion Therapy **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 28 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ISDA **First Identified:** April 2013 **2021 Medicare Utilization:** 128,693

2023 Work RVU: 0.17
2023 NF PE RVU: 0.41
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96372 **Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); subcutaneous or intramuscular**

Global: XXX **Issue:** Application of On-body Injector with Subcutaneous Injection **Screen:** Different Performing Specialty from Survey2 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 26 **Specialty Developing Recommendation:** ASCO, ASH, AAFP, ACRh **First Identified:** April 2013 **2021 Medicare Utilization:** 7,870,685

2023 Work RVU: 0.17
2023 NF PE RVU: 0.24
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** N/A **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

96374 **Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); intravenous push, single or initial substance/drug**

Global: XXX **Issue:** Application of On-body Injector with Subcutaneous Injection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 26 **Specialty Developing Recommendation:** ASCO, ASH, ACRh **First Identified:** July 2015 **2021 Medicare Utilization:** 232,764

2023 Work RVU: 0.18
2023 NF PE RVU: 0.91
2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** N/A **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

96375 **Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); each additional sequential intravenous push of a new substance/drug (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Application of On-body Injector with Subcutaneous Injection **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 26 **Specialty Developing Recommendation:** ASCO, ASH, ACRh **First Identified:** July 2015 **2021 Medicare Utilization:** 1,328,236

2023 Work RVU: 0.10
2023 NF PE RVU: 0.35
2023 Fac PE RVU: NA

RUC Recommendation: 0.10 **Referred to CPT** N/A **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96377 **Application of on-body injector (includes cannula insertion) for timed subcutaneous injection**

Global: XXX **Issue:** Application of On-body Injector with Subcutaneous Injection **Screen:** should be on N/R LOI just added to track **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 26 **Specialty Developing Recommendation:** ASCO, ASH **First Identified:** January 2016 **2021 Medicare Utilization:** 53,537

2023 Work RVU: 0.17
2023 NF PE RVU: 0.37
2023 Fac PE RVU: NA

RUC Recommendation: 0.17 **Referred to CPT** N/A **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Not Part of RAW

96401 **Chemotherapy administration, subcutaneous or intramuscular; non-hormonal anti-neoplastic**

Global: XXX **Issue:** Chemotherapy Administration **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 27 **Specialty Developing Recommendation:** ASBMT, ASCO, ASH, ACRh **First Identified:** July 2015 **2021 Medicare Utilization:** 733,731

2023 Work RVU: 0.21
2023 NF PE RVU: 1.92
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 **Referred to CPT** N/A **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

96402 **Chemotherapy administration, subcutaneous or intramuscular; hormonal anti-neoplastic**

Global: XXX **Issue:** Chemotherapy Administration **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 27 **Specialty Developing Recommendation:** ASBMT, ASCO, ASH, AUA **First Identified:** July 2015 **2021 Medicare Utilization:** 387,086

2023 Work RVU: 0.19
2023 NF PE RVU: 0.80
2023 Fac PE RVU: NA

RUC Recommendation: 0.19 **Referred to CPT** N/A **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

Status Report: CMS Requests and Relativity Assessment Issues

96405 **Chemotherapy administration; intralesional, up to and including 7 lesions** **Global:** 000 **Issue:** Chemotherapy Administration **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 55 **Specialty Developing Recommendation:** ASCO **First Identified:** NA **2021 Medicare Utilization:** 19,134

2023 Work RVU: 0.52
2023 NF PE RVU: 1.95
2023 Fac PE RVU: 0.30

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

96406 **Chemotherapy administration; intralesional, more than 7 lesions** **Global:** 000 **Issue:** Chemotherapy Administration **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 55 **Specialty Developing Recommendation:** ASCO **First Identified:** NA **2021 Medicare Utilization:** 730

2023 Work RVU: 0.80
2023 NF PE RVU: 3.06
2023 Fac PE RVU: 0.46

RUC Recommendation: New PE inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

96409 **Chemotherapy administration; intravenous, push technique, single or initial substance/drug** **Global:** XXX **Issue:** Chemotherapy Administration **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 27 **Specialty Developing Recommendation:** ASBMT, ASCO, ASH **First Identified:** July 2015 **2021 Medicare Utilization:** 57,524

2023 Work RVU: 0.24
2023 NF PE RVU: 2.71
2023 Fac PE RVU: NA

RUC Recommendation: 0.24 **Referred to CPT** N/A **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

96411 **Chemotherapy administration; intravenous, push technique, each additional substance/drug (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Chemotherapy Administration **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 27 **Specialty Developing Recommendation:** ASBMT, ASCO, ASH **First Identified:** July 2015 **2021 Medicare Utilization:** 136,948

2023 Work RVU: 0.20
2023 NF PE RVU: 1.41
2023 Fac PE RVU: NA

RUC Recommendation: 0.20 **Referred to CPT** N/A **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96413 **Chemotherapy administration, intravenous infusion technique; up to 1 hour, single or initial substance/drug**

Global: XXX **Issue:** Chemotherapy Administration **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 29 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ASBMT **First Identified:** February 2010 **2021 Medicare Utilization:** 1,689,219

2023 Work RVU: 0.28
2023 NF PE RVU: 3.55
2023 Fac PE RVU: NA

RUC Recommendation: 0.28 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

96415 **Chemotherapy administration, intravenous infusion technique; each additional hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chemotherapy Administration **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 29 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ASBMT **First Identified:** January 2012 **2021 Medicare Utilization:** 766,295

2023 Work RVU: 0.19
2023 NF PE RVU: 0.63
2023 Fac PE RVU: NA

RUC Recommendation: 0.19 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

96416 **Chemotherapy administration, intravenous infusion technique; initiation of prolonged chemotherapy infusion (more than 8 hours), requiring use of a portable or implantable pump**

Global: XXX **Issue:** Chemotherapy Administration **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2010 **Tab:** 20 **Specialty Developing Recommendation:** ACRh, ASCO, ASH **First Identified:** February 2010 **2021 Medicare Utilization:** 25,003

2023 Work RVU: 0.21
2023 NF PE RVU: 3.55
2023 Fac PE RVU: NA

RUC Recommendation: New PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

Status Report: CMS Requests and Relativity Assessment Issues

96417 **Chemotherapy administration, intravenous infusion technique; each additional sequential infusion (different substance/drug), up to 1 hour (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Chemotherapy Administration **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: January 2013 **Tab:** 29 **Specialty Developing Recommendation:** ACRh, ASCO, ASH, ASBMT **First Identified:** January 2012 **2021 Medicare Utilization:** 357,078

2023 Work RVU: 0.21
2023 NF PE RVU: 1.67
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 and new PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

96440 **Chemotherapy administration into pleural cavity, requiring and including thoracentesis**

Global: 000 **Issue:** Chemotherapy Administration **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: February 2008 **Tab:** R **Specialty Developing Recommendation:** **First Identified:** NA **2021 Medicare Utilization:** 50

2023 Work RVU: 2.12
2023 NF PE RVU: 20.28
2023 Fac PE RVU: 1.68

RUC Recommendation: New PE inputs

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

96567 **Photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitive drug(s), per day**

Global: XXX **Issue:** Photodynamic Therapy **Screen:** High Volume Growth1 / CMS Fastest Growing / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 16 **Specialty Developing Recommendation:** AAD **First Identified:** February 2008 **2021 Medicare Utilization:** 43,661

2023 Work RVU: 0.00
2023 NF PE RVU: 4.20
2023 Fac PE RVU: NA

RUC Recommendation: 0.00 PE Only

Referred to CPT September 2016
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

96573 **Photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitizing drug(s) provided by a physician or other qualified health care professional, per day**

Global: 000 **Issue:** Photodynamic Therapy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 16 **Specialty Developing Recommendation:** AAD **First Identified:** January 2017 **2021 Medicare Utilization:** 31,439

2023 Work RVU: 0.48
2023 NF PE RVU: 6.40
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** September 2016 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

96574 **Debridement of premalignant hyperkeratotic lesion(s) (ie, targeted curettage, abrasion) followed with photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitizing drug(s) provided by a physician or other qualified health care professional, per day**

Global: 000 **Issue:** Photodynamic Therapy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 16 **Specialty Developing Recommendation:** AAD **First Identified:** January 2017 **2021 Medicare Utilization:** 47,841

2023 Work RVU: 1.01
2023 NF PE RVU: 7.38
2023 Fac PE RVU: NA

RUC Recommendation: 1.01 **Referred to CPT** September 2016 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

96910 **Photochemotherapy; tar and ultraviolet b (goeckerman treatment) or petrolatum and ultraviolet b**

Global: XXX **Issue:** Photo-chemotherapy **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 44 **Specialty Developing Recommendation:** AAD **First Identified:** July 2015 **2021 Medicare Utilization:** 312,471

2023 Work RVU: 0.00
2023 NF PE RVU: 3.51
2023 Fac PE RVU: NA

RUC Recommendation: PE Only **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

96920 **Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq cm**

Global: 000 **Issue:** Laser Treatment – Skin **Screen:** CMS Fastest Growing / CPT Assistant Analysis / High Volume Growth3 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 09 **Specialty Developing Recommendation:** AADA **First Identified:** October 2008 **2021 Medicare Utilization:** 88,673

2023 Work RVU: 1.15
2023 NF PE RVU: 3.48
2023 Fac PE RVU: 0.68

RUC Recommendation: Refer to CPT. 1.15 **Referred to CPT** February 2023 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2016

96921 **Laser treatment for inflammatory skin disease (psoriasis); 250 sq cm to 500 sq cm**

Global: 000 **Issue:** Laser Treatment – Skin **Screen:** High Volume Growth1 / CMS Fastest Growing / CPT Assistant Analysis / High Volume Growth3 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 09 **Specialty Developing Recommendation:** AADA **First Identified:** February 2008 **2021 Medicare Utilization:** 25,424

2023 Work RVU: 1.30
2023 NF PE RVU: 3.77
2023 Fac PE RVU: 0.76

RUC Recommendation: Refer to CPT. 1.30 **Referred to CPT** February 2023 **Result:** Increase

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2016

96922 **Laser treatment for inflammatory skin disease (psoriasis); over 500 sq cm**

Global: 000 **Issue:** Laser Treatment – Skin **Screen:** High Volume Growth1 / CMS Fastest Growing / CPT Assistant Analysis **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 09 **Specialty Developing Recommendation:** AADA **First Identified:** October 2008 **2021 Medicare Utilization:** 14,024

2023 Work RVU: 2.10
2023 NF PE RVU: 4.79
2023 Fac PE RVU: 1.23

RUC Recommendation: Refer to CPT 2.10 **Referred to CPT** February 2023 **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Sep 2016

Status Report: CMS Requests and Relativity Assessment Issues

97001 **Physical therapy evaluation**

Global: **Issue:** Physical Medicine and Rehabilitation Workgroup **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: September 2011 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

97002 **Physical therapy re-evaluation**

Global: **Issue:** Physical Medicine and Rehabilitation Workgroup **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: February 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

97003 **Occupational therapy evaluation**

Global: **Issue:** Physical Medicine and Rehabilitation Workgroup **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: February 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

97004 **Occupational therapy re-evaluation**

Global: **Issue:** Physical Medicine and Rehabilitation Workgroup **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: February 2015 **2021 Medicare Utilization:**

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT February 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97010 **Application of a modality to 1 or more areas; hot or cold packs**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 41 **Specialty Developing Recommendation:** No Interest **First Identified:** April 2016 **2021 Medicare Utilization:** 2

2023 Work RVU: 0.06
2023 NF PE RVU: 0.12
2023 Fac PE RVU: NA

RUC Recommendation: No specialty society interest **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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97012 **Application of a modality to 1 or more areas; traction, mechanical**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** April 2016 **2021 Medicare Utilization:** 460,216

2023 Work RVU: 0.25
2023 NF PE RVU: 0.17
2023 Fac PE RVU: NA

RUC Recommendation: 0.25 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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97014 **Application of a modality to 1 or more areas; electrical stimulation (unattended)**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** April 2016 **2021 Medicare Utilization:**

2023 Work RVU: 0.18
2023 NF PE RVU: 0.18
2023 Fac PE RVU: NA

RUC Recommendation: 0.18 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

Status Report: CMS Requests and Relativity Assessment Issues

97016 **Application of a modality to 1 or more areas; vasopneumatic devices**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Codes Reported Together 75% or More-Part1 / High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA

First Identified: February 2010

2021 Medicare Utilization: 896,158

2023 Work RVU: 0.18

2023 NF PE RVU: 0.16

2023 Fac PE RVU: NA

RUC Recommendation: 0.18

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

97018 **Application of a modality to 1 or more areas; paraffin bath**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Codes Reported Together 75% or More-Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** AOTA, APTA

First Identified: February 2010

2021 Medicare Utilization: 144,507

2023 Work RVU: 0.06

2023 NF PE RVU: 0.10

2023 Fac PE RVU: NA

RUC Recommendation: 0.06

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

97022 **Application of a modality to 1 or more areas; whirlpool**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA

First Identified: April 2016

2021 Medicare Utilization: 139,020

2023 Work RVU: 0.17

2023 NF PE RVU: 0.33

2023 Fac PE RVU: NA

RUC Recommendation: 0.17

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

97032 **Application of a modality to 1 or more areas; electrical stimulation (manual), each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** July 2015 **2021 Medicare Utilization:** 770,126

2023 Work RVU: 0.25
2023 NF PE RVU: 0.17
2023 Fac PE RVU: NA

RUC Recommendation: 0.25 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97033 **Application of a modality to 1 or more areas; iontophoresis, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** April 2016 **2021 Medicare Utilization:** 38,829

2023 Work RVU: 0.26
2023 NF PE RVU: 0.32
2023 Fac PE RVU: NA

RUC Recommendation: 0.26 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97034 **Application of a modality to 1 or more areas; contrast baths, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** April 2016 **2021 Medicare Utilization:** 6,823

2023 Work RVU: 0.21
2023 NF PE RVU: 0.21
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97035 **Application of a modality to 1 or more areas; ultrasound, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Modalities **Screen:** Low Value-High Volume / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** October 2010 **2021 Medicare Utilization:** 1,485,156

2023 Work RVU: 0.21
2023 NF PE RVU: 0.21
2023 Fac PE RVU: NA

RUC Recommendation: 0.21 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97110 **Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** Codes Reported Together 75% or More-Part1 / MPC List / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 58,730,344

2023 Work RVU: 0.45
2023 NF PE RVU: 0.42
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97112 **Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** CMS High Expenditure Procedural Codes1 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** September 2011 **2021 Medicare Utilization:** 21,727,068

2023 Work RVU: 0.50
2023 NF PE RVU: 0.50
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97113 **Therapeutic procedure, 1 or more areas, each 15 minutes; aquatic therapy with therapeutic exercises**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** July 2015 **2021 Medicare Utilization:** 1,526,923

2023 Work RVU: 0.48
2023 NF PE RVU: 0.61
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97116 **Therapeutic procedure, 1 or more areas, each 15 minutes; gait training (includes stair climbing)**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** Codes Reported Together 75% or More-Part1 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** February 2010 **2021 Medicare Utilization:** 3,518,965

2023 Work RVU: 0.45
2023 NF PE RVU: 0.42
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97127 **Therapeutic interventions that focus on cognitive function (eg, attention, memory, reasoning, executive function, problem solving, and/or pragmatic functioning) and compensatory strategies to manage the performance of an activity (eg, managing time or schedules, initiating, organizing and sequencing tasks), direct (one-on-one) patient contact**

Global: **Issue:** Cognitive Function Intervention **Screen:** High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** January 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: 1.50 **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97140 **Manual therapy techniques (eg, mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** CMS High Expenditure Procedural Codes1 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA

First Identified: September 2011

2021 Medicare Utilization: 27,794,107

2023 Work RVU: 0.43
2023 NF PE RVU: 0.37
2023 Fac PE RVU: NA

RUC Recommendation: 0.43

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

97150 **Therapeutic procedure(s), group (2 or more individuals)**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: January 2012 **Tab:** **Specialty Developing Recommendation:** APTA

First Identified: April 2011

2021 Medicare Utilization: 1,525,578

2023 Work RVU: 0.29
2023 NF PE RVU: 0.23
2023 Fac PE RVU: NA

RUC Recommendation: 0.29

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

97161 **Physical therapy evaluation: low complexity, requiring these components: a history with no personal factors and/or comorbidities that impact the plan of care; an examination of body system(s) using standardized tests and measures addressing 1-2 elements from any of the following: body structures and functions, activity limitations, and/or participation restrictions; a clinical presentation with stable and/or uncomplicated characteristics; and clinical decision making of low complexity using standardized patient assessment instrument and/or measurable assessment of functional outcome. typically, 20 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA

First Identified: February 2015

2021 Medicare Utilization: 1,457,142

2023 Work RVU: 1.54
2023 NF PE RVU: 1.42
2023 Fac PE RVU: NA

RUC Recommendation: 0.75

Referred to CPT February 2015
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Decrease

Status Report: CMS Requests and Relativity Assessment Issues

97162 **Physical therapy evaluation: moderate complexity, requiring these components: a history of present problem with 1-2 personal factors and/or comorbidities that impact the plan of care; an examination of body systems using standardized tests and measures in addressing a total of 3 or more elements from any of the following: body structures and functions, activity limitations, and/or participation restrictions; an evolving clinical presentation with changing characteristics; and clinical decision making of moderate complexity using standardized patient assessment instrument and/or measurable assessment of functional outcome. typically, 30 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 1,277,916

2023 Work RVU: 1.54
2023 NF PE RVU: 1.42
2023 Fac PE RVU: NA

RUC Recommendation: 1.18 **Referred to CPT** February 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

97163 **Physical therapy evaluation: high complexity, requiring these components: a history of present problem with 3 or more personal factors and/or comorbidities that impact the plan of care; an examination of body systems using standardized tests and measures addressing a total of 4 or more elements from any of the following: body structures and functions, activity limitations, and/or participation restrictions; a clinical presentation with unstable and unpredictable characteristics; and clinical decision making of high complexity using standardized patient assessment instrument and/or measurable assessment of functional outcome. typically, 45 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 272,930

2023 Work RVU: 1.54
2023 NF PE RVU: 1.42
2023 Fac PE RVU: NA

RUC Recommendation: 1.50 **Referred to CPT** February 2015 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97164 **Re-evaluation of physical therapy established plan of care, requiring these components: an examination including a review of history and use of standardized tests and measures is required; and revised plan of care using a standardized patient assessment instrument and/or measurable assessment of functional outcome typically, 20 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 503,936

2023 Work RVU: 0.96
2023 NF PE RVU: 1.08
2023 Fac PE RVU: NA

RUC Recommendation: 0.75 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97165 **Occupational therapy evaluation, low complexity, requiring these components: an occupational profile and medical and therapy history, which includes a brief history including review of medical and/or therapy records relating to the presenting problem; an assessment(s) that identifies 1-3 performance deficits (ie, relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and clinical decision making of low complexity, which includes an analysis of the occupational profile, analysis of data from problem-focused assessment(s), and consideration of a limited number of treatment options. patient presents with no comorbidities that affect occupational performance. modification of tasks or assistance (eg, physical or verbal) with assessment(s) is not necessary to enable completion of evaluation component. typically, 30 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 148,116

2023 Work RVU: 1.54
2023 NF PE RVU: 1.42
2023 Fac PE RVU: NA

RUC Recommendation: 0.88 **Referred to CPT** February 2015 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97166 **Occupational therapy evaluation, moderate complexity, requiring these components: an occupational profile and medical and therapy history, which includes an expanded review of medical and/or therapy records and additional review of physical, cognitive, or psychosocial history related to current functional performance; an assessment(s) that identifies 3-5 performance deficits (ie, relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and clinical decision making of moderate analytic complexity, which includes an analysis of the occupational profile, analysis of data from detailed assessment(s), and consideration of several treatment options. patient may present with comorbidities that affect occupational performance. minimal to moderate modification of tasks or assistance (eg, physical or verbal) with assessment(s) is necessary to enable patient to complete evaluation component. typically, 45 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 119,073

2023 Work RVU: 1.54
2023 NF PE RVU: 1.42
2023 Fac PE RVU: NA

RUC Recommendation: 1.20 **Referred to CPT** February 2015 **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97167 **Occupational therapy evaluation, high complexity, requiring these components: an occupational profile and medical and therapy history, which includes review of medical and/or therapy records and extensive additional review of physical, cognitive, or psychosocial history related to current functional performance; an assessment(s) that identifies 5 or more performance deficits (ie, relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and clinical decision making of high analytic complexity, which includes an analysis of the patient profile, analysis of data from comprehensive assessment(s), and consideration of multiple treatment options. patient presents with comorbidities that affect occupational performance. significant modification of tasks or assistance (eg, physical or verbal) with assessment(s) is necessary to enable patient to complete evaluation component. typically, 60 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 23,075

2023 Work RVU: 1.54
2023 NF PE RVU: 1.42
2023 Fac PE RVU: NA

RUC Recommendation: 1.70 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97168 **Re-evaluation of occupational therapy established plan of care, requiring these components: an assessment of changes in patient functional or medical status with revised plan of care; an update to the initial occupational profile to reflect changes in condition or environment that affect future interventions and/or goals; and a revised plan of care. a formal reevaluation is performed when there is a documented change in functional status or a significant change to the plan of care is required. typically, 30 minutes are spent face-to-face with the patient and/or family.**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 17 **Specialty Developing Recommendation:** AOTA, APTA **First Identified:** February 2015 **2021 Medicare Utilization:** 32,891

2023 Work RVU: 0.96
2023 NF PE RVU: 1.07
2023 Fac PE RVU: NA

RUC Recommendation: 0.80 **Referred to CPT** February 2015 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97530 **Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** CMS High Expenditure Procedural Codes1 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** September 2011 **2021 Medicare Utilization:** 23,945,325

2023 Work RVU: 0.44
2023 NF PE RVU: 0.66
2023 Fac PE RVU: NA

RUC Recommendation: 0.44 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97532 **Development of cognitive skills to improve attention, memory, problem solving (includes compensatory training), direct (one-on-one) patient contact, each 15 minutes**

Global: **Issue:** Cognitive Function Intervention **Screen:** High Volume Growth2 / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA, ASHA, APA (psychology) **First Identified:** April 2013 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97533 **Sensory integrative techniques to enhance sensory processing and promote adaptive responses to environmental demands, direct (one-on-one) patient contact, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - ADL/IADL **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** April 2016 **2021 Medicare Utilization:** 41,438

2023 Work RVU: 0.48
2023 NF PE RVU: 1.41
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97535 **Self-care/home management training (eg, activities of daily living (adl) and compensatory training, meal preparation, safety procedures, and instructions in use of assistive technology devices/adaptive equipment) direct one-on-one contact, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - ADL/IADL **Screen:** Codes Reported Together 75% or More-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** October 2012 **2021 Medicare Utilization:** 2,628,494

2023 Work RVU: 0.45
2023 NF PE RVU: 0.52
2023 Fac PE RVU: NA

RUC Recommendation: 0.45 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Article no longer necessary

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97537 **Community/work reintegration training (eg, shopping, transportation, money management, avocational activities and/or work environment/modification analysis, work task analysis, use of assistive technology device/adaptive equipment), direct one-on-one contact, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - ADL/IADL **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** April 2016 **2021 Medicare Utilization:** 14,261

2023 Work RVU: 0.48
2023 NF PE RVU: 0.46
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97542 **Wheelchair management (eg, assessment, fitting, training), each 15 minutes** **Global:** XXX **Issue:** Physical Medicine and Rehabilitation Services - Therapeutic **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** April 2013 **2021 Medicare Utilization:** 85,302

2023 Work RVU: 0.48
2023 NF PE RVU: 0.46
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97597 **Debridement (eg, high pressure waterjet with/without suction, sharp selective debridement with scissors, scalpel and forceps), open wound, (eg, fibrin, devitalized epidermis and/or dermis, exudate, debris, biofilm), including topical application(s), wound assessment, use of a whirlpool, when performed and instruction(s) for ongoing care, per session, total wound(s) surface area; first 20 sq cm or less** **Global:** 000 **Issue:** Open Wound Debridement **Screen:** Site of Service Anomaly / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 23 **Specialty Developing Recommendation:** AAFP, ACS, APMA **First Identified:** September 2007 **2021 Medicare Utilization:** 745,666

2023 Work RVU: 0.77
2023 NF PE RVU: 2.18
2023 Fac PE RVU: 0.22

RUC Recommendation: 0.88 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97598 **Debridement (eg, high pressure waterjet with/without suction, sharp selective debridement with scissors, scalpel and forceps), open wound, (eg, fibrin, devitalized epidermis and/or dermis, exudate, debris, biofilm), including topical application(s), wound assessment, use of a whirlpool, when performed and instruction(s) for ongoing care, per session, total wound(s) surface area; each additional 20 sq cm, or part thereof (list separately in addition to code for primary procedure)** **Global:** ZZZ **Issue:** Open Wound Debridement **Screen:** Site of Service Anomaly / High Volume Growth3 / Different Performing Specialty from Survey **Complete?** Yes

Most Recent RUC Meeting: October 2018 **Tab:** 23 **Specialty Developing Recommendation:** AAFP, ACS, APMA **First Identified:** September 2007 **2021 Medicare Utilization:** 143,440

2023 Work RVU: 0.50
2023 NF PE RVU: 0.78
2023 Fac PE RVU: 0.17

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97602 **Removal of devitalized tissue from wound(s), non-selective debridement, without anesthesia (eg, wet-to-moist dressings, enzymatic, abrasion, larval therapy), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Active Wound Care Management **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** AAOS, ACS, APMA, ASPS **First Identified:** April 2016 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97605 **Negative pressure wound therapy (eg, vacuum assisted drainage collection), utilizing durable medical equipment (dme), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters**

Global: XXX **Issue:** Negative Pressure Wound Therapy **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** AAOS, ACS, APMA, ASPS **First Identified:** April 2013 **2021 Medicare Utilization:** 45,050

2023 Work RVU: 0.55
2023 NF PE RVU: 0.71
2023 Fac PE RVU: 0.17

RUC Recommendation: 0.55 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

97606 **Negative pressure wound therapy (eg, vacuum assisted drainage collection), utilizing durable medical equipment (dme), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters**

Global: XXX **Issue:** Negative Pressure Wound Therapy **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** APMA, ACS, AAOS, ASPS **First Identified:** April 2013 **2021 Medicare Utilization:** 16,957

2023 Work RVU: 0.60
2023 NF PE RVU: 0.91
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.60 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97607 **Negative pressure wound therapy, (eg, vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters**

Global: XXX **Issue:** Negative Pressure Wound Therapy **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** APMA, ACS, AAOS, ASPS **First Identified:** May 2013 **2021 Medicare Utilization:** 8,276

2023 Work RVU: 0.41
2023 NF PE RVU: 10.48
2023 Fac PE RVU: 0.17

RUC Recommendation: 0.11 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

97608 **Negative pressure wound therapy, (eg, vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters**

Global: XXX **Issue:** Negative Pressure Wound Therapy **Screen:** High Volume Growth2 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** APMA, ACS, AAOS, ASPS **First Identified:** May 2013 **2021 Medicare Utilization:** 1,476

2023 Work RVU: 0.46
2023 NF PE RVU: 10.44
2023 Fac PE RVU: 0.19

RUC Recommendation: 0.46 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

97610 **Low frequency, non-contact, non-thermal ultrasound, including topical application(s), when performed, wound assessment, and instruction(s) for ongoing care, per day**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Active Wound Care Management **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** **First Identified:** April 2016 **2021 Medicare Utilization:** 37,545

2023 Work RVU: 0.40
2023 NF PE RVU: 12.91
2023 Fac PE RVU: 0.12

RUC Recommendation: Maintain **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97755 **Assistive technology assessment (eg, to restore, augment or compensate for existing function, optimize functional tasks and/or maximize environmental accessibility), direct one-on-one contact, with written report, each 15 minutes**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Tests and Measures **Screen:** High Volume Growth1 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** February 2008 **2021 Medicare Utilization:** 3,154

2023 Work RVU: 0.62
2023 NF PE RVU: 0.51
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

97760 **Orthotic(s) management and training (including assessment and fitting when not otherwise reported), upper extremity(ies), lower extremity(ies) and/or trunk, initial orthotic(s) encounter, each 15 minutes**

Global: XXX **Issue:** Orthotic Management and Prosthetic Training **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** April 2016 **2021 Medicare Utilization:** 55,538

2023 Work RVU: 0.50
2023 NF PE RVU: 0.94
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** September 2016 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97761 **Prosthetic(s) training, upper and/or lower extremity(ies), initial prosthetic(s) encounter, each 15 minutes**

Global: XXX **Issue:** Orthotic Management and Prosthetic Training **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** April 2016 **2021 Medicare Utilization:** 4,165

2023 Work RVU: 0.50
2023 NF PE RVU: 0.74
2023 Fac PE RVU: NA

RUC Recommendation: 0.50 **Referred to CPT** September 2016 **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97762 **Checkout for orthotic/prosthetic use, established patient, each 15 minutes**

Global: **Issue:** Orthotic Management and Prosthetic Training **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA **First Identified:** April 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

97763 **Orthotic(s)/prosthetic(s) management and/or training, upper extremity(ies), lower extremity(ies), and/or trunk, subsequent orthotic(s)/prosthetic(s) encounter, each 15 minutes**

Global: XXX **Issue:** Orthotic Management and Prosthetic Training **Screen:** Physical Medicine and Rehabilitation Services **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA, AOTA **First Identified:** April 2016 **2021 Medicare Utilization:** 39,975

2023 Work RVU: 0.48
2023 NF PE RVU: 1.10
2023 Fac PE RVU: NA

RUC Recommendation: 0.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

97802 **Medical nutrition therapy; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes**

Global: XXX **Issue:** Medical Nutrition Therapy **Screen:** CMS Request - Medical Nutrition Therapy **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 53 **Specialty Developing Recommendation:** ADA, AGA, AACE **First Identified:** NA **2021 Medicare Utilization:** 195,588

2023 Work RVU: 0.53
2023 NF PE RVU: 0.55
2023 Fac PE RVU: 0.42

RUC Recommendation: 0.53 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

97803 **Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes**

Global: XXX **Issue:** Medical Nutrition Therapy **Screen:** CMS Request - Medical Nutrition Therapy **Complete?** Yes

Most Recent RUC Meeting: April 2008 **Tab:** 53 **Specialty Developing Recommendation:** ADA, AGA, AACE **First Identified:** NA **2021 Medicare Utilization:** 189,626

2023 Work RVU: 0.45
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.35

RUC Recommendation: 0.45

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

97810 **Acupuncture, 1 or more needles; without electrical stimulation, initial 15 minutes of personal one-on-one contact with the patient**

Global: XXX **Issue:** Acupuncture **Screen:** Different Performing Specialty from Survey4 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AAFP, AAPM&R, ACA **First Identified:** September 2022 **2021 Medicare Utilization:** 52,629

2023 Work RVU: 0.60
2023 NF PE RVU: 0.50
2023 Fac PE RVU: 0.27

RUC Recommendation: Survey

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

97811 **Acupuncture, 1 or more needles; without electrical stimulation, each additional 15 minutes of personal one-on-one contact with the patient, with re-insertion of needle(s) (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Acupuncture **Screen:** Different Performing Specialty from Survey4 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AAFP, AAPM&R, ACA **First Identified:** September 2022 **2021 Medicare Utilization:** 61,711

2023 Work RVU: 0.50
2023 NF PE RVU: 0.32
2023 Fac PE RVU: 0.23

RUC Recommendation: Survey

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

Status Report: CMS Requests and Relativity Assessment Issues

97813 **Acupuncture, 1 or more needles; with electrical stimulation, initial 15 minutes of personal one-on-one contact with the patient**

Global: XXX **Issue:** Acupuncture **Screen:** Different Performing Specialty from Survey4 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AAFP, AAPM&R, ACA **First Identified:** September 2022 **2021 Medicare Utilization:** 46,894

2023 Work RVU: 0.65
2023 NF PE RVU: 0.66
2023 Fac PE RVU: 0.30

RUC Recommendation: Survey **Referred to CPT** **Result:**
Referred to CPT Asst ☐ **Published in CPT Asst:**

97814 **Acupuncture, 1 or more needles; with electrical stimulation, each additional 15 minutes of personal one-on-one contact with the patient, with re-insertion of needle(s) (list separately in addition to code for primary procedure)**

Global: XXX **Issue:** Acupuncture **Screen:** Different Performing Specialty from Survey4 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 24 **Specialty Developing Recommendation:** AAFP, AAPM&R, ACA **First Identified:** September 2022 **2021 Medicare Utilization:** 55,554

2023 Work RVU: 0.55
2023 NF PE RVU: 0.51
2023 Fac PE RVU: 0.25

RUC Recommendation: Survey **Referred to CPT** **Result:**
Referred to CPT Asst ☐ **Published in CPT Asst:**

98925 **Osteopathic manipulative treatment (omt); 1-2 body regions involved**

Global: 000 **Issue:** Osteopathic Manipulative Treatment **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 34 **Specialty Developing Recommendation:** AOA **First Identified:** February 2010 **2021 Medicare Utilization:** 43,697

2023 Work RVU: 0.46
2023 NF PE RVU: 0.43
2023 Fac PE RVU: 0.19

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

98926 **Osteopathic manipulative treatment (omt); 3-4 body regions involved**

Global: 000 **Issue:** Osteopathic Manipulative Treatment **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 34 **Specialty Developing Recommendation:** AOA

First Identified: October 2009 **2021 Medicare Utilization:** 84,547

2023 Work RVU: 0.71
2023 NF PE RVU: 0.58
2023 Fac PE RVU: 0.28

RUC Recommendation: 0.75

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

98927 **Osteopathic manipulative treatment (omt); 5-6 body regions involved**

Global: 000 **Issue:** Osteopathic Manipulative Treatment **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 34 **Specialty Developing Recommendation:** AOA

First Identified: October 2009 **2021 Medicare Utilization:** 81,029

2023 Work RVU: 0.96
2023 NF PE RVU: 0.72
2023 Fac PE RVU: 0.35

RUC Recommendation: 1.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

98928 **Osteopathic manipulative treatment (omt); 7-8 body regions involved**

Global: 000 **Issue:** Osteopathic Manipulative Treatment **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 34 **Specialty Developing Recommendation:** AOA

First Identified: February 2010 **2021 Medicare Utilization:** 84,113

2023 Work RVU: 1.21
2023 NF PE RVU: 0.84
2023 Fac PE RVU: 0.44

RUC Recommendation: 1.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

98929 **Osteopathic manipulative treatment (omt); 9-10 body regions involved**

Global: 000 **Issue:** Osteopathic Manipulative Treatment **Screen:** Harvard Valued - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: February 2011 **Tab:** 34 **Specialty Developing Recommendation:** AOA

First Identified: February 2010 **2021 Medicare Utilization:** 75,926

2023 Work RVU: 1.46
2023 NF PE RVU: 0.95
2023 Fac PE RVU: 0.52

RUC Recommendation: 1.50

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

98940 **Chiropractic manipulative treatment (cmt); spinal, 1-2 regions**

Global: 000 **Issue:** Chiropractic Manipulative Treatment **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 25 **Specialty Developing Recommendation:** ACA

First Identified: September 2011 **2021 Medicare Utilization:** 4,519,636

2023 Work RVU: 0.46
2023 NF PE RVU: 0.35
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.46

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

98941 **Chiropractic manipulative treatment (cmt); spinal, 3-4 regions**

Global: 000 **Issue:** Chiropractic Manipulative Treatment **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 25 **Specialty Developing Recommendation:** ACA

First Identified: September 2011 **2021 Medicare Utilization:** 12,786,088

2023 Work RVU: 0.71
2023 NF PE RVU: 0.46
2023 Fac PE RVU: 0.28

RUC Recommendation: 0.71

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

98942 **Chiropractic manipulative treatment (cmt); spinal, 5 regions**

Global: 000 **Issue:** Chiropractic Manipulative Treatment **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 25 **Specialty Developing Recommendation:** ACA

First Identified: September 2011 **2021 Medicare Utilization:** 939,532

2023 Work RVU: 0.96
2023 NF PE RVU: 0.56
2023 Fac PE RVU: 0.38

RUC Recommendation: 0.96

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

98943 **Chiropractic manipulative treatment (cmt); extraspinal, 1 or more regions**

Global: XXX **Issue:** Chiropractic Manipulative Treatment **Screen:** CMS High Expenditure Procedural Codes1 **Complete?** Yes

Most Recent RUC Meeting: October 2012 **Tab:** 25 **Specialty Developing Recommendation:** ACA

First Identified: September 2011 **2021 Medicare Utilization:**

2023 Work RVU: 0.46
2023 NF PE RVU: 0.28
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.46

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

Status Report: CMS Requests and Relativity Assessment Issues

99143 **Deleted from CPT** **Global:** **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

99144 **Deleted from CPT** **Global:** **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

99148 **Deleted from CPT** **Global:** **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99149 **Deleted from CPT**

Global: **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

99150 **Deleted from CPT**

Global: **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

99151 **Moderate sedation services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 minutes of intraservice time, patient younger than 5 years of age**

Global: XXX **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:** 4

2023 Work RVU: 0.50
2023 NF PE RVU: 1.26
2023 Fac PE RVU: 0.18

RUC Recommendation: 0.50 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99152 **Moderate sedation services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 minutes of intraservice time, patient age 5 years or older**

Global: XXX **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:** 1,665,477

2023 Work RVU: 0.25
2023 NF PE RVU: 1.21
2023 Fac PE RVU: 0.08

RUC Recommendation: 0.25 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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99155 **Moderate sedation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports; initial 15 minutes of intraservice time, patient younger than 5 years of age**

Global: XXX **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:** 4

2023 Work RVU: 1.90
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.34

RUC Recommendation: 1.90 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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Status Report: CMS Requests and Relativity Assessment Issues

99156 **Moderate sedation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports; initial 15 minutes of intraservice time, patient age 5 years or older**

Global: XXX **Issue:** Moderate Sedation Services **Screen:** Moderate Sedation Review **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 14 **Specialty Developing Recommendation:** AAP, AAOMS, ACC, CHEST, ACEP, ACG, ACR, AGA, ASGE, ASA, ATS, HRS, SIR, SVS, SCAI **First Identified:** January 2014 **2021 Medicare Utilization:** 7,805

2023 Work RVU: 1.65
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.41

RUC Recommendation: 1.84 **Referred to CPT** **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** Maintain

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99174 **Instrument-based ocular screening (eg, photoscreening, automated-refraction), bilateral; with remote analysis and report**

Global: XXX **Issue:** Instrument-Based Ocular Screening (PE Only) **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 09 **Specialty Developing Recommendation:** AAP, AAO **First Identified:** NA **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.17
2023 Fac PE RVU: NA

RUC Recommendation: PE Only **Referred to CPT** May 2014 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

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99177 **Instrument-based ocular screening (eg, photoscreening, automated-refraction), bilateral; with on-site analysis**

Global: XXX **Issue:** Instrument-Based Ocular Screening (PE Only) **Screen:** CMS Request - Practice Expense Review **Complete?** Yes

Most Recent RUC Meeting: September 2014 **Tab:** 09 **Specialty Developing Recommendation:** **First Identified:** May 2014 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.13
2023 Fac PE RVU: NA

RUC Recommendation: PE Only **Referred to CPT** May 2014 **Referred to CPT Asst** ☐ **Published in CPT Asst:** **Result:** PE Only

Status Report: CMS Requests and Relativity Assessment Issues

99183 **Physician or other qualified health care professional attendance and supervision of hyperbaric oxygen therapy, per session**

Global: XXX **Issue:** Hyperbaric Oxygen Under Pressure (PE Only) **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 16 **Specialty Developing Recommendation:** AAFP, UHMS **First Identified:** April 2013 **2021 Medicare Utilization:** 316,560

2023 Work RVU: 2.11
2023 NF PE RVU: 0.77
2023 Fac PE RVU: 0.77

RUC Recommendation: Refer to CPT. 2.11 **Referred to CPT** September 2023 **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

99281 **Emergency department visit for the evaluation and management of a patient that may not require the presence of a physician or other qualified health care professional**

Global: XXX **Issue:** ED Visits **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 29 **Specialty Developing Recommendation:** AAP, ACEP **First Identified:** June 2017 **2021 Medicare Utilization:** 53,497

2023 Work RVU: 0.25
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.06

RUC Recommendation: 0.48 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

99282 **Emergency department visit for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and straightforward medical decision making**

Global: XXX **Issue:** ED Visits **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 29 **Specialty Developing Recommendation:** AAP, ACEP **First Identified:** June 2017 **2021 Medicare Utilization:** 286,892

2023 Work RVU: 0.93
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.21

RUC Recommendation: 0.93 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99283 **Emergency department visit for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and low level of medical decision making**

Global: XXX **Issue:** ED Visits **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 29 **Specialty Developing Recommendation:** AAP, ACEP **First Identified:** June 2017 **2021 Medicare Utilization:** 1,962,566

2023 Work RVU: 1.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.35

RUC Recommendation: 1.42 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

99284 **Emergency department visit for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making**

Global: XXX **Issue:** ED Visits **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 29 **Specialty Developing Recommendation:** AAP, ACEP **First Identified:** June 2017 **2021 Medicare Utilization:** 4,022,787

2023 Work RVU: 2.74
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.57

RUC Recommendation: 2.60 **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

99285 **Emergency department visit for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and high level of medical decision making**

Global: XXX **Issue:** ED Visits **Screen:** CMS Request - Final Rule for 2018 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 29 **Specialty Developing Recommendation:** AAP, ACEP **First Identified:** June 2017 **2021 Medicare Utilization:** 9,200,375

2023 Work RVU: 4.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.79

RUC Recommendation: 3.80 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99358 **Prolonged evaluation and management service before and/or after direct patient care; first hour**

Global: XXX **Issue:** Prolonged Services - Without Direct Patient Contact **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 14 **Specialty Developing Recommendation:** AAFP, AAHPM, AAN, AAP, AATS, ACP, ACRh, AGS, ANA, ASCO, ATS, CHEST, NASS, STS **First Identified:** November 2019 **2021 Medicare Utilization:** 319,221

2023 Work RVU: 1.80
2023 NF PE RVU: 0.75
2023 Fac PE RVU: 0.71

RUC Recommendation: 1.80 **Referred to CPT** February 2021 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

99359 **Prolonged evaluation and management service before and/or after direct patient care; each additional 30 minutes (list separately in addition to code for prolonged service)**

Global: ZZZ **Issue:** Prolonged Services - Without Direct Patient Contact **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 14 **Specialty Developing Recommendation:** AAFP, AAHPM, AAN, AAP, AATS, ACP, ACRh, AGS, ANA, ASCO, ATS, CHEST, NASS, STS **First Identified:** November 2019 **2021 Medicare Utilization:** 12,035

2023 Work RVU: 0.75
2023 NF PE RVU: 0.45
2023 Fac PE RVU: 0.45

RUC Recommendation: 0.75 **Referred to CPT** February 2021 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

99363 **Anticoagulant management for an outpatient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; initial 90 days of therapy (must include a minimum of 8 INR measurements)**

Global: **Issue:** Home INR Monitoring **Screen:** High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 19 **Specialty Developing Recommendation:** **First Identified:** September 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99364 **Anticoagulant management for an outpatient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; each subsequent 90 days of therapy (must include a minimum of 3 INR measurements)**

Global: **Issue:** Home INR Monitoring **Screen:** High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 19 **Specialty Developing Recommendation:** **First Identified:** September 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

99375 **Supervision of a patient under care of home health agency (patient not present) in home, domiciliary or equivalent environment (eg, alzheimer's facility) requiring complex and multidisciplinary care modalities involving regular development and/or revision of care plans by that individual, review of subsequent reports of patient status, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 30 minutes or more**

Global: XXX **Issue:** Home Healthcare Supervision **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** April 2016 **2021 Medicare Utilization:**

2023 Work RVU: 1.73
2023 NF PE RVU: 1.16
2023 Fac PE RVU: 0.67

RUC Recommendation: RUC recommended to survey but no specialty society interest followed. **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99378 **Supervision of a hospice patient (patient not present) requiring complex and multidisciplinary care modalities involving regular development and/or revision of care plans by that individual, review of subsequent reports of patient status, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 30 minutes or more**

Global: XXX **Issue:** Home Healthcare Supervision **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** April 2016 **2021 Medicare Utilization:**

2023 Work RVU: 1.73
2023 NF PE RVU: 1.16
2023 Fac PE RVU: 0.67

RUC Recommendation: RUC recommended to survey but no specialty society interest followed.

Referred to CPT **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

99415 **Prolonged clinical staff service (the service beyond the highest time in the range of total time of the service) during an evaluation and management service in the office or outpatient setting, direct patient contact with physician supervision; first hour (list separately in addition to code for outpatient evaluation and management service)**

Global: ZZZ **Issue:** Prolonged Services - Clinical Staff Services (PE Only) **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 15 **Specialty Developing Recommendation:** AAHPM, AAP, CHEST, ACP, AGS, ANA, ASCO, ATS, SVS **First Identified:** **2021 Medicare Utilization:** 7,814

2023 Work RVU: 0.00
2023 NF PE RVU: 0.55
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs

Referred to CPT February 2022 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99416 **Prolonged clinical staff service (the service beyond the highest time in the range of total time of the service) during an evaluation and management service in the office or outpatient setting, direct patient contact with physician supervision; each additional 30 minutes (list separately in addition to code for prolonged service)**

Global: ZZZ **Issue:** Prolonged Services - Clinical Staff Services (PE Only) **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 15 **Specialty Developing Recommendation:** AAHPM, AAP, CHEST, ACP, AGS, ANA, ASCO, ATS, SVS **First Identified:** **2021 Medicare Utilization:** 5,743

2023 Work RVU: 0.00
2023 NF PE RVU: 0.25
2023 Fac PE RVU: NA

RUC Recommendation: New PE Inputs **Referred to CPT** February 2022 **Result:** PE Only
Referred to CPT Asst ☐ **Published in CPT Asst:**

99417 **Prolonged outpatient evaluation and management service(s) time with or without direct patient contact beyond the required time of the primary service when the primary service level has been selected using total time, each 15 minutes of total time (list separately in addition to the code of the outpatient evaluation and management service)**

Global: XXX **Issue:** Prolonged Services - on the date of an E/M **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 15 **Specialty Developing Recommendation:** AAFP, AAHPM, AAN, AAP, AATS, ACP, ACRh, AGS, ANA, ASCO, ATS, CHEST, NASS, STS **First Identified:** November 2021 **2021 Medicare Utilization:** 1

2023 Work RVU: 0.61
2023 NF PE RVU: 0.27
2023 Fac PE RVU: 0.24

RUC Recommendation: 0.61 **Referred to CPT** February 2021 **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99418 **Prolonged inpatient or observation evaluation and management service(s) time with or without direct patient contact beyond the required time of the primary service when the primary service level has been selected using total time, each 15 minutes of total time (list separately in addition to the code of the inpatient and observation evaluation and management service)**

Global: ZZZ **Issue:** Prolonged Services - on the date of an E/M **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 15 **Specialty Developing Recommendation:** AAHPM, AAN, AAP, AATS, ACP, ACRh, AGS, ANA, ASCO, ATS, CHEST, NASS, STS **First Identified:** February 2021 **2021 Medicare Utilization:**

2023 Work RVU: 0.81
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.31

RUC Recommendation: 0.81 **Referred to CPT** February 2021 **Result:** Increase
Referred to CPT Asst ☐ **Published in CPT Asst:**

99457 **Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month; first 20 minutes**

Global: XXX **Issue:** RAW **Screen:** Different Performing Specialty from Survey4 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAFP, ACC, ACP **First Identified:** April 2022 **2021 Medicare Utilization:** 929,385

2023 Work RVU: 0.61
2023 NF PE RVU: 0.79
2023 Fac PE RVU: 0.24

RUC Recommendation: Review action plan. **Referred to CPT** **Result:**
Referred to CPT Asst ☐ **Published in CPT Asst:**

99491 **Chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored; first 30 minutes provided personally by a physician or other qualified health care professional, per calendar month.**

Global: XXX **Issue:** Chronic Care Management Services **Screen:** New and Revised Service (Not part of RAW) **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 09 **Specialty Developing Recommendation:** AAFP, AAN, ACP, AGS **First Identified:** NA **2021 Medicare Utilization:** 163,536

2023 Work RVU: 1.50
2023 NF PE RVU: 0.91
2023 Fac PE RVU: 0.63

RUC Recommendation: 1.45. Refer to CPT Assistant **Referred to CPT** **Result:** Not Part of RAW
Referred to CPT Asst ☑ **Published in CPT Asst:** Oct 2018

Status Report: CMS Requests and Relativity Assessment Issues

99492 **Initial psychiatric collaborative care management, first 70 minutes in the first calendar month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional, with the following required elements: outreach to and engagement in treatment of a patient directed by the treating physician or other qualified health care professional, initial assessment of the patient, including administration of validated rating scales, with the development of an individualized treatment plan, review by the psychiatric consultant with modifications of the plan if recommended, entering patient in a registry and tracking patient follow-up and progress using the registry, with appropriate documentation, and participation in weekly caseload consultation with the psychiatric consultant, and provision of brief interventions using evidence-based techniques such as behavioral activation, motivational interviewing, and other focused treatment strategies.**

Global: XXX **Issue:** Psychiatric Collaborative Care Management Services **Screen:** Work Neutrality 2018 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AACAP, AAFP, AAP, ACP, APA (psychiatry) **First Identified:** October 2019 **2021 Medicare Utilization:** 10,740

2023 Work RVU: 1.88
2023 NF PE RVU: 2.45
2023 Fac PE RVU: 0.74

RUC Recommendation: CMS investigate and review for New Tech/New Svc in April 2023.

Referred to CPT

Result:

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99493 **Subsequent psychiatric collaborative care management, first 60 minutes in a subsequent month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional, with the following required elements: tracking patient follow-up and progress using the registry, with appropriate documentation, participation in weekly caseload consultation with the psychiatric consultant, ongoing collaboration with and coordination of the patient's mental health care with the treating physician or other qualified health care professional and any other treating mental health providers, additional review of progress and recommendations for changes in treatment, as indicated, including medications, based on recommendations provided by the psychiatric consultant, provision of brief interventions using evidence-based techniques such as behavioral activation, motivational interviewing, and other focused treatment strategies, monitoring of patient outcomes using validated rating scales, and relapse prevention planning with patients as they achieve remission of symptoms and/or other treatment goals and are prepared for discharge from active treatment.**

Global: XXX **Issue:** Psychiatric Collaborative Care Management Services **Screen:** Work Neutrality 2018 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AACAP, AAFP, AAP, ACP, APA (psychiatry) **First Identified:** October 2019 **2021 Medicare Utilization:** 33,086

2023 Work RVU: 2.05
2023 NF PE RVU: 2.04
2023 Fac PE RVU: 0.82

RUC Recommendation: CMS investigate and review for New Tech/New Svc in April 2023.

Referred to CPT

Result:

Referred to CPT Asst ☐ **Published in CPT Asst:**

99494 **Initial or subsequent psychiatric collaborative care management, each additional 30 minutes in a calendar month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Psychiatric Collaborative Care Management Services **Screen:** Work Neutrality 2018 **Complete?** No

Most Recent RUC Meeting: January 2020 **Tab:** 37 **Specialty Developing Recommendation:** AACAP, AAFP, AAP, ACP, APA (psychiatry) **First Identified:** October 2019 **2021 Medicare Utilization:** 20,625

2023 Work RVU: 0.82
2023 NF PE RVU: 0.83
2023 Fac PE RVU: 0.32

RUC Recommendation: CMS investigate and review for New Tech/New Svc in April 2023.

Referred to CPT

Result:

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

99495 **Transitional care management services with the following required elements: communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge at least moderate level of medical decision making during the service period face-to-face visit, within 14 calendar days of discharge**

Global: XXX **Issue:** Transitional Care Management Services **Screen:** Codes Increased by CMS Independent of RUC Review **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 09 **Specialty Developing Recommendation:** AGS, ANA **First Identified:** October 2021 **2021 Medicare Utilization:** 625,395

2023 Work RVU: 2.78
2023 NF PE RVU: 3.10
2023 Fac PE RVU: 1.17

RUC Recommendation: Withdrawn **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

99496 **Transitional care management services with the following required elements: communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge high level of medical decision making during the service period face-to-face visit, within 7 calendar days of discharge**

Global: XXX **Issue:** Transitional Care Management Services **Screen:** Codes Increased by CMS Independent of RUC Review **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 09 **Specialty Developing Recommendation:** AGS, ANA **First Identified:** October 2021 **2021 Medicare Utilization:** 613,997

2023 Work RVU: 3.79
2023 NF PE RVU: 4.17
2023 Fac PE RVU: 1.59

RUC Recommendation: Withdrawn **Referred to CPT** **Result:** Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

99497 **Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; first 30 minutes, face-to-face with the patient, family member(s), and/or surrogate**

Global: XXX **Issue:** Advance Care Planning **Screen:** CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: April 2022 **Tab:** 10 **Specialty Developing Recommendation:** AAHPM, CHEST, AGS, ANA, ATS **First Identified:** January 2014 **2021 Medicare Utilization:** 2,057,930

2023 Work RVU: 1.50
2023 NF PE RVU: 0.85
2023 Fac PE RVU: 0.63

RUC Recommendation: 1.50 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2014

Status Report: CMS Requests and Relativity Assessment Issues

99498 **Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; each additional 30 minutes (list separately in addition to code for primary procedure)**

Global: ZZZ **Issue:** Advance Care Planning **Screen:** CPT Assistant Analysis **Complete?** Yes

Most Recent RUC Meeting: April 2022 **Tab:** 10 **Specialty Developing Recommendation:** AAHPM, CHEST, AGS, ANA, ATS **First Identified:** January 2014 **2021 Medicare Utilization:** 62,186

2023 Work RVU: 1.40
2023 NF PE RVU: 0.62
2023 Fac PE RVU: 0.61

RUC Recommendation: 1.40 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☑ **Published in CPT Asst:** Dec 2014

9X036

Global: **Issue:** Pelvic Exam (PE Only) **Screen:** Gender Equity Payment **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 13 **Specialty Developing Recommendation:** AAFP, ACOG, ANA, AUA **First Identified:** April 2022 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: PE Inputs **Referred to CPT** September 2022 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

9X045

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

9X046

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

9X047

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan **Referred to CPT** **Result:**
Referred to CPT Asst ☐ **Published in CPT Asst:**

9X048

Global: **Issue:** Phrenic Nerve Stimulation System **Screen:** Low Survey Response **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 06 **Specialty Developing Recommendation:** **First Identified:** January 2023 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Review action Plan **Referred to CPT** **Result:**
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0008 **Administration of influenza virus vaccine**

Global: XXX **Issue:** Immunization Administration **Screen:** CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** July 2020 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0009 **Administration of pneumococcal vaccine**

Global: XXX **Issue:** Immunization Administration **Screen:** CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** July 2020 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0010 **Administration of hepatitis b vaccine** **Global:** XXX **Issue:** Immunization Administration **Screen:** CMS Request-Final Rule for 2021 **Complete?** Yes

Most Recent RUC Meeting: April 2021 **Tab:** 19 **Specialty Developing Recommendation:** AAFP, AAP, ACOG, ACP, ANA **First Identified:** July 2020 **2021 Medicare Utilization:**

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: 0.17 **Referred to CPT** **Result:** Maintain
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0101 **Cervical or vaginal cancer screening; pelvic and clinical breast examination** **Global:** XXX **Issue:** **Screen:** Low Value-High Volume / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 35 **Specialty Developing Recommendation:** ACOG **First Identified:** October 2010 **2021 Medicare Utilization:** 838,279

2023 Work RVU: 0.45
2023 NF PE RVU: 0.65
2023 Fac PE RVU: 0.30

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0102 **Prostate cancer screening; digital rectal examination** **Global:** XXX **Issue:** RAW **Screen:** High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 30 **Specialty Developing Recommendation:** **First Identified:** October 2016 **2021 Medicare Utilization:** 16,666

2023 Work RVU: 0.18
2023 NF PE RVU: 0.50
2023 Fac PE RVU: 0.07

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0104 **Colorectal cancer screening; flexible sigmoidoscopy** **Global:** 000 **Issue:** Flexible Sigmoidoscopy **Screen:** MPC List **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 09 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, SAGES, ACS **First Identified:** January 2014 **2021 Medicare Utilization:** 2,780

2023 Work RVU: 0.84
2023 NF PE RVU: 4.64
2023 Fac PE RVU: 0.70

RUC Recommendation: 0.84 **Referred to CPT** October 2013 **Result:** Decrease
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0105 **Colorectal cancer screening; colonoscopy on individual at high risk**

Global: 000 **Issue:** Colonoscopy **Screen:** MPC List / CMS-Other Utilization over 20,000 Part3 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 257,961

2023 Work RVU: 3.26
2023 NF PE RVU: 6.51
2023 Fac PE RVU: 1.74
Result: Decrease

RUC Recommendation: 3.36

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0108 **Diabetes outpatient self-management training services, individual, per 30 minutes**

Global: XXX **Issue:** Diabetes Management Training **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 41iv **Specialty Developing Recommendation:** AND **First Identified:** April 2016 **2021 Medicare Utilization:** 155,271

2023 Work RVU: 0.90
2023 NF PE RVU: 0.68
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 0.90

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

G0109 **Diabetes outpatient self-management training services, group session (2 or more), per 30 minutes**

Global: XXX **Issue:** Diabetes Management Training **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 41iv **Specialty Developing Recommendation:** AND **First Identified:** April 2016 **2021 Medicare Utilization:** 36,224

2023 Work RVU: 0.25
2023 NF PE RVU: 0.20
2023 Fac PE RVU: NA
Result: Maintain

RUC Recommendation: 0.25

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0121 **Colorectal cancer screening; colonoscopy on individual not meeting criteria for high risk**

Global: 000 **Issue:** Colonoscopy **Screen:** MPC List /CMS-Other Utilization over 20,000 Part3 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AGA, ASGE, ACG, ASCRS, ACS, SAGES **First Identified:** September 2011 **2021 Medicare Utilization:** 173,331

2023 Work RVU: 3.26
2023 NF PE RVU: 6.51
2023 Fac PE RVU: 1.74

RUC Recommendation: 3.36 **Referred to CPT** **Result:** Decrease

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0124 **Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, requiring interpretation by physician**

Global: XXX **Issue:** Cytopathology Cervical/Vaginal **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 26 **Specialty Developing Recommendation:** CAP **First Identified:** October 2017 **2021 Medicare Utilization:** 42,486

2023 Work RVU: 0.26
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.42 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0127 **Trimming of dystrophic nails, any number**

Global: 000 **Issue:** **Screen:** CMS-Other - Utilization over 500,000 **Complete?** Yes

Most Recent RUC Meeting: September 2011 **Tab:** 51 **Specialty Developing Recommendation:** APMA **First Identified:** April 2011 **2021 Medicare Utilization:** 1,094,310

2023 Work RVU: 0.17
2023 NF PE RVU: 0.52
2023 Fac PE RVU: 0.04

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0141 **Screening cytopathology smears, cervical or vaginal, performed by automated system, with manual rescreening, requiring interpretation by physician**

Global: XXX **Issue:** Cytopathology Cervical/Vaginal **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 26 **Specialty Developing Recommendation:** CAP

First Identified: October 2017

2021 Medicare Utilization: 2,482

2023 Work RVU: 0.26
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.42

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

G0166 **External counterpulsation, per treatment session**

Global: XXX **Issue:** External Counterpulsation **Screen:** CMS-Other - Utilization over 100,000 / CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 14 **Specialty Developing Recommendation:** ACC

First Identified: April 2016

2021 Medicare Utilization: 56,720

2023 Work RVU: 0.00
2023 NF PE RVU: 3.08
2023 Fac PE RVU: NA

RUC Recommendation: 0.00 (PE Only)

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: PE Only

G0168 **Wound closure utilizing tissue adhesive(s) only**

Global: 000 **Issue:** Wound Closure by Adhesive **Screen:** CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 34 **Specialty Developing Recommendation:** ACEP, AAFP

First Identified: July 2016

2021 Medicare Utilization: 34,363

2023 Work RVU: 0.31
2023 NF PE RVU: 3.35
2023 Fac PE RVU: 0.07

RUC Recommendation: 0.45

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

G0179 **Physician or allowed practitioner re-certification for medicare-covered home health services under a home health plan of care (patient not present), including contacts with home health agency and review of reports of patient status required by physicians and allowed practitioners to affirm the initial implementation of the plan of care**

Global: XXX **Issue:** Physician Recertification **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** October 2008 **2021 Medicare Utilization:** 709,965

2023 Work RVU: 0.45
2023 NF PE RVU: 0.74
2023 Fac PE RVU: NA

RUC Recommendation: RUC recommended to survey but no specialty society interest followed.

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0180 **Physician or allowed practitioner certification for medicare-covered home health services under a home health plan of care (patient not present), including contacts with home health agency and review of reports of patient status required by physicians and allowed practitioners to affirm the initial implementation of the plan of care**

Global: XXX **Issue:** Physician Recertification **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** October 2008 **2021 Medicare Utilization:** 1,039,293

2023 Work RVU: 0.67
2023 NF PE RVU: 0.84
2023 Fac PE RVU: NA

RUC Recommendation: RUC recommended to survey but no specialty society interest followed.

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0181 **Physician or allowed practitioner supervision of a patient receiving medicare-covered services provided by a participating home health agency (patient not present) requiring complex and multidisciplinary care modalities involving regular physician or allowed practitioner development and/or revision of care plans**

Global: XXX **Issue:** Home Healthcare Supervision **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** October 2008 **2021 Medicare Utilization:** 394,397

2023 Work RVU: 1.73
2023 NF PE RVU: 1.24
2023 Fac PE RVU: NA

RUC Recommendation: Recommend deletion after review of 99375 and 99378. No specialty society interest followed.

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0182 **Physician supervision of a patient under a medicare-approved hospice (patient not present) requiring complex and multidisciplinary care modalities involving regular physician development and/or revision of care plans, review of subsequent reports of patient status, review of laboratory and other studies, communication (including telephone calls) with other health care professionals involved in the patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month, 30 minutes or more**

Global: XXX **Issue:** Home Healthcare Supervision **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest

First Identified: April 2016

2021 Medicare Utilization: 32,082

2023 Work RVU: 1.73

2023 NF PE RVU: 1.26

2023 Fac PE RVU: NA

RUC Recommendation: Recommend deletion after review of 99375 and 99378. No specialty society interest followed.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

G0202 **Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (cad) when performed**

Global: **Issue:** Mammography **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR

First Identified: February 2008

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: CMS Deleted for 2018

Referred to CPT October 2015

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

G0204 **Diagnostic mammography, including computer-aided detection (cad) when performed; bilateral**

Global: **Issue:** Mammography **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR

First Identified: February 2008

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: CMS Deleted for 2018

Referred to CPT October 2015

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Deleted from CPT

Status Report: CMS Requests and Relativity Assessment Issues

G0206 **Therapeutic procedures to increase strength or endurance of respiratory muscles, face to face, one on one, each 15 minutes (includes monitoring)**

Global: **Issue:** Mammography **Screen:** CMS Fastest Growing / CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: January 2016 **Tab:** 20 **Specialty Developing Recommendation:** ACR

First Identified: February 2008

2021 Medicare Utilization:

2023 Work RVU:

2023 NF PE RVU:

2023 Fac PE RVU:

RUC Recommendation: CMS Deleted for 2018

Referred to CPT October 2015

Result: Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0237 **Therapeutic procedures to increase strength or endurance of respiratory muscles, face to face, one on one, each 15 minutes (includes monitoring)**

Global: XXX **Issue:** Respiratory Therapy **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACCP/ATS

First Identified: February 2008

2021 Medicare Utilization: 14,173

2023 Work RVU: 0.00

2023 NF PE RVU: 0.31

2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen - RUC articulated concerns regarding claims reporting to CMS

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0238 **Therapeutic procedures to improve respiratory function, other than described by g0237, one on one, face to face, per 15 minutes (includes monitoring)**

Global: XXX **Issue:** Respiratory Therapy **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: February 2009 **Tab:** 38 **Specialty Developing Recommendation:** ACCP/ATS

First Identified: February 2008

2021 Medicare Utilization: 28,603

2023 Work RVU: 0.00

2023 NF PE RVU: 0.30

2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen - RUC articulated concerns regarding claims reporting to CMS

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0248 **Demonstration, prior to initiation of home inr monitoring, for patient with either mechanical heart valve(s), chronic atrial fibrillation, or venous thromboembolism who meets medicare coverage criteria, under the direction of a physician; includes: face-to-face demonstration of use and care of the inr monitor, obtaining at least one blood sample, provision of instructions for reporting home inr test results, and documentation of patient's ability to perform testing and report results**

Global: XXX **Issue:** Home INR Monitoring **Screen:** High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 19 **Specialty Developing Recommendation:** ACC **First Identified:** January 2016 **2021 Medicare Utilization:** 20,817

2023 Work RVU: 0.00
2023 NF PE RVU: 2.87
2023 Fac PE RVU: NA

RUC Recommendation: Created Category I code, recommend CMS delete G code **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0249 **Provision of test materials and equipment for home inr monitoring of patient with either mechanical heart valve(s), chronic atrial fibrillation, or venous thromboembolism who meets medicare coverage criteria; includes: provision of materials for use in the home and reporting of test results to physician; testing not occurring more frequently than once a week; testing materials, billing units of service include 4 tests**

Global: XXX **Issue:** Home INR Monitoring **Screen:** CMS Fastest Growing / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 19 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:** 1,046,142

2023 Work RVU: 0.00
2023 NF PE RVU: 2.00
2023 Fac PE RVU: NA

RUC Recommendation: Created Category I code, recommend CMS delete G code **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0250 **Physician review, interpretation, and patient management of home inr testing for patient with either mechanical heart valve(s), chronic atrial fibrillation, or venous thromboembolism who meets medicare coverage criteria; testing not occurring more frequently than once a week; billing units of service include 4 tests**

Global: XXX **Issue:** Home INR Monitoring **Screen:** CMS Fastest Growing / High Volume Growth3 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 19 **Specialty Developing Recommendation:** ACC **First Identified:** February 2008 **2021 Medicare Utilization:** 146,366

2023 Work RVU: 0.18
2023 NF PE RVU: 0.07
2023 Fac PE RVU: NA

RUC Recommendation: Created Category I code, recommend CMS delete G code **Referred to CPT** September 2016 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0268 **Removal of impacted cerumen (one or both ears) by physician on same date of service as audiologic function testing**

Global: 000 **Issue:** Removal of Impacted Cerumen **Screen:** CMS Fastest Growing / CMS 000-Day Global Typically Reported with an E/M **Complete?** Yes

Most Recent RUC Meeting: April 2017 **Tab:** 35 **Specialty Developing Recommendation:** AAO-HNS **First Identified:** October 2008 **2021 Medicare Utilization:** 157,400

2023 Work RVU: 0.61
2023 NF PE RVU: 0.87
2023 Fac PE RVU: 0.29

RUC Recommendation: 0.61 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0270 **Medical nutrition therapy; reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition or treatment regimen (including additional hours needed for renal disease), individual, face to face with the patient, each 15 minutes**

Global: XXX **Issue:** Medical Nutrition Therapy **Screen:** CMS Fastest Growing **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** ADA **First Identified:** February 2008 **2021 Medicare Utilization:** 76,830

2023 Work RVU: 0.45
2023 NF PE RVU: 0.49
2023 Fac PE RVU: 0.35

RUC Recommendation: Maintain/Remove from screen **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0277 **Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval**

Global: XXX **Issue:** Hyperbaric Oxygen Under Pressure (PE Only) **Screen:** High Volume Growth8 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 16 **Specialty Developing Recommendation:** AAFP, UHMS **First Identified:** April 2022 **2021 Medicare Utilization:** 139,997

2023 Work RVU: 0.00
2023 NF PE RVU: 5.06
2023 Fac PE RVU: NA

RUC Recommendation: Refer to CPT. PE Inputs **Referred to CPT** September 2023 **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0279 **Diagnostic digital breast tomosynthesis, unilateral or bilateral (list separately in addition to 77065 or 77066)**

Global: ZZZ **Issue:** RAW **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 31 **Specialty Developing Recommendation:**

First Identified: October 2017

2021 Medicare Utilization: 899,600

2023 Work RVU: 0.60
2023 NF PE RVU: 0.94
2023 Fac PE RVU: NA

RUC Recommendation: Recommend CMS delete

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

G0283 **Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care**

Global: XXX **Issue:** Physical Medicine and Rehabilitation Services - Electrical Stimulation Other than Wound **Screen:** Low Value-High Volume / CMS-Other - Utilization over 250,000 / CMS High Expenditure Procedural Codes2 **Complete?** Yes

Most Recent RUC Meeting: January 2017 **Tab:** 29 **Specialty Developing Recommendation:** APTA

First Identified: October 2010

2021 Medicare Utilization: 5,967,264

2023 Work RVU: 0.18
2023 NF PE RVU: 0.17
2023 Fac PE RVU: NA

RUC Recommendation: 0.18

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

G0296 **Counseling visit to discuss need for lung cancer screening using low dose ct scan (ldct) (service is for eligibility determination and shared decision making)**

Global: XXX **Issue:** Counseling Visit for Lung Cancer **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: January 2022 **Tab:** 20 **Specialty Developing Recommendation:**

First Identified: January 2019

2021 Medicare Utilization: 48,793

2023 Work RVU: 0.52
2023 NF PE RVU: 0.28
2023 Fac PE RVU: 0.20

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

G0297 **Low dose ct scan (ldct) for lung cancer screening** **Global:** **Issue:** Screening CT of Thorax **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 07 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: CMS Deleted for 2021. Recommend CMS delete. Cat I code created.

Referred to CPT May 2019 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0364 **Bone marrow aspiration performed with bone marrow biopsy through the same incision on the same date of service** **Global:** **Issue:** RAW **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 31 **Specialty Developing Recommendation:** **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0365 **Vessel mapping of vessels for hemodialysis access (services for preoperative vessel mapping prior to creation of hemodialysis access using an autogenous hemodialysis conduit, including arterial inflow and venous outflow)** **Global:** **Issue:** Duplex Scan Arterial Inflow-Venous Outflow Upper Extremity **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 17 **Specialty Developing Recommendation:** ACR, SIR, SVS **First Identified:** October 2017 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT

Referred to CPT September 2018 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0389 **Ultrasound b-scan and/or real time with image documentation; for abdominal aortic aneurysm (aaa) screening**

Global: **Issue:** Abdominal Aorta Ultrasound Screening **Screen:** Final Rule for 2015 / High Volume Growth4 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 12 **Specialty Developing Recommendation:** ACC, ACP, ACR, SCAI, SVS **First Identified:** July 2014 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: CPT Assistant article published **Referred to CPT** May 2015 **Result:** Deleted from CPT

Referred to CPT Asst ☑ **Published in CPT Asst:** Jan 2017

G0396 **Alcohol and/or substance (other than tobacco) misuse structured assessment (e.g., audit, dast), and brief intervention 15 to 30 minutes**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 30,000 **Complete?** No

Most Recent RUC Meeting: January 2018 **Tab:** 31 **Specialty Developing Recommendation:** AAFP, ASA, ASAM **First Identified:** October 2017 **2021 Medicare Utilization:** 58,365

2023 Work RVU: 0.65
2023 NF PE RVU: 0.34
2023 Fac PE RVU: 0.24

RUC Recommendation: Refer to CPT **Referred to CPT** Time Uncertain **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0399 **Home sleep test (hst) with type iii portable monitor, unattended; minimum of 4 channels: 2 respiratory movement/airflow, 1 ecg/heart rate and 1 oxygen saturation**

Global: XXX **Issue:** RAW **Screen:** High Volume Growth5 / Contractor Priced High Volume2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AASM, ATS, CHEST **First Identified:** October 2018 **2021 Medicare Utilization:** 106,535

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: NA

RUC Recommendation: Requested CMS delete **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0402 **Initial preventive physical examination; face-to-face visit, services limited to new beneficiary during the first 12 months of medicare enrollment**

Global: XXX **Issue:** Initial Preventive Exam **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 35 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** April 2016 **2021 Medicare Utilization:** 501,570

2023 Work RVU: 2.60
2023 NF PE RVU: 2.14
2023 Fac PE RVU: 1.10

RUC Recommendation: RUC recommended to survey but no specialty society interest followed.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

G0403 **Electrocardiogram, routine ecg with 12 leads; performed as a screening for the initial preventive physical examination with interpretation and report**

Global: XXX **Issue:** EKG for Initial Preventive Exam **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 35 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** April 2016 **2021 Medicare Utilization:** 111,713

2023 Work RVU: 0.17
2023 NF PE RVU: 0.24
2023 Fac PE RVU: NA

RUC Recommendation: RUC recommended to survey but no specialty society interest followed.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

G0407 **Follow-up inpatient consultation, intermediate, physicians typically spend 25 minutes communicating with the patient via telehealth**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** No

Most Recent RUC Meeting: April 2021 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ANA, APA (psychiatry) **First Identified:** October 2020 **2021 Medicare Utilization:** 36,642

2023 Work RVU: 1.39
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.63

RUC Recommendation: Review in April 2025 or April 2029

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

Status Report: CMS Requests and Relativity Assessment Issues

G0408 **Follow-up inpatient consultation, complex, physicians typically spend 35 minutes communicating with the patient via telehealth**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** No

Most Recent RUC Meeting: April 2021 **Tab:** 24 **Specialty Developing Recommendation:** AAN, ANA, APA (psychiatry) **First Identified:** October 2020 **2021 Medicare Utilization:** 25,924

2023 Work RVU: 2.00
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.94

RUC Recommendation: Review in April 2025 or April 2029

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

G0416 **Surgical pathology, gross and microscopic examinations, for prostate needle biopsy, any method**

Global: XXX **Issue:** Prostate Biopsy - Pathology **Screen:** Final Rule for 2015 **Complete?** Yes

Most Recent RUC Meeting: October 2015 **Tab:** 16 **Specialty Developing Recommendation:** ASC, CAP **First Identified:** July 2014 **2021 Medicare Utilization:** 126,159

2023 Work RVU: 3.60
2023 NF PE RVU: 7.02
2023 Fac PE RVU: NA

RUC Recommendation: 4.00

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Increase

G0422 **Intensive cardiac rehabilitation; with or without continuous ecg monitoring with exercise, per session**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** October 2020 **2021 Medicare Utilization:** 31,047

2023 Work RVU: 1.81
2023 NF PE RVU: 1.67
2023 Fac PE RVU: 1.67

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

G0423 **Intensive cardiac rehabilitation; with or without continuous ecg monitoring; without exercise, per session**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:** **First Identified:** October 2020 **2021 Medicare Utilization:** 40,257

2023 Work RVU: 1.81
2023 NF PE RVU: 1.67
2023 Fac PE RVU: 1.87

RUC Recommendation: Maintain

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

Status Report: CMS Requests and Relativity Assessment Issues

G0425 **Telehealth consultation, emergency department or initial inpatient, typically 30 minutes communicating with the patient via telehealth**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000-Part3 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: April 2022 **2021 Medicare Utilization:** 29,684

2023 Work RVU: 1.92
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.65
Result:

RUC Recommendation: No recommendation. Review in April 2025 or April 2029.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0426 **Telehealth consultation, emergency department or initial inpatient, typically 50 minutes communicating with the patient via telehealth**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000-Part3 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: September 2022 **2021 Medicare Utilization:** 27,990

2023 Work RVU: 2.61
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.03
Result:

RUC Recommendation: No recommendation. Review in April 2025 or April 2029.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0427 **Telehealth consultation, emergency department or initial inpatient, typically 70 minutes or more communicating with the patient via telehealth**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000-Part3 **Complete?** No

Most Recent RUC Meeting: January 2023 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: September 2022 **2021 Medicare Utilization:** 18,231

2023 Work RVU: 3.86
2023 NF PE RVU: NA
2023 Fac PE RVU: 1.37
Result:

RUC Recommendation: No recommendation. Review in April 2025 or April 2029.

Referred to CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0436 **Smoking and tobacco cessation counseling visit for the asymptomatic patient; intermediate, greater than 3 minutes, up to 10 minutes**

Global: **Issue:** RAW **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 35 **Specialty Developing Recommendation:** **First Identified:** April 2016 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: Deleted from CPT **Referred to CPT** **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0438 **Annual wellness visit; includes a personalized prevention plan of service (pps), initial visit**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** April 2013 **2021 Medicare Utilization:** 818,777

2023 Work RVU: 2.60
2023 NF PE RVU: 2.13
2023 Fac PE RVU: NA

RUC Recommendation: RUC recommended to survey but no specialty society interest followed. **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0439 **Annual wellness visit, includes a personalized prevention plan of service (pps), subsequent visit**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 250,000 **Complete?** Yes

Most Recent RUC Meeting: April 2016 **Tab:** 47 **Specialty Developing Recommendation:** No Interest **First Identified:** April 2013 **2021 Medicare Utilization:** 8,977,883

2023 Work RVU: 1.92
2023 NF PE RVU: 1.80
2023 Fac PE RVU: NA

RUC Recommendation: RUC recommended to survey but no specialty society interest followed. **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0442 **Annual alcohol misuse screening, 5 to 15 minutes**

Global: XXX **Issue:** Annual Alcohol Screening **Screen:** CMS-Other - Utilization over 100,000 / High Volume Growth8 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** April 2016 **2021 Medicare Utilization:** 815,675

2023 Work RVU: 0.18
2023 NF PE RVU: 0.36
2023 Fac PE RVU: 0.08

RUC Recommendation: Survey April 2023.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

G0444 **Annual depression screening, 5 to 15 minutes**

Global: XXX **Issue:** Annual Depression Screening **Screen:** CMS-Other - Utilization over 100,000 /High Volume Gowth8 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** April 2016 **2021 Medicare Utilization:** 2,142,759

2023 Work RVU: 0.18
2023 NF PE RVU: 0.36
2023 Fac PE RVU: 0.08

RUC Recommendation: Survey April 2023.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

G0446 **Annual, face-to-face intensive behavioral therapy for cardiovascular disease, individual, 15 minutes**

Global: XXX **Issue:** Intensive Behavioral Therapy for Cardiovascular Disease **Screen:** CMS-Other - Utilization over 30,000 / High Volume Growth8 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** October 2017 **2021 Medicare Utilization:** 290,059

2023 Work RVU: 0.45
2023 NF PE RVU: 0.28
2023 Fac PE RVU: 0.19

RUC Recommendation: Survey April 2023.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Maintain

Status Report: CMS Requests and Relativity Assessment Issues

G0447 **Face-to-face behavioral counseling for obesity, 15 minutes**

Global: XXX **Issue:** Behavioral Counseling for Obesity **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 35 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** April 2016 **2021 Medicare Utilization:** 289,558

2023 Work RVU: 0.45
2023 NF PE RVU: 0.27
2023 Fac PE RVU: 0.19

RUC Recommendation: RUC recommended to survey but no specialty society interest followed.

Referred to CPT

Result: Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0452 **Molecular pathology procedure; physician interpretation and report**

Global: XXX **Issue:** Molecular Pathology Interpretation **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 13 **Specialty Developing Recommendation:** **First Identified:** October 2018 **2021 Medicare Utilization:** 166,431

2023 Work RVU: 0.93
2023 NF PE RVU: 0.51
2023 Fac PE RVU: NA

RUC Recommendation: 0.93

Referred to CPT

Result: Increase

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0453 **Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby), per patient, (attention directed exclusively to one patient) each 15 minutes (list in addition to primary procedure)**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 100,000 **Complete?** Yes

Most Recent RUC Meeting: October 2016 **Tab:** 35 **Specialty Developing Recommendation:** **First Identified:** April 2016 **2021 Medicare Utilization:** 373,272

2023 Work RVU: 0.60
2023 NF PE RVU: NA
2023 Fac PE RVU: 0.30

RUC Recommendation: Remove from screen

Referred to CPT

Result: Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0456 **Negative pressure wound therapy, (e.g. vacuum assisted drainage collection) using a mechanically-powered device, not durable medical equipment, including provision of cartridge and dressing(s), topical application(s), wound assessment, and instructions for ongoing care, per session; total wounds(s) surface area less than or equal to 50 square centimeters**

Global: **Issue:** Negative Pressure Wound Therapy **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: November 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: RUC recommended to survey but no specialty society interest followed. CMS deleted.

Referred to CPT May 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0457 **Negative pressure wound therapy, (e.g. vacuum assisted drainage collection) using a mechanically-powered device, not durable medical equipment, including provision of cartridge and dressing(s), topical application(s), wound assessment, and instructions for ongoing care, per session; total wounds(s) surface area greater than 50 square centimeters**

Global: **Issue:** Negative Pressure Wound Therapy **Screen:** CMS Request - Final Rule for 2013 **Complete?** Yes

Most Recent RUC Meeting: January 2014 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: November 2012 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: RUC recommended to survey but no specialty society interest followed. CMS deleted.

Referred to CPT May 2013 **Result:** Deleted from CPT

Referred to CPT Asst ☐ **Published in CPT Asst:**

G0500 **Moderate sedation services provided by the same physician or other qualified health care professional performing a gastrointestinal endoscopic service that sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 minutes of intra-service time; patient age 5 years or older (additional time may be reported with 99153, as appropriate)**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: October 2020 **2021 Medicare Utilization:** 325,088

2023 Work RVU: 0.10
2023 NF PE RVU: 1.55
2023 Fac PE RVU: 0.04

RUC Recommendation: Maintain

Referred to CPT **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G0506 **Comprehensive assessment of and care planning for patients requiring chronic care management services (list separately in addition to primary monthly care management service)**

Global: ZZZ **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** Yes

Most Recent RUC Meeting: October 2021 **Tab:** 20 **Specialty Developing Recommendation:** **First Identified:** October 2020 **2021 Medicare Utilization:** 94,929

2023 Work RVU: 0.87
2023 NF PE RVU: 0.90
2023 Fac PE RVU: 0.37

RUC Recommendation: Request CMS Delete **Referred to CPT** **Result:** Request CMS Delete

Referred to CPT Asst ☐ **Published in CPT Asst:**

G2010 **Remote evaluation of recorded video and/or images submitted by an established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000-Part3 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AADA, AAFP, ACP **First Identified:** April 2022 **2021 Medicare Utilization:** 7,599

2023 Work RVU: 0.18
2023 NF PE RVU: 0.17
2023 Fac PE RVU: 0.08

RUC Recommendation: Refer to CPT to review by the CPT/RUC Telemedicine Office Visits Workgroup. **Referred to CPT** February 2023 **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

G2012 **Brief communication technology-based service, e.g. virtual check-in, by a physician or other qualified health care professional who can report evaluation and management services, provided to an established patient, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000-Part3 **Complete?** No

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** AAFP, ACP, ANA **First Identified:** April 2022 **2021 Medicare Utilization:** 198,513

2023 Work RVU: 0.25
2023 NF PE RVU: 0.15
2023 Fac PE RVU: 0.10

RUC Recommendation: Refer to CPT to review by the CPT/RUC Telemedicine Office Visits Workgroup. **Referred to CPT** February 2023 **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G2066 **Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results**

Global: XXX **Issue:** Remote Interrogation Device Evaluation - Cardiovascular (PE Only) **Screen:** Contractor Priced High Volume2 **Complete?** Yes

Most Recent RUC Meeting: January 2023 **Tab:** 20 **Specialty Developing Recommendation:** ACC, HRS **First Identified:** April 2022 **2021 Medicare Utilization:** 1,090,278

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: PE Inputs **Referred to CPT** **Result:** PE Only

Referred to CPT Asst ☐ **Published in CPT Asst:**

G6001 **Ultrasonic guidance for placement of radiation therapy fields**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** No

Most Recent RUC Meeting: April 2022 **Tab:** 16 **Specialty Developing Recommendation:** AADA, ASTRO **First Identified:** October 2020 **2021 Medicare Utilization:** 151,321

2023 Work RVU: 0.58
2023 NF PE RVU: 4.78
2023 Fac PE RVU: NA

RUC Recommendation: Review in 2 years **Referred to CPT** **Result:**

Referred to CPT Asst ☐ **Published in CPT Asst:**

G6002 **Stereoscopic x-ray guidance for localization of target volume for the delivery of radiation therapy**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: January 2018 **Tab:** 31 **Specialty Developing Recommendation:** **First Identified:** October 2017 **2021 Medicare Utilization:** 968,239

2023 Work RVU: 0.39
2023 NF PE RVU: 1.81
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen **Referred to CPT** **Result:** Remove from Screen

Referred to CPT Asst ☐ **Published in CPT Asst:**

Status Report: CMS Requests and Relativity Assessment Issues

G6012 **Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10 mev**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** No

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: October 2020 **2021 Medicare Utilization:** 306,208

2023 Work RVU: 0.00
2023 NF PE RVU: 7.01
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

G6013 **Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19 mev**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** No

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: October 2020 **2021 Medicare Utilization:** 162,847

2023 Work RVU: 0.00
2023 NF PE RVU: 7.03
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

G6014 **Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20 mev or greater**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 20,000 Part1 **Complete?** Yes

Most Recent RUC Meeting: October 2019 **Tab:** 17 **Specialty Developing Recommendation:**

First Identified: January 2019 **2021 Medicare Utilization:** 11,600

2023 Work RVU: 0.00
2023 NF PE RVU: 6.99
2023 Fac PE RVU: NA

RUC Recommendation: Remove from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from screen

Status Report: CMS Requests and Relativity Assessment Issues

G6015 **Intensity modulated treatment delivery, single or multiple fields/arcs,via narrow spatially and temporally modulated beams, binary, dynamic mlc, per treatment session**

Global: XXX **Issue:** **Screen:** CMS-Other - Utilization over 20,000 Part2 **Complete?** No

Most Recent RUC Meeting: January 2021 **Tab:** 29 **Specialty Developing Recommendation:**

First Identified: October 2020 **2021 Medicare Utilization:** 1,129,279

2023 Work RVU: 0.00
2023 NF PE RVU: 10.73
2023 Fac PE RVU: NA

RUC Recommendation: Review action plan

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result:

G6017 **Intra-fraction localization and tracking of target or patient motion during delivery of radiation therapy (eg,3d positional tracking, gating, 3d surface tracking), each fraction of treatment**

Global: YYY **Issue:** RAW **Screen:** Contractor Priced High Volume2 **Complete?** Yes

Most Recent RUC Meeting: September 2022 **Tab:** 13 **Specialty Developing Recommendation:** ASTRO

First Identified: April 2022 **2021 Medicare Utilization:** 90,376

2023 Work RVU: 0.00
2023 NF PE RVU: 0.00
2023 Fac PE RVU: 0.00

RUC Recommendation: Removed from screen

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: Remove from Screen

GPCX1 **Visit complexity inherent to evaluation and management associated with medical care services that serve as the continuing focal point for all needed health care services and/or with medical care services that are part of ongoing care related to a patient's single, serious, or complex chronic condition. (Add-on code, list separately in addition to office/ outpatient evaluation and management visit, new or established)**

Global: **Issue:** Visit Complexity E/M Add-On **Screen:** CMS Request - Final Rule for 2020 **Complete?** Yes

Most Recent RUC Meeting: January 2020 **Tab:** 34 **Specialty Developing Recommendation:**

First Identified: November 2019 **2021 Medicare Utilization:**

2023 Work RVU:
2023 NF PE RVU:
2023 Fac PE RVU:

RUC Recommendation: No recommendation on physician work, time or PE for this code. CMS estimates of utilization for code GPC1X should be more conservative.

Referred to CPT
Referred to CPT Asst ☐ **Published in CPT Asst:**

Result: N/A

Status Report: CMS Requests and Relativity Assessment Issues

P3001 **Screening papanicolaou smear, cervical or vaginal, up to three smears, requiring interpretation by physician**

Global: XXX **Issue:** Cytopathology Cervical/Vaginal **Screen:** CMS-Other - Utilization over 30,000 **Complete?** Yes

Most Recent RUC Meeting: April 2018 **Tab:** 26 **Specialty Developing Recommendation:** CAP **First Identified:** October 2017 **2021 Medicare Utilization:** 1,217

2023 Work RVU: 0.26
2023 NF PE RVU: 0.41
2023 Fac PE RVU: 0.41

RUC Recommendation: 0.42 **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

Q0091 **Screening papanicolaou smear; obtaining, preparing and conveyance of cervical or vaginal smear to laboratory**

Global: XXX **Issue:** RAW **Screen:** CMS-Other - Utilization over 30,000-Part2 **Complete?** Yes

Most Recent RUC Meeting: January 2019 **Tab:** 37 **Specialty Developing Recommendation:** No Specialty Society Interest **First Identified:** October 2018 **2021 Medicare Utilization:** 463,178

2023 Work RVU: 0.37
2023 NF PE RVU: 0.90
2023 Fac PE RVU: 0.15

RUC Recommendation: RUC recommended to survey but no specialty society interest followed. **Referred to CPT** **Result:** Maintain

Referred to CPT Asst ☐ **Published in CPT Asst:**

CPT	2023 Long Descriptor	Issue	Most Recent RUC Meeting Date	Tab	Next RUC Review	RUC or RAW to Review	Specialty Society to Survey	RUC Recommendation	Screen	First Identified - RUC Meeting Date	Global	2023 Base Unit/Work RVU	2023 Fac PE RVU	2023 Non-Fac PE RVU	2023 PLI RVU	2021 Medicare Utilization	Referred to CPT Asst	CPT Asst Status	CPT Asst Complete	Referred to CPT	Refer to CPT Background	CPT Meeting	CPT Tab	CPT Ed Panel Status Complete	Complete	Result
00534	Anesthesia for transver	RAW	January 2019	37			ASA	Remove from screen	High Volume Growth5	October 2018	XXX	7	0.00	0.00	0.00	29379	FALSE			FALSE					TRUE	Remove from Screen
00537	Anesthesia for cardiac c	Anesthesia for Cardiac Electrop	October 2020	13			ASA	12	High Volume Growth4	October 2016	XXX	10	0.00	0.00	0.00	97493	FALSE			FALSE					TRUE	Increase
00560	Anesthesia for procedu	RAW	January 2019	37			ASA	Remove from screen	High Volume Growth5	October 2018	XXX	15	0.00	0.00	0.00	60260	FALSE			FALSE					TRUE	Remove from Screen
00731	Anesthesia for upper g	Anesthesia for Intestinal Endos	January 2017	04			ASA	5 base units	CMS Request - Final Rule	September 2016	XXX	5	0.00	0.00	0.00	1082677	FALSE			FALSE		September	12	yes	TRUE	Maintain
00732	Anesthesia for upper g	Anesthesia for Intestinal Endos	January 2017	04			ASA	6 base units	CMS Request - Final Rule	September 2016	XXX	6	0.00	0.00	0.00	95856	FALSE			FALSE		September	12	yes	TRUE	Increase
00740	Anesthesia for upper g	Anesthesia for Intestinal Endos	January 2017	04			ASA	Deleted from CPT	CMS Request - Final Rule	July 2015							FALSE			TRUE	In April 2016, an A	September	12	yes	TRUE	Deleted from CPT
00810	Anesthesia for lower in	Anesthesia for Intestinal Endos	January 2017	04			ASA	Deleted from CPT	CMS Request - Final Rule	July 2015							FALSE			TRUE	In April 2016, an A	September	12	yes	TRUE	Deleted from CPT
00811	Anesthesia for lower in	Anesthesia for Intestinal Endos	April 2017	04			ASA	4 base units	CMS Request - Final Rule	September 2016	XXX	4	0.00	0.00	0.00	1059171	FALSE			FALSE		September	12	yes	TRUE	Decrease
00812	Anesthesia for lower in	Anesthesia for Intestinal Endos	April 2017	04			ASA	3 base units	CMS Request - Final Rule	September 2016	XXX	3	0.00	0.00	0.00	500444	FALSE			FALSE		September	12	yes	TRUE	Decrease
00813	Anesthesia for combine	Anesthesia for Intestinal Endos	January 2017	04			ASA	5 base units	CMS Request - Final Rule	September 2016	XXX	5	0.00	0.00	0.00	507450	FALSE			FALSE		September	12	yes	TRUE	Maintain
00918	Anesthesia for transure	Anesthesia for transurethral pr	January 2021	29				Maintain	High Volume Growth7	October 2020	XXX	5	0.00	0.00	0.00	100511	FALSE			FALSE					TRUE	Remove from Screen
01916	Anesthesia for diagnostic	arteriography/venography	October 2020	23	Septembe	RAW		Review action plan	High Volume Growth6	October 2019	XXX	5	0.00	0.00	0.00	44007	FALSE			FALSE					FALSE	
01930	Anesthesia for therape	Anesthesia for Interventional R	February 2008	S			ASA	Remove from screen	High Volume Growth1	February 2008	XXX	5	0.00	0.00	0.00	14318	FALSE			FALSE					TRUE	Remove from Screen
01935	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	Deleted from CPT	High Volume Growth4	January 2021	XXX					21981	FALSE			FALSE		October 2(	15	complete	TRUE	Deleted from CPT
01936	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	Deleted from CPT	High Volume Growth4	October 2016	XXX					265058	FALSE			TRUE	This service was i	October 2(	15	complete	TRUE	Deleted from CPT
01937	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	4	High Volume Growth4	January 2021	XXX	4	0.00	0.00	0.00		FALSE			FALSE		October 2(	15	complete	TRUE	Decrease
01938	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	4	High Volume Growth4	January 2021	XXX	4	0.00	0.00	0.00		FALSE			FALSE		October 2(	15	complete	TRUE	Decrease
01939	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	4	High Volume Growth4	January 2021	XXX	4	0.00	0.00	0.00		FALSE			FALSE		October 2(	15	complete	TRUE	Decrease
01940	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	4	High Volume Growth4	January 2021	XXX	4	0.00	0.00	0.00		FALSE			FALSE		October 2(	15	complete	TRUE	Decrease
01941	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	6	High Volume Growth4	January 2021	XXX	5	0.00	0.00	0.00		FALSE			FALSE		October 2(	15	complete	TRUE	Increase
01942	Anesthesia for percutar	Anesthesia Services for Image-(	January 2021	04			ASA	6	High Volume Growth4	January 2021	XXX	5	0.00	0.00	0.00		FALSE			FALSE		October 2(	15	complete	TRUE	Increase
10004	Fine needle aspiration b	Fine Needle Aspiration	October 2017	04				0.80	CMS High Expenditure Pr	June 2017	ZZZ	0.8	0.35	0.61	0.11	287	FALSE			FALSE					TRUE	Decrease
10005	Fine needle aspiration b	Fine Needle Aspiration	January 2020	21				1.63	CMS High Expenditure Pr	June 2017	XXX	1.46	0.55	2.44	0.17	128051	FALSE			FALSE					TRUE	Decrease
10006	Fine needle aspiration b	Fine Needle Aspiration	October 2017	04				1.00	CMS High Expenditure Pr	June 2017	ZZZ	1	0.38	0.69	0.10	30901	FALSE			FALSE					TRUE	Decrease
10007	Fine needle aspiration b	Fine Needle Aspiration	October 2017	04				1.81	CMS High Expenditure Pr	June 2017	XXX	1.81	0.62	6.90	0.19	429	FALSE			FALSE					TRUE	Decrease
10008	Fine needle aspiration b	Fine Needle Aspiration	October 2017	04				1.18	CMS High Expenditure Pr	June 2017	ZZZ	1.18	0.20	2.96	0.17	29	FALSE			FALSE					TRUE	Decrease
10009	Fine needle aspiration b	Fine Needle Aspiration	October 2017	04				2.43	CMS High Expenditure Pr	June 2017	XXX	2.26	0.74	10.59	0.22	2883	FALSE			FALSE					TRUE	Decrease
10010	Fine needle aspiration b	Fine Needle Aspiration	October 2017	04				1.65	CMS High Expenditure Pr	June 2017	ZZZ	1.65	0.28	5.32	0.19	53	FALSE			FALSE					TRUE	Decrease
10011	Fine needle aspiration b	Fine Needle Aspiration	January 2018	04				Contractor Price	CMS High Expenditure Pr	June 2017	XXX	0	0.00	0.00	0.00	64	FALSE			FALSE					TRUE	Contractor Price
10012	Fine needle aspiration b	Fine Needle Aspiration	January 2018	04				Contractor Price	CMS High Expenditure Pr	June 2017	ZZZ	0	0.00	0.00	0.00	34	FALSE			FALSE					TRUE	Contractor Price
10021	Fine needle aspiration b	Fine Needle Aspiration	January 2020	21			AACE, ASBS, AS(	1.20	CMS Request - Final Rule	July 2015	XXX	1.03	0.46	1.88	0.14	12848	FALSE			TRUE	The specialty soci	June 2017	06	yes	TRUE	Decrease
10022	Fine needle aspiration;	Fine Needle Aspiration	October 2017	04			AACE, ASBS, AS(	Deleted from CPT	CMS Fastest Growing / Cl	October 2008							FALSE			TRUE	The specialty soci	June 2017	06	yes	TRUE	Deleted from CPT
10030	Image-guided fluid colle	Drainage of Abscess	January 2013	04			ACR, SIR	3.00	Codes Reported Together	January 2012	000	2.75	0.94	16.46	0.29	7984	FALSE			FALSE		October 2(	06	Complete	TRUE	Decrease
10040	Acne surgery (eg, marsi	Acne Surgery	April 2016	13			AAD	0.91	Harvard Valued - Utilizatic	October 2015	010	0.91	0.53	2.48	0.10	41148	FALSE			FALSE					TRUE	Decrease
10060	Incision and drainage o	Incision and Drainage of Absces	October 2010	07			APMA	1.50	Harvard Valued - Utilizatic	February 2010	010	1.22	1.80	2.42	0.12	297751	FALSE			FALSE					TRUE	Increase
10061	Incision and drainage o	Incision and Drainage of Absces	January 2020	37			APMA	Maintain. 2.45	Harvard Valued - Utilizatic	October 2009	010	2.45	2.72	3.62	0.30	105170	FALSE			FALSE					TRUE	Maintain
10120	Incision and removal of	foreign body, subcutaneous tis	September 2011	12			APMA, AAFP	1.25	Harvard Valued - Utilizatic	April 2011	010	1.22	1.75	3.15	0.17	38137	FALSE			FALSE					TRUE	Maintain
10180	Incision and drainage, complex, postoperative wound i		October 2013	18				Remove from re-review	RUC identified when revie	January 2013	010	2.3	2.53	5.10	0.51	7788	FALSE			FALSE					TRUE	Maintain
11040	Deleted from CPT	Excision and Debridement	September 2007	16			APMA, APTA	Deleted from CPT	Site of Service Anomaly	September 2007							FALSE			TRUE	Descriptor enable	October 2(	15	Code Deleted	TRUE	Deleted from CPT
11041	Deleted from CPT	Excision and Debridement	September 2007	16			APMA, APTA	Deleted from CPT	Site of Service Anomaly	September 2007							FALSE			TRUE	Descriptor enable	October 2(	15	Code Deleted	TRUE	Deleted from CPT
11042	Debridement, subcutar	Excision and Debridement	February 2010	04			APMA, APTA	1.12	Site of Service Anomaly	September 2007	000	1.01	0.64	2.73	0.12	1980217	FALSE			TRUE	Descriptor enable	October 2(	15	Complete	TRUE	Increase
11043	Debridement, muscle a	Debridement	February 2010	04			APMA, APTA	3.00	Site of Service Anomaly	September 2007	000	2.7	1.45	3.83	0.40	552830	FALSE			TRUE	Descriptor enable	October 2(	15	Complete	TRUE	Decrease
11044	Debridement, bone (inc	Debridement	February 2010	04			APMA, APTA	4.56	Site of Service Anomaly	September 2007	000	4.1	1.92	4.51	0.65	114689	FALSE			TRUE	Descriptor enable	October 2(	15	Complete	TRUE	Increase
11045	Debridement, subcutar	Excision and Debridement	February 2010	04			ACS, APMA, AP	0.69	Site of Service Anomaly	February 2010	ZZZ	0.5	0.17	0.61	0.08	599986	FALSE			FALSE					TRUE	Increase
11046	Debridement, muscle a	Debridement	September 2022	13	April 2024	RAW	ACS, APMA, AP	Review action plan. 1.29	Site of Service Anomaly /	February 2010	ZZZ	1.03	0.40	0.95	0.19	307724	FALSE			FALSE					FALSE	Decrease
11047	Debridement, bone (inc	Debridement	January 2020	37			ACS, APMA, AP	12.00	Site of Service Anomaly /	February 2010	ZZZ	1.8	0.72	1.45	0.35	91066	FALSE			FALSE					TRUE	Increase
11055	Paring or cutting of ben	RAW Review	January 2012	30			APMA	Maintain	CMS Request to Re-Revie	November 2011	000	0.35	0.08	1.76	0.04	774459	FALSE			FALSE					TRUE	Maintain
11056	Paring or cutting of ben	Trim Skin Lesions	January 2012	53			APMA	0.50	MPC List / CMS Request t	October 2010	000	0.5	0.11	1.93	0.04	1807522	FALSE			FALSE					TRUE	Decrease
11057	Paring or cutting of ben	RAW Review	January 2012	30			APMA	Maintain	CMS Request to Re-Revie	November 2011	000	0.65	0.15	2.00	0.04	312718	FALSE			FALSE					TRUE	Maintain
11100	Biopsy of skin, subcutar	Biopsy of Skin Lesion	April 2017	05			AAD	Deleted from CPT	MPC List / CMS High Expe	October 2010							FALSE			TRUE	Prior to the Janua	February 2(	65	yes	TRUE	Deleted from CPT
11101	Biopsy of skin, subcutar	Biopsy of Skin Lesion	April 2017	05			AAD	Deleted from CPT	Low Value Billed in Multip	October 2010							FALSE			TRUE	Prior to the Janua	February 2(	65	yes	TRUE	Deleted from CPT
11102	Tangential biopsy of ski	Skin Biopsy	April 2017	05				0.66	CMS High Expenditure Pr	February 2017	000	0.66	0.39	2.32	0.07	3163916	FALSE			FALSE		February 2(	65	yes	TRUE	Decrease
11103	Tangential biopsy of ski	Skin Biopsy	April 2017	05				0.38	CMS High Expenditure Pr	February 2017	ZZZ	0.38	0.22	1.09	0.04	1387504	FALSE			FALSE		February 2(	65	yes	TRUE	Decrease
11104	Punch biopsy of skin (in	Skin Biopsy	April 2017	05				0.83	CMS High Expenditure Pr	February 2017	000	0.83	0.46	2.85	0.10	330155	FALSE			FALSE		February 2(	65	yes	TRUE	Decrease
11105	Punch biopsy of skin (in	Skin Biopsy	April 2017	05				0.45	CMS High Expenditure Pr	February 2017	ZZZ	0.45	0.25	1.27	0.06	88175	FALSE			FALSE		February 2(	65	yes	TRUE	Decrease
11106	Incisional biopsy of skin	Skin Biopsy	April 2017	05				1.01	CMS High Expenditure Pr	February 2017	000	1.01	0.54	3.55	0.12	33505	FALSE			FALSE		February 2(	65	yes	TRUE	Decrease
11107	Incisional biopsy of skin	Skin Biopsy	April 2017	05				0.54	CMS High Expenditure Pr	February 2017	ZZZ	0.54	0.30	1.54	0.07	6888	FALSE			FALSE		February 2(	65	yes	TRUE	Decrease
11300	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	0.60	CMS High Expenditure Pr	January 2012	000	0.6	0.34	2.38	0.07	90082	FALSE			FALSE					TRUE	Increase
11301	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	0.90	CMS High Expenditure Pr	January 2012	000	0.9	0.52	2.67	0.10	189558	FALSE			FALSE					TRUE	Increase
11302	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.16	CMS High Expenditure Pr	January 2012	000	1.05	0.61	2.97	0.11	101686	FALSE			FALSE					TRUE	Increase
11303	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.25	CMS High Expenditure Pr	January 2012	000	1.25	0.71	3.19	0.14	16022	FALSE			FALSE					TRUE	Increase
11305	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	0.80	CMS High Expenditure Pr	January 2012	000	0.8	0.24	2.31	0.07	89775	FALSE			FALSE					TRUE	Increase
11306	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.18	CMS High Expenditure Pr	January 2012	000	0.96	0.40	2.64	0.10	96135	FALSE			FALSE					TRUE	Increase
11307	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.20	CMS High Expenditure Pr	January 2012	000	1.2	0.54	2.87	0.12	52364	FALSE			FALSE					TRUE	Increase
11308	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.46	CMS High Expenditure Pr	January 2012	000	1.46	0.49	2.83	0.12	16450	FALSE			FALSE					TRUE	Increase
11310	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.19	CMS High Expenditure Pr	January 2012	000	0.8	0.46	2.61	0.10	58618	FALSE			FALSE					TRUE	Increase
11311	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.43	CMS High Expenditure Pr	January 2012	000	1.1	0.64	2.90	0.12	87211	FALSE			FALSE					TRUE	Increase
11312	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	1.80	CMS High Expenditure Pr	January 2012	000	1.3	0.76	3.24	0.17	39225	FALSE			FALSE					TRUE	Increase
11313	Shaving of epidermal or	Shaving of Epidermal or Dermal	April 2012	38			AAD	2.00	CMS High Expenditure Pr	January 2012	000	1.68	0.96	3.58	0.19	7132	FALSE			FALSE					TRUE	Increase
11719	Trimming of nondystro	Debridement of Nail	January 2012	32			APMA	0.17	Low Value-High Volume	October 2010	000	0.17	0.04	0.24	0.01	648206	FALSE			FALSE					TRUE	Maintain
11720	Debridement of nail(s)	Debridement of Nail	September 2011	53			APMA	0.32 (Interim)	MPC List	Septemer 2011	000	0.32	0.07	0.62	0.04	1879999	FALSE			FALSE					TRUE	Maintain
11721	Debridement of nail(s)	Debridement of Nail	September 2011	53			APMA	0.54 (Interim)	MPC List	October 2010	000	0.54	0.12	0.74	0.04	5698272	FALSE			FALSE					TRUE	Maintain
11730	Avulsion of nail plate, p	Removal of Nail Plate	January 2016	56			APMA	1.10	CMS High Expenditure Pr	July 2015	000	1.05	0.44	2.30	0.10	326549	FALSE			FALSE					TRUE	Maintain
11750	Excision of nail and nail	Excision of Nail Bed - HCPAC	September 2014	26	RUC Review work and direct P			1.99	010-Day Global Post-Oper	January 2014	010	1.58	1.29	3.07	0.12	167442	FALSE			FALSE					TRUE	Decrease
11752	Excision of nail and nail	Excision of Nail Bed - HCPAC	January 2015	28				Deleted from CPT	010-Day Global Post-Oper	January 2014							FALSE			TRUE	The American Poc	October 2(	09	Code Deleted	TRUE	Deleted from CPT
11755	Biopsy of nail unit (eg, p	Biopsy of Nail	April 2017	41i			APMA	1.25	CMS 000-Day Global Typic	July 2016	000	1.25	0.44	2.32	0.10	52685	FALSE			FALSE					TRUE	Decrease
11900	Injection, intralesional;	Skin Injection Services	April 2010	31			AAD	0.52	Harvard Valued - Utilizatic	October 2009	000	0.52	0.31	1.13	0.06	253112	FALSE			FALSE					TRUE	Maintain
11901	Injection, intralesional;	Skin Injection Services	April 2010	31			AAD	0.80	Harvard Valued - Utilizatic	February 2010	000	0.8	0.47	1.21	0.08	69181	FALSE			FALSE					TRUE	Maintain
11980	Subcutaneous hormon	Drug Delivery Implant Procedur	October 2018	05			AAOS, ACOG, AI	1.10	High Volume Growth2 / D	April 2013	000	1.1	0.39	1.55	0.17	29305	FALSE			TRUE	In January 2018, t	May 2018	10	Yes	TRUE	Decrease
11981	Insertion, drug-delivery	Drug Delivery Implant Procedur	October 2018	05			AAOS, ACOG, AI	1.30	High Volume Growth1 / D	June 2008	000	1.14	0.52	1.67	0.20	8284	FALSE			TRUE	In January 2018, t	May 2018	10	Yes	TRUE	Decrease
11982	Removal, non-biodegra	Drug Delivery Implant Procedur	October 2018	05			AAOS, ACOG, AI	1.70	High Volume Growth1 / D	February 2008	000	1.34	0.61	1.78	0.25	2738	FALSE			TRUE	In January 2018, t	May 2018	10	Yes	TRUE	Decrease
11983	Removal with reinsertic	Drug Delivery Implant Procedur	October 2018	05			AAOS, ACOG, AI	2.10	High Volume Growth1	June 2008	000	1.91	0.83	2.01	0.34	1339	FALSE			FALSE					TRUE	Decrease
12001	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	0.84	Harvard Valued - Utilizatic	October 2009	000	0.84	0.33	1.82	0.17	158450	FALSE			FALSE					TRUE	Decrease
12002	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.14	Harvard Valued - Utilizatic	October 2009	000	1.14	0.39	2.06	0.22	129274	FALSE			FALSE					TRUE	Decrease
12004	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.44	Harvard Valued - Utilizatic	April 2010	000	1.44	0.46	2.26	0.27	20365	FALSE			FALSE					TRUE	Decrease
12005	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.97	Harvard Valued - Utilizatic	April 2010	000	1.97	0.47	2.97	0.37	5699	FALSE			FALSE					TRUE	Decrease
12006	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	2.39	Harvard Valued - Utilizatic	April 2010	000	2.39	0.61	3.32	0.46	1055	FALSE			FALSE					TRUE	Decrease
12007	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	2.90	Harvard Valued - Utilizatic	April 2010	000	2.9	0.84	3.49	0.56	333	FALSE			FALSE					TRUE	Decrease
12011	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.07	Harvard Valued - Utilizatic	April 2010	000	1.07	0.37	2.11	0.20	80967	FALSE			FALSE					TRUE	Decrease
12013	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.22	Harvard Valued - Utilizatic	April 2010	000	1.22	0.27	2.07	0.25	48082	FALSE			FALSE					TRUE	Decrease
12014	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.57	Harvard Valued - Utilizatic	April 2010	000	1.57	0.35	2.43	0.30	6474	FALSE			FALSE					TRUE	Decrease
12015	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	1.98	Harvard Valued - Utilizatic	April 2010	000	1.98	0.44	2.82	0.38	3170	FALSE			FALSE					TRUE	Decrease
12016	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	2.68	Harvard Valued - Utilizatic	April 2010	000	2.68	0.61	3.41	0.51	443	FALSE			FALSE					TRUE	Decrease
12017	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	3.18	Harvard Valued - Utilizatic	April 2010	000	3.18	0.73	NA	0.66	56	FALSE			FALSE					TRUE	Decrease
12018	Simple repair of superfi	Repair of Superficial Wounds	April 2010	32			ACEP, AAFP	3.61	Harvard Valued - Utilizatic	April 2010	000	3.61	0.80	NA	0.75	22	FALSE			FALSE					TRUE	Decrease
12031	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22			AAO-HNS, AAD,	2.00	Harvard Valued - Utilizatic	February 2010	010	2	2.26	5.67	0.25	59863	FALSE			FALSE					TRUE	Decrease
12032	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22			AAO-HNS, AAD,	2.52	Harvard Valued - Utilizatic	October 2009	010	2.52	2.83	6.32	0.29	310362	FALSE			FALSE					TRUE	Maintain
12034	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22			AAO-HNS, AAD,	2.97	Harvard Valued - Utilizatic	February 2010	010	2.97	2.73	6.68	0.40	32053	FALSE			FALSE					TRUE	Maintain
12035	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22			AAO-HNS, AAD,	3.60	Harvard Valued - Utilizatic	February 2010	010	3.5	3.04	7.57	0.64	5165	FALSE			FALSE					TRUE	Increase

12036	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	4.50	Harvard Valued - Utilizatic	February 2010	010	4.23	3.31	7.92	0.84	1024	FALSE		FALSE					TRUE	Increase
12037	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	5.25	Harvard Valued - Utilizatic	February 2010	010	5	3.73	8.54	1.01	488	FALSE		FALSE					TRUE	Increase
12041	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	2.10	Harvard Valued - Utilizatic	February 2010	010	2.1	1.95	5.59	0.26	20276	FALSE		FALSE					TRUE	Decrease
12042	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	2.79	Harvard Valued - Utilizatic	February 2010	010	2.79	2.70	6.21	0.31	61284	FALSE		FALSE					TRUE	Maintain
12044	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	3.19	Harvard Valued - Utilizatic	February 2010	010	3.19	2.72	7.84	0.44	2990	FALSE		FALSE					TRUE	Maintain
12045	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	3.90	Harvard Valued - Utilizatic	February 2010	010	3.75	3.77	8.06	0.67	329	FALSE		FALSE					TRUE	Increase
12046	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	4.60	Harvard Valued - Utilizatic	February 2010	010	4.3	4.11	9.65	1.08	121	FALSE		FALSE					TRUE	Increase
12047	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	5.50	Harvard Valued - Utilizatic	February 2010	010	4.95	4.35	10.27	1.25	35	FALSE		FALSE					TRUE	Increase
12051	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	2.33	Harvard Valued - Utilizatic	February 2010	010	2.33	2.41	5.91	0.30	53156	FALSE		FALSE					TRUE	Decrease
12052	Repair, intermediate, w	Repair of Intermediate Wounds	April 2010	45	AAO-HNS, AAD,	Remove from screen	Harvard Valued - Utilizatic	February 2010	010	2.87	2.71	6.28	0.35	94390	FALSE		FALSE					TRUE	Remove from Screen
12053	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	3.17	Harvard Valued - Utilizatic	February 2010	010	3.17	2.82	7.38	0.41	14469	FALSE		FALSE					TRUE	Maintain
12054	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	3.50	Harvard Valued - Utilizatic	February 2010	010	3.5	2.50	7.55	0.54	3544	FALSE		FALSE					TRUE	Maintain
12055	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	4.65	Harvard Valued - Utilizatic	February 2010	010	4.5	3.62	9.97	0.82	286	FALSE		FALSE					TRUE	Increase
12056	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	5.50	Harvard Valued - Utilizatic	February 2010	010	5.3	5.22	11.21	0.95	41	FALSE		FALSE					TRUE	Increase
12057	Repair, intermediate, w	Repair of Intermediate Wounds	October 2010	22	AAO-HNS, AAD,	6.28	Harvard Valued - Utilizatic	February 2010	010	6	5.42	11.27	1.08	20	FALSE		FALSE					TRUE	Increase
13100	Repair, complex, trunk;	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	3.00	CMS Request	July 2011	010	3	2.58	6.89	0.37	4827	FALSE		FALSE					TRUE	Decrease
13101	Repair, complex, trunk;	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	3.50	CMS Request	July 2011	010	3.5	3.43	8.04	0.41	84542	FALSE		FALSE					TRUE	Decrease
13102	Repair, complex, trunk;	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	1.24	CMS Request	July 2011	ZZZ	1.24	0.69	2.07	0.19	21197	FALSE		FALSE					TRUE	Maintain
13120	Repair, complex, scalp,	Complex Wound Repair	October 2017	19	AAD, AAO-HNS,	3.23	CMS Fastest Growing / CF	October 2008	010	3.23	3.26	7.07	0.40	10368	TRUE	1st article: complete	FALSE		Septembe	9	Complete	TRUE	Decrease
13121	Repair, complex, scalp,	Complex Wound Repair	October 2017	19	AAD, AAO-HNS,	4.00	CMS Fastest Growing / CF	October 2008	010	4	3.18	8.34	0.44	182651	TRUE	1st article: complete	FALSE		Septembe	9	Complete	TRUE	Decrease
13122	Repair, complex, scalp,	Complex Wound Repair	October 2017	19	AAD, AAO-HNS,	1.44	CMS Fastest Growing / CF	October 2008	ZZZ	1.44	0.79	2.16	0.22	27329	TRUE	1st article: complete	FALSE		Septembe	9	Complete	TRUE	Maintain
13131	Repair, complex, forehe	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	3.73	Harvard Valued - Utilizatic	April 2011	010	3.73	2.99	7.50	0.44	32774	FALSE		FALSE					TRUE	Decrease
13132	Repair, complex, forehe	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	4.78	CMS Request	September 2011	010	4.78	3.64	8.83	0.55	252586	FALSE		FALSE					TRUE	Decrease
13133	Repair, complex, forehe	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	2.19	CMS Request	September 2011	ZZZ	2.19	1.23	2.57	0.27	13790	FALSE		FALSE					TRUE	Maintain
13150	Repair, complex, eyelid	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	Deleted from CPT	CMS Request	September 2011							FALSE		TRUE	Specialties are rec	October 2(	05	Deleted from (	TRUE	Deleted from CPT
13151	Repair, complex, eyelid	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	4.34	CMS Request	September 2011	010	4.34	3.37	7.85	0.54	28161	FALSE		FALSE					TRUE	Decrease
13152	Repair, complex, eyelid	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	5.34	Harvard Valued - Utilizatic	April 2011	010	5.34	3.95	8.93	0.65	47544	FALSE		FALSE					TRUE	Decrease
13153	Repair, complex, eyelid	Complex Wound Repair	April 2012	37	AAD, AAO-HNS,	2.38	CMS Request	July 2011	ZZZ	2.38	1.31	2.82	0.36	754	FALSE		FALSE					TRUE	Maintain
14000	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	ACS, AAD, ASPS	6.19	Site of Service Anomaly	April 2008	090	6.37	7.55	11.59	1.10	5804	FALSE		FALSE					TRUE	Decrease
14001	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	ACS, AAD, ASPS	8.58	Site of Service Anomaly	September 2007	090	8.78	9.09	13.91	1.60	8527	FALSE		FALSE					TRUE	Decrease
14020	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	AAD, ASPS	7.02	Site of Service Anomaly	April 2008	090	7.22	8.61	12.81	1.02	15643	FALSE		FALSE					TRUE	Decrease
14021	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	AAD, ASPS	9.52	Site of Service Anomaly /	September 2007	090	9.72	10.03	14.88	1.32	18586	FALSE		FALSE					TRUE	Decrease
14040	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	AAD, ASPS, AAC	8.44	Site of Service Anomaly	April 2008	090	8.6	8.84	13.02	1.10	58271	FALSE		FALSE					TRUE	Maintain
14041	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	AAD, ASPS, AAC	10.63	Site of Service Anomaly	September 2007	090	10.83	10.49	15.43	1.31	43225	FALSE		FALSE					TRUE	Decrease
14060	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	AAD, ASPS, AAC	Maintain	Site of Service Anomaly	April 2008	090	9.23	9.42	12.62	1.12	80653	FALSE		FALSE					TRUE	Maintain
14061	Adjacent tissue transfe	Skin Tissue Rearrangement	October 2008	9	AAD, ASPS, AAC	11.25	Site of Service Anomaly	September 2007	090	11.48	11.43	16.86	1.38	29256	FALSE		FALSE					TRUE	Decrease
14300	Deleted from CPT	Adjacent Tissue Transfer	April 2009	04	ACS, AAD, ASPS	Deleted from CPT	Site of Service Anomaly /	September 2007							FALSE		TRUE	The specialty soci	February 2(	09	Code Deleted	TRUE	Deleted from CPT
14301	Adjacent tissue transfe	Adjacent Tissue Transfer	April 2009	04	ACS, AAO-HNS,	12.47	Site of Service Anomaly /	September 2007	090	12.65	11.23	17.84	1.97	39025	FALSE		FALSE		February 2(	09		TRUE	Decrease
14302	Adjacent tissue transfe	Adjacent Tissue Transfer	April 2009	04	ACS, AAO-HNS,	3.73	Site of Service Anomaly /	September 2007	ZZZ	3.73	2.01	2.01	0.66	46941	FALSE		FALSE		February 2(	09		TRUE	Decrease
15002	Surgical preparation or	RAW	September 2014	21	ASPS	Maintain work RVU and adjust	Pre-Time Analysis	January 2014	000	3.65	2.20	6.05	0.65	23825	FALSE		FALSE					TRUE	Maintain
15004	Surgical preparation or	RAW	September 2014	21	ASPS, APMA	Maintain work RVU and adjust	Pre-Time Analysis	January 2014	000	4.58	2.49	6.58	0.64	33789	FALSE		FALSE					TRUE	Maintain
15100	Split-thickness autograf	RAW	September 2014	21	ASPS	Maintain work RVU and adjust	Pre-Time Analysis	January 2014	090	9.9	9.58	14.27	1.90	11671	FALSE		FALSE					TRUE	Maintain
15120	Split-thickness autograf	Autograft	September 2007	16	AAO-HNS, ASPS	Remove from screen	Site of Service Anomaly	September 2007	090	10.15	8.78	13.55	1.63	7599	FALSE		FALSE					TRUE	Remove from Screen
15170	Acellular dermal replac	Acellular Dermal Replacement	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE					TRUE	Deleted from CPT
15171	Acellular dermal replac	Acellular Dermal Replacement	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE					TRUE	Deleted from CPT
15175	Acellular dermal replac	Acellular Dermal Replacement	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The specialty recc	October 2(	07	Complete	TRUE	Deleted from CPT
15176	Acellular dermal replac	Acellular Dermal Replacement	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE					TRUE	Deleted from CPT
15220	Full thickness graft, free	Skin Graft	September 2007	16	AAO-HNS, ASPS	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	090	8.09	8.92	13.81	1.13	9254	FALSE		FALSE					TRUE	PE Only
15240	Full thickness graft, free	RAW	September 2014	21	ASPS, AAD	Maintain work RVU and adjust	Pre-Time Analysis	January 2014	090	10.41	11.86	15.99	1.38	12274	FALSE		FALSE					TRUE	Maintain
15271	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	1.50	Different Performing Spe	April 2011	000	1.5	0.75	2.88	0.22	134215	FALSE		FALSE		February 2011			TRUE	Decrease
15272	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	0.59	Different Performing Spe	April 2011	ZZZ	0.33	0.12	0.35	0.04	17378	FALSE		FALSE		February 2011			TRUE	Decrease
15273	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	3.50	Different Performing Spe	April 2011	000	3.5	1.65	5.17	0.65	6285	FALSE		FALSE		February 2011			TRUE	Decrease
15274	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	0.80	Different Performing Spe	April 2011	ZZZ	0.8	0.35	1.50	0.18	27593	FALSE		FALSE		February 2011			TRUE	Decrease
15275	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	1.83	Different Performing Spe	April 2011	000	1.83	0.73	2.72	0.19	153979	FALSE		FALSE		February 2011			TRUE	Decrease
15276	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	0.59	Different Performing Spe	April 2011	ZZZ	0.5	0.17	0.40	0.07	7165	FALSE		FALSE		February 2011			TRUE	Decrease
15277	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	4.00	Different Performing Spe	April 2011	000	4	1.93	5.62	0.72	1611	FALSE		FALSE		February 2011			TRUE	Decrease
15278	Application of skin subs	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	1.00	Different Performing Spe	April 2011	ZZZ	1	0.46	1.67	0.19	2798	FALSE		FALSE		February 2011			TRUE	Decrease
15320	Deleted from CPT	Skin Allograft	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The specialty recc	October 2(	07	Complete	TRUE	Deleted from CPT
15321	Deleted from CPT	Skin Allograft	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE					TRUE	Deleted from CPT
15330	Acellular dermal allogra	Allograft	February 2008	S	ASPS	Deleted from CPT	High IWPUT	February 2008							FALSE		FALSE					TRUE	Deleted from CPT
15331	Deleted from CPT	Acellular Dermal Allograft	February 2010	31	AAO-HNS, APM	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE					TRUE	Deleted from CPT
15335	Deleted from CPT	Acellular Dermal Allograft	February 2010	31	AAO-HNS, APM	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The specialty recc	October 2(	07	Complete	TRUE	Deleted from CPT
15336	Deleted from CPT	Acellular Dermal Allograft	February 2010	31	AAO-HNS, APM	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE		February 2011			TRUE	Deleted from CPT
15360	Deleted from CPT	Tissue Cultured Allogeneic Derr	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE		February 2011			TRUE	Deleted from CPT
15361	Deleted from CPT	Tissue Cultured Allogeneic Derr	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE		February 2011			TRUE	Deleted from CPT
15365	Deleted from CPT	Tissue Cultured Allogeneic Derr	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The specialty recc	October 2(	07	Complete	TRUE	Deleted from CPT
15366	Deleted from CPT	Tissue Cultured Allogeneic Derr	February 2010	31	APMA, ASPS	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE		February 2011			TRUE	Deleted from CPT
15400	Deleted from CPT	Xenograft	September 2007	16	APMA, AAO-HN	Deleted from CPT	Site of Service Anomaly	September 2007							FALSE		FALSE					TRUE	Deleted from CPT
15401	Deleted from CPT	Xenograft	February 2008	S	ACS, ASPS	Deleted from CPT	High Volume Growth1	February 2008							FALSE		FALSE					TRUE	Deleted from CPT
15420	Deleted from CPT	Xenograft Skin	February 2010	31	APMA, ASPS, AA	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The specialty recc	October 2(	07	Complete	TRUE	Deleted from CPT
15421	Deleted from CPT	Xenograft Skin	February 2010	31	APMA, ASPS, AA	Deleted from CPT	Different Performing Spe	February 2010							FALSE		FALSE		February 2011			TRUE	Deleted from CPT
15570	Formation of direct or t	Skin Pedicle Flaps	October 2008	10	ACS, ASPS, AAO	10.00	Site of Service Anomaly	September 2007	090	10.21	9.66	15.08	1.96	275	FALSE		FALSE					TRUE	Maintain
15572	Formation of direct or t	Skin Pedicle Flaps	October 2008	10	ACS, ASPS, AAO	9.94	Site of Service Anomaly	April 2008	090	10.12	10.13	14.55	1.74	556	FALSE		FALSE					TRUE	Maintain
15574	Formation of direct or t	Skin Pedicle Flaps	October 2008	10	ASPS, AAO-HNS	10.52	Site of Service Anomaly	September 2007	090	10.7	9.62	13.97	1.60	1494	FALSE		FALSE					TRUE	Maintain
15576	Formation of direct or t	Skin Pedicle Flaps	October 2008	10	ASPS, AAO-HNS	9.24	Site of Service Anomaly	September 2007	090	9.37	8.81	12.89	1.12	4373	FALSE		FALSE					TRUE	Maintain
15730	Midface flap (ie, zygom	Muscle Flaps	January 2017	05	AAO	13.50	High Level E/M in Global F	January 2017	090	13.5	12.19	27.74	1.51	1428	FALSE		FALSE					TRUE	Decrease
15731	Forehead flap with pres	Muscle Flaps	January 2017	05		Not part of family	High Level E/M in Global F	April 2016	090	14.38	13.26	17.13	2.13	2090	FALSE		TRUE	In April 2016 the F	Septembe	15	yes	TRUE	Not Part of RAW
15732	Muscle, myocutaneous	Muscle Flaps	January 2017	05	ASPS	Deleted from CPT	Site of Service Anomaly /	September 2007							FALSE		TRUE	The specialty soci	Septembe	15	yes	TRUE	Deleted from CPT
15733	Muscle, myocutaneous	Muscle Flaps	January 2017	05	ASPS	15.68	High Level E/M in Global F	January 2017	090	15.68	12.58	NA	2.48	4590	FALSE		FALSE					TRUE	Decrease
15734	Muscle, myocutaneous	Muscle Flaps	April 2016	14		23.00	High Level E/M in Global F	October 2015	090	23	16.93	NA	4.85	21636	FALSE		FALSE		Septembe	15	yes	TRUE	Increase
15736	Muscle, myocutaneous	Muscle Flaps	April 2016	14	ASSH, ASPS	17.04	High Level E/M in Global F	January 2016	090	17.04	16.03	NA	3.24	1347	FALSE		FALSE		Septembe	15	yes	TRUE	Maintain
15738	Muscle, myocutaneous	Muscle Flaps	April 2016	14	ASPS	19.04	High Level E/M in Global F	January 2016	090	19.04	15.25	NA	3.58	5370	FALSE		FALSE		Septembe	15	yes	TRUE	Maintain
15740	Flap; island pedicle req	Dermatology and Plastic Surger	April 2008	28	AAD, ASPS	11.57	Site of Service Anomaly /	September 2007	090	11.8	11.52	16.71	1.75	1879	FALSE		TRUE	CPT code 15740 w	February 2	11 & 07	Complete	TRUE	Maintain
15769	Grafting of autologous !	Tissue Grafting Procedures	September 2022	13	AAOHNS, ASPS	Refer to CPT Assistant. 6.68.	Site of Service Anomaly -	May 2018	090	6.68	6.45	NA	1.26	5780	TRUE		FALSE					FALSE	Increase
15771	Grafting of autologous !	Tissue Grafting Procedures	October 2018	04	ASPS	6.73	Site of Service Anomaly -	May 2018	090	6.73	7.21	10.21	1.26	3401	FALSE		FALSE					TRUE	Increase
15772	Grafting of autologous !	Tissue Grafting Procedures	October 2018	04	ASPS	2.50	Site of Service Anomaly -	May 2018	ZZZ	2.5	1.46	2.77	0.44	7322	FALSE		FALSE					TRUE	Increase
15773	Grafting of autologous !	Tissue Grafting Procedures	October 2018	04	ASPS	6.83	Site of Service Anomaly -	May 2018	090	6.83	7.01	9.91	1.14	394	FALSE		FALSE					TRUE	Increase
15774	Grafting of autologous !	Tissue Grafting Procedures	October 2018	04	ASPS	2.41	Site of Service Anomaly -	May 2018	ZZZ	2.41	1.43	2.74	0.44	75	FALSE		FALSE					TRUE	Increase
15777	Implantation of biologic	Chronic Wound Dermal Substit	April 2011	04	ACS, APMA, ASF	3.65	Different Performing Spe	April 2011	ZZZ	3.65	2.03	2.03	0.69	7275	FALSE		FALSE		February 2011			TRUE	Decrease
15778	Implantation of absorb	Anterior Abdominal Hernia Rep	April 2021	09	ACS, ASCRS (col	8.00	Site of Service Anomaly -	February 2021	000	7.05	2.83	NA	1.56		FALSE		FALSE		February 2	18	complete	TRUE	Decrease
15823	Blepharoplasty, upper e	Upper Eyelid Blepharoplasty	April 2010	33	AAO	6.81	Harvard Valued - Utilizatic	October 2009	090	6.81	8.97	11.13	0.58	81846	FALSE		FALSE					TRUE	Decrease
16020	Dressings and/or debrid	Dressings/ Debridement of Part	October 2010	08	ASPS, AAFP, AA	0.80	Different Performing Spe	October 2009	000	0.71	0.82	1.73	0.12	13542	FALSE		FALSE					TRUE	Maintain
16025	Dressings and/or debrid	Dressings/ Debridement of Part	October 2010	08	ASPS, AAFP, AA	1.85	Different Performing Spe	October 2009	000	1.74	1.27	2.67	0.27	1828	FALSE		FALSE					TRUE	Maintain
16030	Dressings and/or debrid	Dressings/ Debridement of Part	April 2010	45	ACEP, ASPS, AA	CPT Assistant article published	Different Performing Spe	February 2010	000	2.08	1.43	3.41	0.40	1085	TRUE	Oct 2012 Yes	FALSE					TRUE	Maintain
17000	Destruction (eg, laser s	Destruction of Premalignant Le	April 2013	17	AAD	0.61	MPC List	October 2010	010	0.61	0.96	1.34	0.06	5622795	FALSE		FALSE					TRUE	Decrease
17003	Destruction (eg, laser s	Destruction of Premalignant Le	April 2013	17	AAD	0.04	Low Value-Billed in Multi	October 2010	ZZZ	0.04	0.02	0.16	0.00	18009083	FALSE		FALSE					TRUE	Decrease
17004	Destruction (eg, laser s	Destruction of Premalignant Le	April 2013	17	AAD	Remove from Modifier -51 Exe	CMS High Expenditure Pr	September 2011	010	1.37	1.41	3.53	0.17	820987	FALSE		FALSE					TRUE	Decrease
17106	Destruction of cutaneo	Destruction of Skin Lesions	October 2008	11	AAD	3.61	High IWPUT	February 2008	090	3.69	4.10	6.17	0.42	3465	FALSE		FALSE					TRUE	Decrease
17107	Destruction of cutaneo	Destruction of Skin Lesions	October 2008	11	AAD	4.68	High IWPUT	February 2008	090	4.79	5.32	8.00	0.54	1668	FALSE		FALSE					TRUE	Decrease
17108	Destruction of cutaneo	Destruction of Skin Lesions	October 2008	11	AAD	6.37	High IWPUT	February 2008	090	7.49	7.16	10.44	0.98	4917	FALSE		FALSE					TRUE	Decrease
17110	Destruction (eg, laser s	RAW	October 2013	18		Remove from screen	High Volume Growth2	April 2013	010	0.7	1.23	2.64	0.07	2645400	FALSE		FALSE					TRUE	Remove from Screen
17111	Destruction (eg, laser s	RAW	October 2013	18		Remove from screen	High Volume Growth2	April 2013	010	0.97	1.38	2.91	0.10	129756	FALSE		FALSE					TRUE	Remove from Screen

17250	Chemical cauterization	Chemical Cauterization of Gran	January 2022	20	January 20	RAW		AAFP, ACS, APM	Review in 3 years (Jan 2025).	High Volume Growth	3	October 2015	000	0.5	0.53	2.05	0.08	248217	TRUE	Sep 2016	Yes	TRUE	In January 2016, t	September	17	yes	FALSE				
17261	Destruction, malignant	Destruction of Malignant Lesior	October 2010	26				AAD, AAFP	1.22	Harvard Valued - Utilizatic		October 2009	010	1.22	1.23	3.10	0.12	127721	FALSE			FALSE					TRUE	Maintain		
17262	Destruction, malignant	Destruction of Malignant Lesior	October 2010	26				AAD, AAFP	1.63	Harvard Valued - Utilizatic		February 2010	010	1.63	1.47	3.55	0.18	283361	FALSE			FALSE					TRUE	Maintain		
17271	Destruction, malignant	Destruction of Malignant Lesior	October 2010	26				AAD, AAFP	1.54	Harvard Valued - Utilizatic		February 2010	010	1.54	1.42	3.29	0.17	46244	FALSE			FALSE					TRUE	Maintain		
17272	Destruction, malignant	Destruction of Malignant Lesior	October 2010	26				AAD, AAFP	1.82	Harvard Valued - Utilizatic		February 2010	010	1.82	1.58	3.65	0.19	75889	FALSE			FALSE					TRUE	Maintain		
17281	Destruction, malignant	Destruction of Malignant Lesior	October 2010	26				AAD, AAFP	1.77	Harvard Valued - Utilizatic		February 2010	010	1.77	1.55	3.44	0.19	69196	FALSE			FALSE					TRUE	Maintain		
17282	Destruction, malignant	Destruction of Malignant Lesior	October 2010	26				AAD, AAFP	2.09	Harvard Valued - Utilizatic		October 2009	010	2.09	1.74	3.86	0.22	69607	FALSE			FALSE					TRUE	Maintain		
17311	Mohs micrographic tecl	Mohs Surgery	April 2013	18				AAD	6.20	CMS High Expenditure Pr		September 2011	000	6.2	3.66	13.47	0.65	820299	FALSE			FALSE					TRUE	Maintain		
17312	Mohs micrographic tecl	Mohs Surgery	April 2013	18				AAD	3.30	CMS High Expenditure Pr		September 2011	ZZZ	3.3	1.95	8.69	0.35	483735	FALSE			FALSE					TRUE	Maintain		
17313	Mohs micrographic tecl	Mohs Surgery	April 2013	18				AAD	5.56	CMS High Expenditure Pr		January 2012	000	5.56	3.28	12.94	0.58	158672	FALSE			FALSE					TRUE	Maintain		
17314	Mohs micrographic tecl	Mohs Surgery	April 2013	18				AAD	3.06	CMS High Expenditure Pr		January 2012	ZZZ	3.06	1.81	8.46	0.30	61232	FALSE			FALSE					TRUE	Maintain		
17315	Mohs micrographic tecl	Mohs Surgery	April 2013	18				AAD	0.87	CMS High Expenditure Pr		January 2012	ZZZ	0.87	0.52	1.39	0.10	18666	FALSE			FALSE					TRUE	Maintain		
19020	Mastotomy with explor	Mastotomy	September 2007	16				ACS	Reduce 99238 to 0.5, remove f	Site of Service Anomaly		September 2007	090	3.83	4.70	9.45	0.89	1246	FALSE			FALSE					TRUE	PE Only		
19081	Biopsy, breast, with pla	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	3.29	Codes Reported Together		January 2012	000	3.29	1.19	11.55	0.34	58442	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19082	Biopsy, breast, with pla	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.65	Codes Reported Together		January 2012	ZZZ	1.65	0.60	9.94	0.18	4569	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19083	Biopsy, breast, with pla	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	3.10	Codes Reported Together		January 2012	000	3.1	1.12	11.77	0.31	113588	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19084	Biopsy, breast, with pla	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.55	Codes Reported Together		January 2012	ZZZ	1.55	0.57	9.88	0.17	15183	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19085	Biopsy, breast, with pla	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	3.64	Codes Reported Together		January 2012	000	3.64	1.32	19.36	0.31	6597	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19086	Biopsy, breast, with pla	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.82	Codes Reported Together		January 2012	ZZZ	1.82	0.66	16.14	0.17	1477	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19102	Biopsy of breast; percu	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	Deleted from CPT	Codes Reported Together		January 2012							FALSE			FALSE		October 2008		Complete	TRUE	Deleted from CPT		
19103	Biopsy of breast; percu	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	Deleted from CPT	Codes Reported Together		January 2012							FALSE			FALSE		October 2008		Complete	TRUE	Deleted from CPT		
19281	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	2.00	Codes Reported Together		January 2012	000	2	0.73	5.08	0.18	26026	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19282	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.00	Codes Reported Together		January 2012	ZZZ	1	0.37	4.06	0.10	3373	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19283	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	2.00	Codes Reported Together		January 2012	000	2	0.73	5.64	0.20	3712	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19284	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.00	Codes Reported Together		January 2012	ZZZ	1	0.36	4.67	0.11	441	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19285	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.70	Codes Reported Together		January 2012	000	1.7	0.62	9.35	0.18	26948	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19286	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	0.85	Codes Reported Together		January 2012	ZZZ	0.85	0.31	8.27	0.10	2285	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19287	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	3.02	Codes Reported Together		January 2012	000	2.55	0.93	16.59	0.22	304	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19288	Placement of breast loc	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	1.51	Codes Reported Together		January 2012	ZZZ	1.28	0.47	13.60	0.11	62	FALSE			FALSE		October 2008		Complete	TRUE	Decrease		
19290	Preoperative placemen	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	Deleted from CPT	Codes Reported Together		January 2012							FALSE			FALSE		October 2008		Complete	TRUE	Deleted from CPT		
19291	Preoperative placemen	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	Deleted from CPT	Codes Reported Together		January 2012							FALSE			FALSE		October 2008		Complete	TRUE	Deleted from CPT		
19295	Image guided placemer	Breast Biopsy	April 2013	04				ACR, ACS, ASBS	Deleted from CPT	CMS Fastest Growing / C		October 2008							FALSE			FALSE		October 2008		Complete	TRUE	Deleted from CPT		
19303	Mastectomy, simple, cc	Mastectomy	April 2016	15				ACS, ASBS	15.00	Site of Service Anomaly -		October 2015	090	15	10.01	NA	3.67	23640	FALSE			FALSE					TRUE	Decrease		
19307	Mastectomy, modified	Modified Radical Mastectomy	January 2020	22					17.99	Site of Service Anomaly -		October 2019	090	17.99	12.93	NA	4.43	4668	FALSE			FALSE					TRUE	Decrease		
19318	Breast reduction	Mammaplasty	September 2007	16				ASPS	Reduce 99238 to 0.5	Site of Service Anomaly (S		September 2007	090	16.03	13.73	NA	2.94	6789	FALSE			FALSE					TRUE	PE Only		
19340	Insertion of breast impl	Breast Implant/Expander Place	January 2020	05				ASPS	11.00	CMS Request / Site of Ser		October 2009	090	10.48	10.28	NA	2.00	3355	FALSE			FALSE					TRUE	Decrease		
19357	Tissue expander placen	Breast Implant/Expander Place	January 2020	05				ASPS	15.36	Site of Service Anomaly /		September 2007	090	14.84	17.12	NA	2.76	5825	FALSE			TRUE	Originally referrec	October 2020		Complete	TRUE	Decrease		
20000	Deleted from CPT	Incision of Abcess	September 2007	16				APMA, AAOS	Deleted from CPT	Site of Service Anomaly (S		September 2007							FALSE			TRUE	This service was ic	June 2009	15	Code Deleted	TRUE	Deleted from CPT		
20005	Incision and drainage o	Incision of Deep Abscess	October 2017	19				ACS, AAO-HNS	Deleted from CPT	Site of Service Anomaly /		September 2007							FALSE			TRUE	A RUC member re	February 2006		complete	TRUE	Deleted from CPT		
20220	Biopsy, bone, trocar, or	Bone Biopsy Trocar/Needle	January 2019	22				ACR, SIR	1.93	Different Performing Spe		January 2018	000	1.65	0.77	5.27	0.17	11940	FALSE			FALSE					TRUE	Increase		
20225	Biopsy, bone, trocar, or	Bone Biopsy Trocar/Needle	January 2019	22				ACR, SIR	3.00	Different Performing Spe		October 2017	000	2.45	1.11	8.91	0.25	12681	FALSE			FALSE					TRUE	Increase		
20240	Biopsy, bone, open; sup	Bone Biopsy Excisional	January 2016	04				AAOS, APMA	3.73	010-Day Global Post-Oper		April 2014	000	2.61	1.24	NA	0.29	6890	FALSE			FALSE					TRUE	Increase		
20245	Biopsy, bone, open; dee	Bone Biopsy Excisional	January 2016	04				AAOS	6.50	010-Day Global Post-Oper		January 2014	000	6	3.20	NA	1.03	4386	FALSE			TRUE	In April 2015, in p	October 2015		revised	TRUE	Decrease		
20525	Removal of foreign bod	Removal of Foreign Body	September 2007	16				ACS, AAOS	Reduce 99238 to 0.5	Site of Service Anomaly (S		September 2007	010	3.54	3.20	9.82	0.65	1390	FALSE			FALSE					TRUE	PE Only		
20526	Injection, therapeutic (a	RAW	January 2017	30					Remove fromm screen	CMS 000-Day Global Typic		July 2016	000	0.94	0.58	1.34	0.18	96094	FALSE			FALSE					TRUE	Remove from Screen		
20550	Injection(s); single tend	Injection of Tendon	January 2016	27		RUC		AAOS, AAPM&R	0.75	CMS Fastest Growing / CN		October 2008	000	0.75	0.31	0.88	0.10	816296	FALSE			FALSE					TRUE	Maintain		
20551	Injection(s); single tend	Therapeutic Injection Carpal Tu	April 2017	10				AAPMR, AAOS, A	0.75	CMS Fastest Growing / CN		October 2008	000	0.75	0.31	0.88	0.10	136149	FALSE			FALSE					TRUE	Maintain		
20552	Injection(s); single or multiple trigger point(s), 1 or 2 m		January 2016	28		RUC		AAPM&R, ACRh	0.66	CMS High Expenditure Pr		July 2015	000	0.66	0.36	0.84	0.08	293265	FALSE			FALSE					TRUE	Maintain		
20553	Injection(s); single or multiple trigger point(s), 3 or mor		January 2016	28		RUC		AAPM&R, ACRh	0.75	CMS High Expenditure Pr		July 2015	000	0.75	0.41	0.98	0.10	353939	FALSE			FALSE					TRUE	Maintain		
20600	Arthrocentesis, aspirati	Arthrocentesis	January 2014	04				AAFP, AAOS, AC	0.66 and new PE inputs	Harvard Valued - Utilizatic		February 2010	000	0.66	0.31	0.84	0.08	429910	FALSE			TRUE	Ultrasound as an i	October 2006		Complete	TRUE	Maintain		
20604	Arthrocentesis, aspirati	Arthrocentesis	January 2014	04				AAFP, AAOS, AC	0.89	CMS Request - Final Rule		July 2013	000	0.89	0.37	1.47	0.10	50301	FALSE			FALSE		October 2006			TRUE	Decrease		
20605	Arthrocentesis, aspirati	Arthrocentesis	January 2014	04				AAFP, AAOS, AC	0.68 and new PE inputs	Harvard Valued - Utilizatic		October 2009	000	0.68	0.32	0.87	0.10	402457	FALSE			TRUE	Ultrasound as an i	October 2006		Complete	TRUE	Maintain		
20606	Arthrocentesis, aspirati	Arthrocentesis	January 2014	04				AAFP, AAOS, AC	1.00	CMS Request - Final Rule		July 2013	000	1	0.42	1.55	0.12	57211	FALSE			FALSE		October 2006			TRUE	Decrease		
20610	Arthrocentesis, aspirati	Arthrocentesis	January 2014	04				AAFP, AAOS, AC	0.79 and new PE inputs	Harvard Valued - Utilizatic		February 2010	000	0.79	0.43	1.02	0.12	5959151	FALSE			TRUE	Ultrasound as an i	October 2006		Complete	TRUE	Maintain		
20611	Arthrocentesis, aspirati	Arthrocentesis	January 2014	04				AAFP, AAOS, AC	1.10	CMS Request - Final Rule		July 2013	000	1.1	0.51	1.72	0.17	1095993	FALSE			FALSE		October 2006			TRUE	Decrease		
20612	Aspiration and/or injecti	RAW	January 2017	30					Remove from screen	CMS 000-Day Global Typic		July 2016	000	0.7	0.42	1.12	0.10	25152	FALSE			FALSE					TRUE	Remove from Screen		
20680	Removal of implant; de	RAW	September 2014	21				AAOS, APMA	5.96 and adjustments to pre-s	Pre-Time Analysis		January 2014	090	5.96	5.58	11.09	1.02	48037	FALSE			FALSE					TRUE	Maintain		
20692	Application of a multipl	RAW	April 2014	52					Maintain	090-Day Global Post-Oper		January 2014	090	16.27	14.54	NA	2.82	2999	FALSE			FALSE					TRUE	Maintain		
20694	Removal, under anesth	External Fixation	September 2007	16				AAOS	Reduce 99238 to 0.5	Site of Service Anomaly (S		September 2007	090	4.28	5.22	7.93	0.77	5650	FALSE			FALSE					TRUE	PE Only		
20700	Manual preparation and	Drug Delivery Implant Procedur	October 2018	05				AAOS, AUA	1.50	Different Performing Spe		May 2018	ZZZ	1.5	0.74	0.74	0.27	1045	FALSE			FALSE					TRUE	Increase		
20701	Removal of drug-delive	Drug Delivery Implant Procedur	October 2018	05				AAOS, AUA	1.13	Different Performing Spe		May 2018	ZZZ	1.13	0.57	0.57	0.22	230	FALSE			FALSE					TRUE	Increase		
20702	Manual preparation and	Drug Delivery Implant Procedur	October 2018	05				AAOS, AUA	2.50	Different Performing Spe		May 2018	ZZZ	2.5	1.24	1.24	0.49	478	FALSE			FALSE					TRUE	Increase		
20703	Removal of drug-delive	Drug Delivery Implant Procedur	October 2018	05				AAOS, AUA	1.80	Different Performing Spe		May 2018	ZZZ	1.8	0.90	0.90	0.35	94	FALSE			FALSE					TRUE	Increase		
20704	Manual preparation and	Drug Delivery Implant Procedur	October 2018	05				AAOS, AUA	2.60	Different Performing Spe		May 2018	ZZZ	2.6	1.27	1.27	0.49	390	FALSE			FALSE					TRUE	Increase		
20705	Removal of drug-delive	Drug Delivery Implant Procedur	October 2018	05				AAOS, AUA	2.15	Different Performing Spe		May 2018	ZZZ	2.15	1.12	1.12	0.43	118	FALSE			FALSE					TRUE	Increase		
20900	Bone graft, any donor a	Bone Graft Procedures	April 2008	29				AOFAS, AAOS	3.00	Site of Service Anomaly		September 2007	000	3	1.89	8.24	0.51	4243	FALSE			FALSE					TRUE	Decrease		
20902	Bone graft, any donor a	Bone Graft Procedures	April 2008	29				AOFAS, AAOS	4.58	Site of Service Anomaly		April 2008	000	4.58	2.79	NA	0.83	4148	FALSE			FALSE					TRUE	Decrease		
20926	Tissue grafts, other (eg,	Tissue Grafting Procedures	October 2018	04				AAOS, ASPS, AA	Deleted from CPT	CMS Fastest Growing / Sit		October 2008							TRUE	Deleted fo	N/A	TRUE	In October 2017, /	May 2018	12	Yes	TRUE	Deleted from CPT		
21015	Radical resection of tun	Radical Resection of Soft Tissue	February 2009	6				ACS, AAOS, AAC	9.71	Site of Service Anomaly		September 2007	090	9.89	9.38	NA	1.67	355	FALSE			TRUE	CPT developed ne	June 2008	06	New code stru	TRUE	Increase		
21025	Excision of bone (eg, fo	Excision of Bone – Mandible	October 2010	61				AAOMS	10.03	Site of Service Anomaly		September 2007	090	10.03	8.63	12.56	1.03	4293	FALSE			FALSE					TRUE	Decrease		
21495	Open treatment of hyo	Laryngoplasty	January 2016	09		RUC			Deleted from CPT	090-Day Global Post-Oper		October 2015							FALSE			FALSE					TRUE	Deleted from CPT		
21557	Radical resection of tun	Radical Resection of Soft Tissue	February 2009	6				ACS, AAOS	14.57	Site of Service Anomaly		September 2007	090	14.75	10.77	NA	3.06	366	FALSE			TRUE	CPT developed ne	June 2008	06	New code stru	TRUE	Decrease		
21800	Closed treatment of rib	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	Deleted from CPT	CMS Request - Final Rule		July 2013							FALSE			TRUE	Refer to CPT for d	February 2015		Complete	TRUE	Deleted from CPT		
21805	Open treatment of rib f	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	Deleted from CPT	CMS Request - Final Rule		January 2014							FALSE			TRUE	Referred to CPT fc	October 2007		Complete	TRUE	Deleted from CPT		
21810	Treatment of rib fractu	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	Deleted from CPT	CMS Request - Final Rule		January 2014							FALSE			FALSE		October 2007		Complete	TRUE	Deleted from CPT		
21811	Open treatment of rib f	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	19.55	CMS Request - Final Rule		January 2014	000	10.79	4.26	NA	2.53	447	FALSE			FALSE		October 2007		Complete	TRUE	Decrease		
21812	Open treatment of rib f	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	25.00	CMS Request - Final Rule		January 2014	000	13	5.27	NA	3.04	537	FALSE			FALSE		October 2007		Complete	TRUE	Decrease		
21813	Open treatment of rib f	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	35.00	CMS Request - Final Rule		January 2014	000	17.61	7.11	NA	4.41	70	FALSE			FALSE		October 2007		Complete	TRUE	Decrease		
21820	Closed treatment of ste	Internal Fixation of Rib Fracture	April 2016	46				AAOS, ACEP, an	PE Clinical staff pre-time revise	CMS Request - Final Rule		January 2014	090	1.36	2.89	2.96	0.27	145	TRUE	Jan 2018	yes	FALSE		October 2007		Complete	TRUE	PE Only		
21825	Open treatment of ster	Internal Fixation of Rib Fracture	April 2014	05				STS, ACS	Unrelated to the family	CMS Request - Final Rule		January 2014	090	7.76	6.93	NA	1.78	538	FALSE			FALSE		October 2007		Complete	TRUE	Remove from Screen		
21935	Radical resection of tun	Radical Resection of Soft Tissue	February 2009	6				ACS, AAOS	15.54	Site of Service Anomaly		September 2007	090	15.72	11.23	NA	3.57	191	FALSE			TRUE	CPT developed ne	June 2008	06	New code stru	TRUE	Decrease		
22214	Osteotomy of spine, po	RAW	September 2014	21				AAOS, NASS, AA	Maintain	CMS Fastest Growing		October 2008	090	21.02	18.38	NA	6.08	7078	FALSE			FALSE					TRUE	Maintain		
22305	Closed treatment of ver	Closed treatment of vertebral p	April 2015	23				AANS/CNS, NAS	Deleted from CPT	CMS Request - Final Rule		July 2013							FALSE			TRUE	In October 2013, /	May 2016	13	Complete	TRUE	Deleted from CPT		
22310	Closed treatment of ver	Closed Treatment Vertebral Fra	January 2020	23	Septembe	RAW		AANS, AAOS, CN	3.45. Flag for Rereview	Negative IWPUT / Site of		April 2017	090	3.45	4.79	5.21	0.75	5433	FALSE			FALSE					FALSE	Decrease		
22510	Percutaneous vertebro	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	8.15	Codes Reported Together		April 2014	010	7.9	3.81	45.90	1.11	2333	FALSE			FALSE		February 2016		Complete	TRUE	Decrease		
22511	Percutaneous vertebro	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	8.05	Codes Reported Together		April 2014	010	7.33	3.68	46.28	1.02	2791	FALSE			FALSE		February 2016		Complete	TRUE	Decrease		
22512	Percutaneous vertebro	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	4.00	Codes Reported Together		April 2014	ZZZ	4	1.44	17.39	0.67	1724	FALSE			FALSE		February 2016		Complete	TRUE	Decrease		
22513	Percutaneous vertebral	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	8.90	Codes Reported Together		April 2014	010	8.65	4.90	163.54	1.60	20004	FALSE			FALSE		February 2016		Complete	TRUE	Decrease		
22514	Percutaneous vertebral	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	8.24	Codes Reported Together		April 2014	010	7.99	4.66	163.48	1.48	22125	FALSE			FALSE		February 2016		Complete	TRUE	Decrease		
22515	Percutaneous vertebral	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	4.00	Codes Reported Together		April 2014	ZZZ	4	1.67	84.49	0.79	13352	FALSE			FALSE		February 2016		Complete	TRUE	Decrease		
22520	Percutaneous vertebro	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	Deleted from CPT	CMS Request - Practice E		February 2009							FALSE			TRUE	Joint Workgroup r	February 2016		Complete	TRUE	Deleted from CPT		
22521	Percutaneous vertebro	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	Deleted from CPT	Site of Service Anomaly (S		September 2007							FALSE			TRUE	Joint Workgroup r	February 2016		Complete	TRUE	Deleted from CPT		
22522	Percutaneous vertebro	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	Deleted from CPT	Codes Reported Together		April 2014							FALSE			FALSE		February 2016		Complete	TRUE	Deleted from CPT		
22523	Percutaneous vertebral	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	Deleted from CPT	CMS Request: PE Review		September 2011							FALSE			FALSE		February 2016		Complete	TRUE	Deleted from CPT		
22524	Percutaneous vertebral	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	Deleted from CPT	CMS Request: PE Review		September 2011							FALSE			FALSE		February 2016		Complete	TRUE	Deleted from CPT		
22525	Percutaneous vertebral	Percutaneous Vertebroplasty a	April 2014	06				AANS, CNS, AAC	Deleted from CPT	CMS Request: PE Review		September 2011							FALSE			FALSE		February 2016		Complete	TRUE	Deleted from CPT		
22533	Arthrodesis, lateral extr	Arthrodesis	September 2011	51				AAOS, NASS, AA	Remove from screen. CPT Assi	CMS Fastest Growing		October 2008	090	24.79	18.65	NA	6.14	626	TRUE	Oct 2009	Yes	FALSE					TRUE	Remove from Screen		
22551	Arthrodesis, anterior in	Arthrodesis	February 2010	05				NASS, AANS/CN	24.50	Codes Reported Together		February 2010	090	25	18.00	NA	8.13	32408	FALSE			FALSE		October 2021			TRUE	Decrease		
22552	Arthrodesis, anterior in	Arthrodesis	February 2010	05				NASS, AANS/CN	6.50	Codes Reported Together		February 2010	ZZZ	6.5	3.22	NA	2.08	29355	FALSE			FALSE		October 2021			TRUE	Maintain		
22554	Arthrodesis, anterior in	Arthrodesis	September 2022	13				AANS, AAOS, CN	Refer to CPT Assistant. 17.69	Codes Reported Together		February 2008	090	17.69	14.61	NA	5.68	3525	TRUE			TRUE	Referred to the CI	October 2021		Complete	FALSE	Maintain		
22558	Arthrodesis, anterior in	Vertebral Corpectomy with Artl	September 2022	13				AANS/CNS, AAC	Maintain	High Volume Growth	2 / C	April 2013	090	23.53	15.89	NA	6.34	19532	FALSE			TRUE	In January 2015 th	September	20	yes	TRUE	Maintain		
22585	Arthrodesis, anterior in	Arthrodesis	February 2010	05				NASS, AANS/CN	Remove from screen	Codes Reported Together		February 2010	ZZZ	5.52	2.57	NA	1.59	15241	FALSE			FALSE		October 2021			TRUE	Maintain		

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31591	Laryngoplasty, medializ	Laryngoplasty	January 2016	09		AAOHNS	15.60	090-Day Global Post-Oper	October 2015	090	13.56	17.69	NA	1.94	934	FALSE	FALSE		October 2(	13	Complete	TRUE	Decrease
31592	Cricotracheal resection	Laryngoplasty	January 2016	09		AAOHNS	25.00	090-Day Global Post-Oper	October 2015	090	25	23.52	NA	3.57	26	FALSE	FALSE		October 2(	13	Complete	TRUE	Decrease
31600	Tracheostomy, planned	Tracheostomy	April 2016	21		AAOHNS	5.56	CMS High Expenditure Pr	July 2015	000	5.56	2.44	NA	1.06	24508	FALSE	FALSE					TRUE	Increase
31601	Tracheostomy, planned	Tracheostomy	April 2016	21		AAOHNS	8.00	CMS High Expenditure Pr	July 2015	000	8	4.24	NA	1.13	2	FALSE	FALSE					TRUE	Increase
31603	Tracheostomy, emerge	Tracheostomy	April 2016	21		AAOHNS	6.00	CMS High Expenditure Pr	July 2015	000	6	2.41	NA	1.10	672	FALSE	FALSE					TRUE	Increase
31605	Tracheostomy, emerge	Tracheostomy	April 2016	21		AAOHNS	6.45	CMS High Expenditure Pr	July 2015	000	6.45	2.12	NA	1.28	243	FALSE	FALSE					TRUE	Increase
31610	Tracheostomy, fenestra	Tracheostomy	October 2016	15	RUC	AAOHNS, ACS	12.00	CMS High Expenditure Pr	July 2015	090	12	15.06	NA	1.81	1281	FALSE	FALSE					TRUE	Increase
31611	Construction of trachec	Speech Prosthesis	February 2008	S		AAO-HNS	Reduce 99238 to 0.5	Site of Service Anomaly	September 2007	090	6	9.31	NA	0.86	698	FALSE	FALSE					TRUE	PE Only
31620	Endobronchial ultrasou	Endobronchial Ultrasound - EBI	January 2015	05		ACCP, ATS	Deleted from CPT	High Volume Growth2	April 2013							FALSE	TRUE	In January 2014, t	October 2(	10	Complete	TRUE	Deleted from CPT
31622	Bronchoscopy, rigid or I	Bronchial Aspiration of Tracheo	January 2015	05		ACCP, ATS	2.78	High Volume Growth2	April 2013	000	2.53	1.03	4.57	0.29	37398	FALSE	FALSE		October 2(	10	Complete	TRUE	Maintain
31623	Bronchoscopy, rigid or I	Diagnostic Bronchoscopy	October 2017	09		ATS, CHEST	2.63	High Volume Growth4	October 2016	000	2.63	0.99	5.33	0.22	16722	FALSE	FALSE					TRUE	Maintain
31624	Bronchoscopy, rigid or I	Diagnostic Bronchoscopy	October 2017	09		ATS, CHEST	2.63	High Volume Growth4	October 2017	000	2.63	1.03	4.72	0.25	91471	FALSE	FALSE					TRUE	Maintain
31625	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ATS, CHEST	3.36	High Volume Growth2	April 2013	000	3.11	1.14	7.01	0.29	14232	FALSE	FALSE		October 2(	10	Complete	TRUE	Maintain
31626	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ACCP, ATS	4.16	High Volume Growth2	April 2013	000	3.91	1.38	19.28	0.44	2033	FALSE	FALSE		October 2(	10	Complete	TRUE	Maintain
31628	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ACCP, ATS	3.80	High Volume Growth2	April 2013	000	3.55	1.27	7.25	0.30	27375	FALSE	FALSE		October 2(	10	Complete	TRUE	Maintain
31629	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ACCP, ATS	4.00	High Volume Growth2	April 2013	000	3.75	1.33	9.43	0.35	14059	FALSE	FALSE		October 2(	10	Complete	TRUE	Decrease
31632	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ACCP, ATS	1.03	High Volume Growth2	April 2013	ZZZ	1.03	0.31	0.79	0.10	3750	FALSE	FALSE					TRUE	Maintain
31633	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ACCP, ATS	1.32	High Volume Growth2	April 2013	ZZZ	1.32	0.39	0.93	0.12	991	FALSE	FALSE					TRUE	Maintain
31645	Bronchoscopy, rigid or I	Bronchial Aspiration of Tracheo	October 2016	08	RUC	ATS, CHEST	2.88	Harvard Valued - Utilizatic	October 2015	000	2.88	1.13	4.98	0.27	30095	FALSE	FALSE		May 2016	14	Complete	TRUE	Decrease
31646	Bronchoscopy, rigid or I	Bronchial Aspiration of Tracheo	October 2016	08	RUC	ATS, CHEST	2.78	Harvard Valued - Utilizatic	October 2015	000	2.78	1.09	NA	0.26	3677	FALSE	FALSE		May 2016	14	Complete	TRUE	Increase
31652	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ATS, ACCP	5.00	High Volume Growth2	October 2014	000	4.46	1.55	32.84	0.42	23016	FALSE	FALSE		October 2(	10	Complete	TRUE	Decrease
31653	Bronchoscopy, rigid or I	Endobronchial Ultrasound - EBI	January 2015	05		ATS, ACCP	5.50	High Volume Growth2	October 2014	000	4.96	1.70	33.78	0.47	13844	FALSE	FALSE		October 2(	10	Complete	TRUE	Decrease
31654	Bronchoscopy, rigid or I	Bronchial Aspiration of Tracheo	January 2015	05		ATS, ACCP	1.70	High Volume Growth2	October 2014	ZZZ	1.4	0.42	2.06	0.12	9856	FALSE	FALSE		October 2(	10	Complete	TRUE	Decrease
32201	Pneumonostomy; with	Drainage of Abscess	January 2013	04			Deleted from CPT	Codes Reported Together	January 2012							FALSE	FALSE		October 2(	06	Complete	TRUE	Deleted from CPT
32405	Biopsy, lung or mediast	Lung Biopsy-CT Guidance Bundl	April 2019	05		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2017							FALSE	TRUE	In October 2017, I	February 2	11	complete	TRUE	Deleted from CPT
32408	Core needle biopsy, lun	Lung Biopsy-CT Guidance Bundl	April 2019	05		ACR, SIR	4.00	Codes Reported Together	April 2019	000	3.18	0.99	22.45	0.30	58727	FALSE	FALSE					TRUE	Increase
32420	Pneumocentesis, punct	Thoracentesis with Tube Insert	September 2011	17		ACCP, ACR, ATS,	Deleted from CPT	Harvard Valued - Utilizatic	September 2011							FALSE	TRUE	In September 201	February 2	10	Complete	TRUE	Deleted from CPT
32421	Thoracentesis, punctur	Thoracentesis with Tube Insert	September 2011	17		ACCP, ACR, ATS,	Deleted from CPT	Harvard Valued - Utilizatic	September 2011							FALSE	TRUE	In September 201	February 2	10	Complete	TRUE	Deleted from CPT
32422	Thoracentesis with inse	Thoracentesis with Tube Insert	September 2011	17		ACCP, ACR, ATS,	Deleted from CPT	Harvard Valued - Utilizatic	April 2011							FALSE	TRUE	In September 201	February 2	10	Complete	TRUE	Deleted from CPT
32440	Removal of lung, pneun	RAW Review	January 2013	34		ACCP, ATS, ACR,	No reliable way to determine i	CMS Request to Re-Revie	November 2011	090	27.28	12.36	NA	6.50	143	FALSE	FALSE					TRUE	Remove from Screen
32480	Removal of lung, other	RAW Review	January 2013	34		ACCP, ATS, ACR,	No reliable way to determine i	CMS Request to Re-Revie	November 2011	090	25.82	11.62	NA	6.10	2971	FALSE	FALSE					TRUE	Remove from Screen
32482	Removal of lung, other	RAW Review	January 2013	34		ACCP, ATS, ACR,	No reliable way to determine i	CMS Request to Re-Revie	November 2011	090	27.44	12.59	NA	6.50	203	FALSE	FALSE					TRUE	Remove from Screen
32491	Removal of lung, other	RAW Review	January 2012	30		ACCP, ATS, ACR,	Request further information fr	CMS Request to Re-Revie	November 2011	090	25.24	12.07	NA	6.06	13	FALSE	FALSE					TRUE	Remove from Screen
32551	Tube thoracostomy, inc	Chest Tube Thoracostomy	April 2012	10		ACCP, ATS, ACR,	3.50	Harvard Valued - Utilizatic	April 2011	000	3.04	1.01	NA	0.53	35767	FALSE	TRUE	In September 201	February 2	09	Complete	TRUE	Increase
32554	Thoracentesis, needle c	Chest Tube Interventions	October 2012	04		ACCP, ACR, ATS,	1.82	Harvard Valued - Utilizatic	October 2012	000	1.82	0.58	5.01	0.20	10084	FALSE	FALSE		February 2	10	Complete	TRUE	Decrease
32555	Thoracentesis, needle c	Chest Tube Interventions	October 2012	04		ACCP, ACR, ATS,	2.27	Harvard Valued - Utilizatic	October 2012	000	2.27	0.74	7.02	0.20	207406	FALSE	FALSE		February 2	10	Complete	TRUE	Decrease
32556	Pleural drainage, percu	Chest Tube Interventions	October 2012	04		ACCP, ACR, ATS,	2.50	Harvard Valued - Utilizatic	October 2012	000	2.5	0.80	19.48	0.35	5041	FALSE	FALSE		February 2	10	Complete	TRUE	Decrease
32557	Pleural drainage, percu	Chest Tube Interventions	October 2012	04		ACCP, ACR, ATS,	3.62	Harvard Valued - Utilizatic	October 2012	000	3.12	0.96	16.65	0.30	34801	FALSE	FALSE		February 2	10	Complete	TRUE	Decrease
32663	Thoracoscopy, surgical;	RAW review	January 2013	34		STS	No reliable way to determine i	CMS Fastest Growing	October 2008	090	24.64	10.58	NA	5.90	8161	FALSE	FALSE					TRUE	Remove from Screen
33010	Pericardiocentesis; initi	Pericardiocentesis and Pericard	January 2019	04			Deleted from CPT	Negative IWPUT	September 2018							FALSE	FALSE		Septembe	14	Complete	TRUE	Deleted from CPT
33011	Pericardiocentesis; sub	Pericardiocentesis and Pericard	January 2019	04			Deleted from CPT	Negative IWPUT	September 2018							FALSE	FALSE		Septembe	14	Complete	TRUE	Deleted from CPT
33015	Tube pericardiostomy	Pericardiocentesis and Pericard	January 2019	04		ACC	Deleted from CPT	Negative IWPUT	April 2017							FALSE	TRUE	A RUC member re	Septembe	14	Complete	TRUE	Deleted from CPT
33016	Pericardiocentesis, incl	Pericardiocentesis and Pericard	January 2019	04			5.00	Negative IWPUT	September 2018	000	4.4	1.52	NA	0.94	4359	FALSE	FALSE		Septembe	14	Complete	TRUE	Increase
33017	Pericardial drainage wit	Pericardiocentesis and Pericard	January 2019	04			5.50	Negative IWPUT	September 2018	000	4.62	1.60	NA	0.98	3366	FALSE	FALSE		Septembe	14	Complete	TRUE	Increase
33018	Pericardial drainage wit	Pericardiocentesis and Pericard	January 2019	04			6.00	Negative IWPUT	September 2018	000	5.4	1.84	NA	1.21	6	FALSE	FALSE		Septembe	14	Complete	TRUE	Increase
33019	Pericardial drainage wit	Pericardiocentesis and Pericard	January 2019	04			5.00	Negative IWPUT	September 2018	000	4.29	1.39	NA	0.53	273	FALSE	FALSE		Septembe	14	Complete	TRUE	Increase
33020	Pericardiotomy for rem	Pericardiotomy	April 2018	10		AATS, STS	14.31	Negative IWPUT	April 2018	090	14.31	6.64	NA	3.37	147	FALSE	TRUE	In April 2018, the	May 2018	EC	Yes	TRUE	Decrease
33025	Creation of pericardial v	Pericardiotomy	April 2018	10		AATS, STS	13.20	Negative IWPUT	April 2017	090	13.2	6.39	NA	3.09	3881	FALSE	TRUE	In April 2018, the	May 2018	EC	Yes	TRUE	Decrease
33207	Insertion of new or repl	Pacemaker or Pacing Cariovertε	April 2011	10		ACC	8.05	Codes Reported Together	February 2010	090	7.8	4.61	NA	1.73	9413	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Maintain
33208	Insertion of new or repl	Pacemaker or Pacing Cariovertε	April 2011	10		ACC	8.77	Codes Reported Together	February 2010	090	8.52	4.90	NA	1.90	91848	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Maintain
33212	Insertion of pacemaker	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	5.26	Codes Reported Together	February 2010	090	5.01	3.37	NA	1.13	206	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Decrease
33213	Insertion of pacemaker	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	5.53	CMS Fastest Growing / Cc	October 2008	090	5.28	3.49	NA	1.18	974	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Decrease
33221	Insertion of pacemaker	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	5.80	Codes Reported Together	April 2011	090	5.55	3.88	NA	1.21	223	FALSE	FALSE		February 2	13		TRUE	Decrease
33227	Removal of permanent	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	5.50	Codes Reported Together	April 2011	090	5.25	3.62	NA	1.17	2926	FALSE	FALSE		February 2	13		TRUE	Decrease
33228	Removal of permanent	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	5.77	Codes Reported Together	April 2011	090	5.52	3.75	NA	1.21	30687	FALSE	FALSE		February 2	13		TRUE	Decrease
33229	Removal of permanent	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.04	Codes Reported Together	April 2011	090	5.79	4.01	NA	1.28	6002	FALSE	FALSE		February 2	13		TRUE	Decrease
33230	Insertion of implantable	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.32	Codes Reported Together	April 2011	090	6.07	3.95	NA	1.32	97	FALSE	FALSE		February 2	13		TRUE	Decrease
33231	Insertion of implantable	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.59	Codes Reported Together	April 2011	090	6.34	4.11	NA	1.37	94	FALSE	FALSE		February 2	13		TRUE	Decrease
33233	Removal of permanent	Pacemaker or Pacing Cariovertε	April 2011	10		ACC	3.39	Codes Reported Together	February 2010	090	3.14	3.09	NA	0.71	7684	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Maintain
33240	Insertion of implantable	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.06	Codes Reported Together	February 2010	090	5.8	3.73	NA	1.30	137	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Decrease
33241	Removal of implantable	Pacemaker or Pacing Cariovertε	April 2011	10		ACC	3.29	Codes Reported Together	February 2010	090	3.04	2.66	NA	0.67	5020	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Maintain
33249	Insertion or replacemer	Pacemaker or Pacing Cariovertε	April 2011	10		ACC	15.17	Codes Reported Together	February 2010	090	14.92	8.77	NA	3.31	32852	FALSE	TRUE	33213 - This code	February 2	13	Complete	TRUE	Maintain
33262	Removal of implantable	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.06	Codes Reported Together	April 2011	090	5.81	3.94	NA	1.29	2438	FALSE	FALSE		February 2	13		TRUE	Decrease
33263	Removal of implantable	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.33	Codes Reported Together	April 2011	090	6.08	4.04	NA	1.34	6255	FALSE	FALSE		February 2	13		TRUE	Decrease
33264	Removal of implantable	Pacemaker or Pacing Cariovertε	September 2011	04		ACC	6.60	Codes Reported Together	April 2011	090	6.35	4.21	NA	1.39	12407	FALSE	FALSE		February 2	13		TRUE	Decrease
33282	Implantation of patient	Implantation and Removal of P	April 2013	20			3.50	CMS Request - Final Rule	October 2012							FALSE	FALSE		February 2	12	yes	TRUE	Deleted from CPT
33284	Removal of an implanta	Implantation and Removal of P	April 2013	20			3.00	CMS Request - Final Rule	October 2012							FALSE	FALSE		February 2	12	yes	TRUE	Deleted from CPT
33405	Replacement, aortic val	Valve Replacement and CABG P	April 2012	40		STS	41.32	CMS High Expenditure Pr	September 2011	090	41.32	15.59	NA	9.62	12360	FALSE	FALSE					TRUE	Maintain
33430	Replacement, mitral val	Valve Replacement and CABG P	April 2012	40		STS	50.93	High IWPUT / CMS High E	February 2008	090	50.93	19.32	NA	11.83	6313	FALSE	FALSE					TRUE	Maintain
33533	Coronary artery bypass,	Valve Replacement and CABG P	April 2012	40		STS	34.98	CMS High Expenditure Pr	September 2011	090	33.75	13.26	NA	7.89	47131	FALSE	FALSE					TRUE	Increase
33620	Application of right and	New Technology Review	January 2019	37		STS	CPT Article published July 2016	New Technology/New Ser	January 2015	090	30	11.13	NA	7.22	93	TRUE	July 2016	Yes	FALSE				TRUE	Maintain
33621	Transthoracic insertion	New Technology Review	January 2019	37		STS	CPT Article published July 2016	New Technology/New Ser	January 2015	090	16.18	7.27	NA	3.88	1	TRUE	July 2016	Yes	FALSE				TRUE	Maintain
33622	Reconstruction of com	New Technology Review	January 2019	37		STS	CPT Article published July 2016	New Technology/New Ser	January 2015	090	64	21.01	NA	15.39	2	TRUE	July 2016	Yes	FALSE				TRUE	Maintain
33741	Transcatheter atrial sep	Atrial Septostomy	January 2020	13			14.00	CMS Request - Final Rule	September 2019	000	14	4.77	NA	3.17	61	FALSE	FALSE		Septembe	16	yes	TRUE	Maintain
33745	Transcatheter intracard	Atrial Septostomy	January 2020	13			20.00	CMS Request - Final Rule	September 2019	000	20	6.82	NA	4.51	6	FALSE	FALSE		Septembe	16	yes	TRUE	Maintain
33746	Transcatheter intracard	Atrial Septostomy	January 2020	13			10.50	CMS Request - Final Rule	September 2019	ZZZ	8	2.73	NA	1.79		FALSE	FALSE		Septembe	16	yes	TRUE	Maintain
33863	Ascending aorta graft, v	Aortic Graft	February 2008	S		STS, AATS	Remove from screen	High IWPUT	February 2008	090	58.79	19.50	NA	13.68	1778	FALSE	FALSE					TRUE	Remove from Screen
33945	Heart transplant, with c	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	16.00	CMS Request - Final Rule	November 2014	090	89.5	32.10	NA	20.83	707	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33946	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	6.00	CMS Request - Final Rule	November 2014	XXX	6	1.81	NA	1.24	528	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33947	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	6.63	CMS Request - Final Rule	November 2013	XXX	6.63	1.99	NA	1.39	1277	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33948	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.73	CMS Request - Final Rule	November 2013	XXX	4.73	1.44	NA	0.79	7608	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33949	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.60	CMS Request - Final Rule	November 2013	XXX	4.6	1.40	NA	0.75	5339	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33951	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	8.15	CMS Request - Final Rule	November 2013	000	8.15	2.35	NA	1.85		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33952	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	8.43	CMS Request - Final Rule	November 2013	000	8.15	2.54	NA	1.79	1382	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33953	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	9.83	CMS Request - Final Rule	November 2013	000	9.11	2.61	NA	2.05	1	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33954	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	9.43	CMS Request - Final Rule	November 2014	000	9.11	2.69	NA	2.08	235	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33956	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	16.00	CMS Request - Final Rule	November 2014	000	16	4.65	NA	3.75	387	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33957	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.00	CMS Request - Final Rule	November 2014	000	3.51	1.07	NA	0.79		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33958	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.05	CMS Request - Final Rule	November 2014	000	3.51	1.07	NA	0.79	74	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33959	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.69	CMS Request - Final Rule	November 2014	000	4.47	1.33	NA	1.00		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33960	Prolonged extracorpore	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	Deleted from CPT	CMS Request - Final Rule	July 2013							FALSE	TRUE	October 2013 the	February 2	23	Complete	TRUE	Deleted from CPT
33961	Prolonged extracorpore	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	Deleted from CPT	CMS Request - Final Rule	July 2013							FALSE	TRUE	October 2013 the	February 2	23	Complete	TRUE	Deleted from CPT
33962	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.73	CMS Request - Final Rule	November 2014	000	4.47	1.33	NA	1.00	18	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33963	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	9.00	CMS Request - Final Rule	November 2014	000	9	2.58	NA	2.02		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33964	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	9.50	CMS Request - Final Rule	November 2014	000	9.5	2.72	NA	2.14	10	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33965	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	3.51	CMS Request - Final Rule	November 2014	000	3.51	1.07	NA	0.79		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33966	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.50	CMS Request - Final Rule	November 2014	000	4.5	1.42	NA	0.97	434	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33969	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	6.00	CMS Request - Final Rule	November 2014	000	5.22	1.54	NA	1.18		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33984	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	6.38	CMS Request - Final Rule	November 2014	000	5.46	1.55	NA	1.28	431	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33985	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	9.89	CMS Request - Final Rule	November 2014	000	9.89	2.83	NA	2.24		FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33986	Extracorporeal membra	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	10.00	CMS Request - Final Rule	November 2014	000	10	2.97	NA	2.32	208	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain
33987	Arterial exposure with c	ECMO-ECLS	April 2014	11		STS, AAP, ACC, S	4.08	CMS Request - Final Rule	November 2014	ZZZ	4.04	1.10	NA	0.91	48	FALSE	FALSE		February 2	23	Complete	TRUE	Maintain

33988	Insertion of left heart va	ECMO-ECLS	April 2014	11			STS, AAP, ACC, S	15.00		CMS Request - Final Rule	November 2014	000	15	4.23	NA	3.37	34	FALSE		FALSE		February 2	23	Complete		TRUE	Maintain				
33989	Removal of left heart va	ECMO-ECLS	April 2014	11			STS, AAP, ACC, S	9.50		CMS Request - Final Rule	November 2013	000	9.5	2.72	NA	2.14	17	FALSE		FALSE		February 2	23	Complete		TRUE	Maintain				
34701	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	23.71		Codes Reported Together	January 2017	090	23.71	6.85	NA	5.52	657	FALSE		FALSE						TRUE	Decrease				
34702	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	36.00		Codes Reported Together	January 2017	090	36	9.32	NA	8.51	76	FALSE		FALSE						TRUE	Decrease				
34703	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	26.52		Codes Reported Together	January 2017	090	26.52	7.30	NA	6.30	673	FALSE		FALSE						TRUE	Decrease				
34704	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	45.00		Codes Reported Together	January 2017	090	45	11.15	NA	10.60	96	FALSE		FALSE						TRUE	Decrease				
34705	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	29.58		Codes Reported Together	January 2017	090	29.58	7.97	NA	6.95	10394	FALSE		FALSE						TRUE	Decrease				
34706	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	45.00		Codes Reported Together	January 2017	090	45	10.60	NA	10.70	545	FALSE		FALSE						TRUE	Decrease				
34707	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	22.28		Codes Reported Together	January 2017	090	22.28	6.53	NA	5.21	424	FALSE		FALSE						TRUE	Decrease				
34708	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	36.50		Codes Reported Together	January 2017	090	36.5	7.59	NA	8.86	72	FALSE		FALSE						TRUE	Decrease				
34709	Placement of extension	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	6.50		Codes Reported Together	January 2017	ZZZ	6.5	1.35	NA	1.54	2426	FALSE		FALSE						TRUE	Decrease				
34710	Delayed placement of c	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	15.00		Codes Reported Together	January 2017	090	15	4.68	NA	3.51	1068	FALSE		FALSE						TRUE	Decrease				
34711	Delayed placement of c	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	6.00		Codes Reported Together	January 2017	ZZZ	6	1.16	NA	1.40	306	FALSE		FALSE						TRUE	Decrease				
34712	Transcatheter delivery o	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	12.00		Codes Reported Together	January 2017	090	12	4.37	NA	2.80	838	FALSE		FALSE						TRUE	Decrease				
34713	Percutaneous access ar	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	2.50		Codes Reported Together	January 2017	ZZZ	2.5	0.50	NA	0.59	14992	FALSE		FALSE						TRUE	Decrease				
34714	Open femoral artery ex	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	5.25		Codes Reported Together	January 2017	ZZZ	5.25	1.36	NA	1.24	503	FALSE		FALSE						TRUE	Decrease				
34715	Open axillary/subclavian	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	6.00		Codes Reported Together	January 2017	ZZZ	6	1.27	NA	1.45	201	FALSE		FALSE						TRUE	Decrease				
34716	Open axillary/subclavian	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	7.19		Codes Reported Together	January 2017	ZZZ	7.19	1.99	NA	1.67	1218	FALSE		FALSE						TRUE	Decrease				
34800	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			AAOHNS	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
34802	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Pre-Time Analysis / Codes	January 2014							FALSE		TRUE	Referred to CPT fo	September 2016		yes		TRUE	Deleted from CPT				
34803	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
34804	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
34805	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Codes Reported Together	January 2017							FALSE		FALSE						TRUE	Deleted from CPT				
34806	Transcatheter placeme	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Codes Reported Together	January 2017							FALSE		FALSE						TRUE	Deleted from CPT				
34812	Open femoral artery ex	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	4.13		Pre-Time Analysis	January 2014	ZZZ	4.13	0.88	NA	0.98	5856	FALSE		TRUE	Referred to CPT fo	Septembe	27	yes		TRUE	Decrease				
34820	Open iliac artery exposu	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	7.00		Codes Reported Together	January 2017	ZZZ	7	1.10	NA	1.69	68	FALSE		FALSE						TRUE	Decrease				
34825	Placement of proximal e	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Pre-Time Analysis / Codes	January 2014							FALSE		TRUE	Referred to CPT fo	Septembe	27	yes		TRUE	Deleted from CPT				
34826	Placement of proximal e	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Codes Reported Together	January 2017							FALSE		FALSE						TRUE	Deleted from CPT				
34833	Open iliac artery exposu	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	8.16		Codes Reported Together	January 2017	ZZZ	8.16	1.28	NA	1.97	26	FALSE		FALSE						TRUE	Decrease				
34834	Open brachial artery ex	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	2.65		Codes Reported Together	January 2017	ZZZ	2.65	0.47	NA	0.65	397	FALSE		FALSE						TRUE	Decrease				
34900	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, AA	Deleted from CPT		Codes Reported Together	January 2017							FALSE		FALSE						TRUE	Deleted from CPT				
35301	Thromboendarterector	Thromboendarterectomy	January 2013	21			SVS	21.16		CMS High Expenditure Pr	September 2011	090	21.16	6.64	NA	5.21	25815	FALSE		FALSE						TRUE	Increase				
35450	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
35452	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
35454	Deleted from CPT	Endovascular Revascularization	April 2010	07			ACC, ACR, SIR, S	Deleted from CPT		CMS Fastest Growing	February 2010							FALSE		FALSE		February 2	07			TRUE	Deleted from CPT				
35456	Deleted from CPT	Endovascular Revascularization	April 2010	07			ACC, ACR, SIR, S	Deleted from CPT		CMS Fastest Growing	February 2010							FALSE		FALSE		February 2	07			TRUE	Deleted from CPT				
35458	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
35459	Deleted from CPT	Endovascular Revascularization	April 2010	07			ACC, ACR, SIR, S	Deleted from CPT		CMS Fastest Growing	February 2010							FALSE		FALSE		February 2	07			TRUE	Deleted from CPT				
35460	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		Codes Reported Together	October 2015							FALSE		FALSE						TRUE	Deleted from CPT				
35470	Deleted from CPT	Endovascular Revascularization	April 2010	07			ACC, ACR, SIR, S	Deleted from CPT		CMS Fastest Growing	October 2008							FALSE		TRUE	The code is part o	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35471	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		CMS Fastest Growing / Cc	October 2009							FALSE		TRUE	In January 2015, t	October 2015		Deleted from (		TRUE	Deleted from CPT				
35472	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		CMS Fastest Growing / Cc	October 2009							FALSE		TRUE	The code is part o	Removed from CPT re		Complete		TRUE	Deleted from CPT				
35473	Deleted from CPT	Endovascular Revascularization	April 2010	07			ACC, ACR, SIR, S	Deleted from CPT		CMS Fastest Growing	February 2010							FALSE		TRUE	The code is part o	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35474	Deleted from CPT	Endovascular Revascularization	April 2010	07			ACC, ACR, SIR, S	Deleted from CPT		CMS Fastest Growing	October 2008							FALSE		TRUE	The code is part o	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35475	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15			ACR, SIR, SVS	Deleted from CPT		CMS Fastest Growing / CM	September 2011							FALSE		TRUE	In January 2015, t	October 2015		Deleted from (		TRUE	Deleted from CPT				
35476	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15	RUC		ACR, SIR, SVS	Deleted from CPT		CMS Fastest Growing / CM	September 2011							FALSE		TRUE	In January 2015, t	October 2015		Deleted from (		TRUE	Deleted from CPT				
35490	Deleted from CPT	Endovascular Revascularization	April 2010	07			SIR, ACR, SVS	Deleted from CPT		High Volume Growth1	April 2008							FALSE		TRUE	The RUC recomm	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35491	Deleted from CPT	Endovascular Revascularization	April 2010	07			SIR, ACR, SVS	Deleted from CPT		High Volume Growth1	April 2008							FALSE		TRUE	The RUC recomm	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35492	Deleted from CPT	Endovascular Revascularization	April 2010	07			SIR, ACR, SVS	Deleted from CPT		High Volume Growth1	April 2008							FALSE		TRUE	The RUC recomm	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35493	Deleted from CPT	Endovascular Revascularization	April 2010	07			SIR, ACR, SVS	Deleted from CPT		High Volume Growth1	February 2008							FALSE		TRUE	The RUC recomm	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35494	Deleted from CPT	Endovascular Revascularization	April 2010	07			SIR, ACR, SVS	Deleted from CPT		High Volume Growth1	April 2008							FALSE		TRUE	The RUC recomm	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35495	Deleted from CPT	Endovascular Revascularization	April 2010	07			SIR, ACR, SVS	Deleted from CPT		High Volume Growth1	February 2008							FALSE		TRUE	The RUC recomm	February 2	07	Deleted- New		TRUE	Deleted from CPT				
35701	Exploration not followe	Exploration of Artery	January 2019	06			ACS, SVS	7.50		Negative IWPUT	January 2018	090	7.5	4.28	NA	1.28	709	FALSE		TRUE	The RUC identifies	Septembe	17	Complete		TRUE	Decrease				
35702	Exploration not followe	Exploration of Artery	January 2019	06				7.12		Negative IWPUT	September 2018	090	7.12	3.40	NA	1.60	408	FALSE		FALSE		Septembe	17	Complete		TRUE	Decrease				
35703	Exploration not followe	Exploration of Artery	January 2019	06				7.50		Negative IWPUT	September 2018	090	7.5	3.00	NA	1.74	600	FALSE		FALSE		Septembe	17	Complete		TRUE	Decrease				
35721	Exploration (not followe	Exploration of Artery	January 2019	06			ACS, SVS	Deleted from CPT		Negative IWPUT	January 2018							FALSE		TRUE	The RUC identifies	Septembe	17	Complete		TRUE	Deleted from CPT				
35741	Exploration (not followe	Exploration of Artery	January 2019	06			ACS, SVS	Deleted from CPT		Negative IWPUT	January 2018							FALSE		TRUE	The RUC identifies	Septembe	17	Complete		TRUE	Deleted from CPT				
35761	Exploration (not followe	Exploration of Artery	January 2019	06			ACS, SVS	Deleted from CPT		Negative IWPUT	April 2017							FALSE		TRUE	The RUC identifies	Septembe	17	Complete		TRUE	Deleted from CPT				
36000	Introduction of needle i	Introduction of Needle or Intra	April 2010	45			ACC, AUR, AAP,	CMS consider a bundled status		Harvard Valued - Utilizatic	October 2009	XXX	0.18	0.07	0.71	0.02		FALSE		TRUE	The specialty societies indicated they cc			Complete		TRUE	Maintain				
36010	Introduction of cathete	Introduction of Catheter	October 2013	18			ACR, SIR, SVS	Remove from re-review.		Codes Reported Together	February 2010	XXX	2.18	0.60	13.73	0.38	13444	FALSE		FALSE		February 2	15			TRUE	Remove from Screen				
36140	Introduction of needle i	Introduction of Needle or Intra	October 2013	18			SVS, SIR, ACR, A	Remove from re-review		Harvard Valued - Utilizatic	April 2011	XXX	1.76	0.49	13.23	0.35	17255	FALSE		FALSE						TRUE	Remove from Screen				
36145	Deleted from CPT	Arteriovenous Shunt Imaging	April 2009	9				Deleted from CPT		Codes Reported Together	February 2008							FALSE		TRUE	Referred to the CI	February 2	31	Code Deleted		TRUE	Deleted from CPT				
36147	Introduction of needle i	Dialysis Circuit -1	January 2016	14			ACR, RPA, SIR, S	Deleted from CPT		Codes Reported Together	February 2008							FALSE		FALSE		October 2(	27	Complete		TRUE	Deleted from CPT				
36148	Introduction of needle i	Dialysis Circuit -1	January 2016	14			ACR, RPA, SIR, S	Deleted from CPT		Codes Reported Together	February 2008							FALSE		FALSE		October 2(	27	Complete		TRUE	Deleted from CPT				
36215	Selective catheter place	Selective Catheter Placement	April 2016	23			ACR, RPA, SIR, S	4.17		Codes Reported Together	February 2010	000	4.17	1.45	26.35	0.58	35641	FALSE		TRUE	The Workgroup recommends the specia			Complete		TRUE	Decrease				
36216	Selective catheter place	Selective Catheter Placement	April 2016	23			ACR, SIR, SVS	5.27		Codes Reported Together	February 2010	000	5.27	1.62	25.69	1.01	3582	FALSE		TRUE	The Workgroup recommends the specia			Complete		TRUE	Maintain				
36217	Selective catheter place	Selective Catheter Placement	April 2016	23			ACR, SIR, SVS	6.29		Harvard Valued - Utilizatic	April 2011	000	6.29	2.00	45.90	1.37	3614	FALSE		TRUE	In September 2011, the specialty societ			Complete		TRUE	Maintain				
36218	Selective catheter place	Selective Catheter Placement	April 2016	23			ACR, SIR, SVS	1.01		CMS High Expenditure Pr	July 2015	ZZZ	1.01	0.32	5.04	0.19	1887	FALSE		FALSE						TRUE	Maintain				
36221	Non-selective catheter	Cervicocerebral Angiography	April 2012	14			AAN, AANS, ACC	4.51		Codes Reported Together	February 2010	000	3.92	1.06	24.97	0.84	1470	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36222	Selective catheter place	Cervicocerebral Angiography	April 2012	14			AAN, AANS, ACC	6.00		Codes Reported Together	February 2010	000	5.28	1.81	30.04	1.26	5479	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36223	Selective catheter place	Cervicocerebral Angiography	October 2020	24			AAN, AANS, ACC	6.50		Codes Reported Together	February 2010	000	5.75	2.31	42.03	1.56	26058	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36224	Selective catheter place	Cervicocerebral Angiography	October 2020	24			AAN, AANS, ACC	7.55		Codes Reported Together	February 2010	000	6.25	2.74	53.21	1.84	33880	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36225	Selective catheter place	Cervicocerebral Angiography	April 2012	14			AAN, AANS, ACC	6.50		Codes Reported Together	February 2010	000	5.75	2.23	39.29	1.55	9808	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36226	Selective catheter place	Cervicocerebral Angiography	April 2012	14			AAN, AANS, ACC	7.55		Codes Reported Together	February 2010	000	6.25	2.71	51.54	1.80	28735	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36227	Selective catheter place	Cervicocerebral Angiography	April 2012	14			AAN, AANS, ACC	2.32		Codes Reported Together	February 2010	ZZZ	2.09	0.86	4.52	0.59	15752	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36228	Selective catheter place	Cervicocerebral Angiography	April 2012	14			AAN, AANS, ACC	4.25		Codes Reported Together	February 2010	ZZZ	4.25	1.73	32.30	1.28	2216	FALSE		TRUE	The Workgroup re	February 2	12	Complete		TRUE	Decrease				
36245	Selective catheter place	Selective Catheter Placement	January 2013	22			ACC, ACR, SIR, S	4.90		Harvard Valued - Utilizatic	October 2009	XXX	4.65	1.42	31.96	0.80	33918	FALSE		TRUE	An extensive lowe	February 2	07 & 06	New code stru		TRUE	Decrease				
36246	Selective catheter place	Vascular Injection Procedures	October 2012	27			SVS, SIR, ACR, A	5.27		Harvard Valued - Utilizatic	February 2010	000	5.02	1.33	19.05	0.98	29820	FALSE		FALSE						TRUE	Maintain				
36247	Selective catheter place	Vascular Injection Procedures	October 2012	27			SVS, SIR, ACR, A	7.00		Harvard Valued - Utilizatic	February 2010	000	6.04	1.64	35.71	1.02	60496	FALSE		FALSE						TRUE	Increase				
36248	Selective catheter place	Catheter Placement	October 2009	40			ACR, SIR	Remove from screen		CMS Fastest Growing	October 2008	ZZZ	1.01	0.28	2.38	0.12	27375	FALSE		TRUE	The code is part o	February 2	07	New code stru		TRUE	Remove from Screen				
36251	Selective catheter place	Renal Angiography	April 2011	11			ACR, SIR	5.45		Codes Reported Together	February 2011	000	5.1	1.48	32.77	0.90	3041	FALSE		FALSE						TRUE	Decrease				
36252	Selective catheter place	Renal Angiography	April 2011	11			ACR, SIR	7.38		Codes Reported Together	February 2011	000	6.74	2.21	33.54	1.45	5249	FALSE		FALSE						TRUE	Decrease				
36253	Superselective catheter	Renal Angiography	April 2011	11			ACR, SIR	7.55		Codes Reported Together	February 2011	000	7.3	2.13	52.46	0.86	1747	FALSE		FALSE						TRUE	Decrease				
36254	Superselective catheter	Renal Angiography	April 2011	11			ACR, SIR	8.15		Codes Reported Together	February 2011	000	7.9	2.55	50.03	1.65	246	FALSE		FALSE						TRUE	Decrease				
36410	Venipuncture, age 3 yea	Venipunture	April 2010	36			ACP	0.18		Harvard Valued - Utilizatic	October 2009	XXX	0.18	0.07	0.32	0.02	145136	FALSE		FALSE						TRUE	Maintain				
36475	Endovenous ablation th	Endovenous Ablation	April 2014	38			ACC, ACR, ACS, S	5.30		High Volume Growth2	April 2013	000	5.3	1.72	26.06	1.11	87983	FALSE		FALSE						TRUE	Decrease				
36476	Endovenous ablation th	Endovenous Ablation	April 2014	38			ACC, ACR, ACS, S	2.65		High Volume Growth2	October 2013	ZZZ	2.65	0.71	5.30	0.56	5789	FALSE		FALSE						TRUE	Decrease				
36478	Endovenous ablation th	Endovenous Ablation	April 2014	38			ACC, ACR, ACS, S	5.30		High Volume Growth2	April 2013	000	5.3	1.76	23.11	1.06	34994	FALSE		FALSE						TRUE	Decrease				
36479	Endovenous ablation th	Endovenous Ablation	April 2014	38			ACC, ACR, ACS, S	2.65		High Volume Growth2	April 2013	ZZZ	2.65	0.77	5.79	0.54	3879	FALSE		FALSE						TRUE	Decrease				
36481	Percutaneous portal ve	Interventional Radiology Proce	February 2009	21			ACR, SIR	New PE Inputs		CMS Request - Practice E	NA	000	6.73	2.08	45.04	0.72	675	FALSE		FALSE						TRUE	PE Only				
36511	Therapeutic apheresis;	Therapeutic Apheresis	January 2017	12			CAP, RPA	2.00. Refer to CPT Assistant.		CMS Request - Final Rule	January 2017	000	2	1.10	NA	0.12	332	TRUE	May 2018	yes	FALSE		Septembe	30	yes		TRUE	Increase				
36512	Therapeutic apheresis;	Therapeutic Apheresis	January 2017	12			CAP, RPA	2.00. Refer to CPT Assistant.		CMS Request - Final Rule	January 2017	000	2	1.01	NA	0.12	2850	TRUE	May 2018	yes	FALSE		Septembe	30	yes		TRUE	Increase				
36513	Therapeutic apheresis;	Therapeutic Apheresis	January 2017	12			CAP, RPA	2.00. Refer to CPT Assistant.		CMS Request - Final Rule	January 2017	000	2	0.93	NA	0.19	229	TRUE	May 2018	yes	FALSE		Septembe	30	yes		TRUE	Increase				
36514	Therapeutic apheresis;	Therapeutic Apheresis	January 2017	12			CAP, RPA	1.81. Refer to CPT Assistant		CMS Request - Final Rule	January 2017	000	1.81	0.79	14.91	0.14	23495	TRUE	May 2018	yes	FALSE		Septembe	30	yes		TRUE	Increase				
36515	Therapeutic apheresis;	Therapeutic Apheresis	January 2017	12			CAP, RPA	Deleted from CPT		CMS Request - Final Rule	January 2017							TRUE	May 2018	yes	FALSE		Septembe	30	yes		TRUE	Deleted from CPT				
36516	Therapeutic apheresis;	Therapeutic Apheresis	January 2017	12			CAP, RPA	1.56. Refer to CPT Assistant		CMS Fastest Growing / CM	October 2008	000	1.56	0.65	50.95	0.30	1064	TRUE	Sep 2009	Yes	TRUE	CPT code 36516 w	Septembe	30	yes		TRUE	Increase				
36522	Photopheresis, extraco	Therapeutic Apheresis	January 2017	12			CAP, RPA	1.75. Refer to CPT Assistant		CMS Request - Final Rule	January 2017	000	1.75	0.96	38.81	0.12	7845	TRUE	May 2018	yes	FALSE		Septembe	30	yes		TRUE	Increase				
36555	Insertion of non-tunnel	Insertion of Catheter	October 2016	16	RUC		ACR, ASA	1.93		CMS High Expenditure Pr	July 2015	000	1.93	0.39	3.58	0.17	25	FALSE			FALSE					TRUE	Decrease				
36556	Insertion of non-tunnel	Insertion of Catheter	October 2016	16	RUC		ACR, ASA	1.75		CMS High Expenditure Pr	July 2015	000	1.75	0.51	4.44	0.22	388031	FALSE			FALSE					TRUE	Decrease				
36568	Insertion of peripherall	PICC Line Procedures	September 2022	13			ACR, SIR	2.11		Identified in RUC review c	October 2016	000	2.11	0.35	NA	0.25		FALSE		TRUE	In October 2016, ´	Septembe	16	Complete		TRUE	Decrease				
36569	Insertion of peripherall	PICC Line Procedures	September 2022	13			ACR, SIR	1.90.		CMS High Expenditure Pr	July 2015	000	1.9	0.59	NA	0.26	10837	FALSE		TRUE	In October 2016, ´	Septembe	16	Complete		TRUE	Decrease				
36572	Insertion of peripherall	PICC Line Procedures	September 2022	13			ACR, SIR, SVS	2.00		CMS High Expenditure Pr	September 2017	000	1.82	0.34	9.26	0.22	26	FALSE		FALSE						TRUE	Decrease				

36573	Insertion of peripherall	PICC Line Procedures	September 2022	13			ACR, SIR, SVS	1.90	CMS High Expenditure Pr	September 2017	000	1.7	0.59	9.70	0.18	68123	FALSE		FALSE						TRUE	Decrease
36584	Replacement, complete	PICC Line Procedures	September 2022	13			ACR, SIR	1.47	Identified in RUC review c	October 2016	000	1.2	0.40	8.52	0.12	3205	FALSE		TRUE	In October 2016, ´ Septembe	16	Complete			TRUE	Decrease
36620	Arterial catheterization	Insertion of Catheter	April 2018	33			ACR, ASA	1.00	CMS High Expenditure Pr	July 2015	000	1	0.21	NA	0.10	549202	FALSE		FALSE						TRUE	Decrease
36818	Arteriovenous anastom	Arteriovenous Anastomosis	October 2013	10			ACS, SVS	13.00	CMS Request - Final Rule	November 2012	090	12.39	4.81	NA	2.99	3491	FALSE		FALSE						TRUE	Increase
36819	Arteriovenous anastom	Arteriovenous Anastomosis	October 2013	10			ACS, SVS	15.00	CMS Request - Final Rule	November 2012	090	13.29	4.86	NA	3.22	5100	FALSE		FALSE						TRUE	Increase
36820	Arteriovenous anastom	Arteriovenous Anastomosis	October 2013	10			ACS, SVS	13.99	Site of Service Anomaly /	September 2007	090	13.07	5.00	NA	3.11	993	FALSE		FALSE						TRUE	Decrease
36821	Arteriovenous anastom	Arteriovenous Anastomosis	October 2013	10			ACS, SVS	11.90	Site of Service Anomaly /	September 2007	090	11.9	4.59	NA	2.87	23830	FALSE		FALSE						TRUE	Decrease
36822	Insertion of cannula(s) f	ECMO-ECLS	April 2014	11			STS, AAP, ACC, S	Deleted from CPT	CMS Request - Final Rule	February 2011							FALSE		TRUE	Added as part of :	February 2	23	Complete	TRUE	Deleted from CPT
36825	Creation of arterioveno	Arteriovenous Anastomosis	October 2013	10			ACS, SVS	15.93	Site of Service Anomaly /	September 2007	090	14.17	5.63	NA	3.44	1393	FALSE		FALSE						TRUE	Increase
36830	Creation of arterioveno	Arteriovenous Anastomosis	October 2013	10			ACS, SVS	11.90	CMS Request - Final Rule	November 2012	090	12.03	4.59	NA	2.89	14683	FALSE		FALSE						TRUE	Decrease
36834	Deleted from CPT	Aneurysm Repair	September 2007	16			AVA, ACS	Deleted from CPT	Site of Service Anomaly	September 2007							FALSE		TRUE	The RUC referred	February 2	18	Code Deleted	TRUE	Deleted from CPT
36870	Thrombectomy, percut	Dialysis Circuit -1	January 2016	14		RUC	ACR, SIR, SVS	Deleted from CPT	Site of Service Anomaly (S	September 2007							FALSE		TRUE	The RUC reviewe	October 2(	27	Complete	TRUE	Deleted from CPT
36901	Introduction of needle(	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	3.36	Codes Reported Together	October 2015	000	3.36	1.04	17.35	0.51	48016	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36902	Introduction of needle(	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	4.83	Codes Reported Together	October 2015	000	4.83	1.46	30.80	0.69	145675	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36903	Introduction of needle(	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	6.39	Codes Reported Together	October 2015	000	6.39	1.80	121.63	0.98	14972	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36904	Percutaneous translum	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	7.50	Codes Reported Together	October 2015	000	7.5	2.15	45.92	1.08	2803	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36905	Percutaneous translum	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	9.00	Codes Reported Together	October 2015	000	9	2.69	58.42	1.21	28025	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36906	Percutaneous translum	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	10.42	Codes Reported Together	October 2015	000	10.42	2.97	151.66	1.48	10192	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36907	Transluminal balloon ar	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	3.00	Codes Reported Together	October 2015	ZZZ	3	0.82	14.32	0.44	51014	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36908	Transcatheter placeme	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	4.25	Codes Reported Together	October 2015	ZZZ	4.25	1.09	37.75	0.67	3740	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
36909	Dialysis circuit permane	Dialysis Circuit -1	January 2016	14		RUC	ACR, RPA, SIR, S	4.12	Codes Reported Together	October 2015	ZZZ	4.12	1.09	52.90	0.65	4288	FALSE		FALSE		October 2(	27	Complete	TRUE	Decrease
37183	Revision of transvenous	Interventional Radiology Proce	February 2009	21			ACR, SIR	New PE inputs	CMS Request - Practice Ex	NA	000	7.74	2.38	168.49	0.79	832	FALSE		FALSE						TRUE	PE Only
37191	Insertion of intravascul	IVC Transcatheter Procedure	April 2011	12			ACR, SIR, SVS	4.71	Codes Reported Together	February 2011	000	4.46	1.36	56.27	0.64	22544	FALSE		FALSE		February 2	15		TRUE	Decrease
37192	Repositioning of intrave	IVC Transcatheter Procedure	April 2011	12			ACR, SIR, SVS	8.00	Codes Reported Together	February 2011	000	7.1	1.20	29.62	1.72	22	FALSE		FALSE		February 2	15		TRUE	Decrease
37193	Retrieval (removal) of ir	IVC Transcatheter Procedure	April 2011	12			ACR, SIR, SVS	8.00	Codes Reported Together	February 2011	000	7.1	1.99	37.06	1.00	6002	FALSE		FALSE		February 2	15		TRUE	Decrease
37201	Transcatheter therapy,	Bundle Thrombolysis	April 2012	15			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE	The Workgroup a	October 2(	18	Complete	TRUE	Deleted from CPT
37203	Transcatheter retrieval,	Transcatheter Procedures	September 2011	07			ACC, ACR, SIR, S	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE	The Workgroup a	June 2011		Complete	TRUE	Deleted from CPT
37204	Transcatheter occlusion	Embolization and Occlusion Prc	April 2013	08			ACC, ACR, SIR, S	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE	In February 2010,	February 2	09	Complete	TRUE	Deleted from CPT
37205	Transcatheter placeme	Endovascular Revascularization	April 2010	07			SVS, ACS, SIR, A	Deleted from CPT	High Volume Growth1 / C	February 2010							FALSE		TRUE	In February 2010,	February 2	10	Complete	TRUE	Deleted from CPT
37206	Transcatheter placeme	Endovascular Revascularization	April 2010	07			SVS, ACS, SIR, A	Deleted from CPT	High Volume Growth1	February 2010							FALSE		TRUE	In February 2010,	February 2	10	Complete	TRUE	Deleted from CPT
37207	Transcatheter placeme	Endovascular Revascularization	April 2010	07			SVS, ACS, SIR, A	Deleted from CPT	High Volume Growth1	February 2010							FALSE		TRUE	In February 2010,	February 2	10	Complete	TRUE	Deleted from CPT
37208	Transcatheter placeme	Endovascular Revascularization	April 2010	07			SVS, ACS, SIR, A	Deleted from CPT	High Volume Growth1	February 2010							FALSE		TRUE	In February 2010,	February 2	10	Complete	TRUE	Deleted from CPT
37209	Exchange of a previous	Bundle Thrombolysis	April 2012	15			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE	The Workgroup a	October 2(	18	Complete	TRUE	Deleted from CPT
37210	Uterine fibroid emboliz	Embolization and Occlusion Prc	April 2013	08			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE		February 2	09	Complete	TRUE	Deleted from CPT
37211	Transcatheter therapy,	Bundle Thrombolysis	April 2012	15			ACR, SIR, SVS	8.00	Codes Reported Together	February 2010	000	7.75	2.10	NA	1.39	8940	FALSE		FALSE						TRUE	Decrease
37212	Transcatheter therapy,	Bundle Thrombolysis	April 2012	15			ACR, SIR, SVS	7.06	Codes Reported Together	February 2010	000	6.81	1.89	NA	1.13	1794	FALSE		FALSE						TRUE	Decrease
37213	Transcatheter therapy,	Bundle Thrombolysis	April 2012	15			ACR, SIR, SVS	5.00	Codes Reported Together	February 2010	000	4.75	1.18	NA	0.79	1435	FALSE		FALSE						TRUE	Decrease
37214	Transcatheter therapy,	Bundle Thrombolysis	April 2012	15			ACR, SIR, SVS	3.04	Codes Reported Together	February 2010	000	2.49	0.64	NA	0.43	4081	FALSE		FALSE						TRUE	Decrease
37220	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2023	RUC	SVS, ACS, SIR, A	Refer to CPT. 8.15	High Volume Growth1	February 2010	000	7.9	2.02	65.92	1.72	11391	FALSE		TRUE	In October 2018,	February 2024				TRUE	Decrease
37221	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 10.00	High Volume Growth1	February 2010	000	9.75	2.43	81.05	2.15	29005	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37222	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 3.73	High Volume Growth1	February 2010	ZZZ	3.73	0.86	13.95	0.80	3143	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37223	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 4.25	High Volume Growth1	February 2010	ZZZ	4.25	0.95	33.20	0.95	4297	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37224	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 9.00	High Volume Growth1	February 2010	000	8.75	2.24	77.46	1.93	29781	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37225	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT.	High Volume Growth1 / P	February 2010	000	11.75	3.15	250.10	2.48	40461	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37226	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 10.49	High Volume Growth1	February 2010	000	10.24	2.57	233.49	2.28	20103	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37227	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 14.50	High Volume Growth1 / P	February 2010	000	14.25	3.58	321.29	3.02	20679	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37228	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 11.00	High Volume Growth1	February 2010	000	10.75	2.66	112.07	2.33	30844	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37229	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 14.05	High Volume Growth1 / P	February 2010	000	13.8	3.61	252.05	2.76	38048	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37230	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 13.80	High Volume Growth1	February 2010	000	13.55	3.68	252.54	2.91	2410	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37231	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 15.00	High Volume Growth1	February 2010	000	14.75	3.95	337.92	2.64	3084	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37232	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 4.00	High Volume Growth1	February 2010	ZZZ	4	0.99	19.89	0.79	14007	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37233	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 6.50	High Volume Growth1	February 2010	ZZZ	6.5	1.63	23.60	1.24	8996	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37234	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 5.50	High Volume Growth1	February 2010	ZZZ	5.5	1.53	102.90	1.13	353	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37235	Revascularization, endo	Endovascular Revascularization	April 2022	16	April 2024	RUC	SVS, ACS, SIR, A	Refer to CPT. 7.80	High Volume Growth1	February 2010	ZZZ	7.8	1.92	110.58	1.06	468	FALSE		TRUE	In October 2018,	February 2024				FALSE	Decrease
37236	Transcatheter placeme	Transcatheter Placement of Int	April 2013	09			SVS, ACS, SIR, A	9.00	Codes Reported Together	February 2013	000	8.75	2.23	72.21	1.88	10944	FALSE		FALSE		February 2	10	Complete	TRUE	Decrease
37237	Transcatheter placeme	Transcatheter Placement of Int	April 2013	09			SVS, ACS, SIR, A	4.25	Codes Reported Together	February 2013	ZZZ	4.25	0.95	33.77	0.91	1315	FALSE		FALSE		February 2	10	Complete	TRUE	Decrease
37238	Transcatheter placeme	Transcatheter Placement of Int	April 2013	09			SVS, ACS, SIR, A	6.29	Codes Reported Together	February 2013	000	6.04	1.72	96.87	1.14	10623	FALSE		FALSE		February 2	10	Complete	TRUE	Decrease
37239	Transcatheter placeme	Transcatheter Placement of Int	April 2013	09			SVS, ACS, SIR, A	3.34	Codes Reported Together	February 2013	ZZZ	2.97	0.82	48.12	0.58	3979	FALSE		FALSE		February 2	10	Complete	TRUE	Decrease
37241	Vascular embolization c	Embolization and Occlusion Prc	April 2013	08			SVS, ACS, SIR, A	9.00	Codes Reported Together	February 2010	000	8.75	2.45	130.77	1.31	1680	FALSE		FALSE		February 2	09		TRUE	Decrease
37242	Vascular embolization c	Embolization and Occlusion Prc	April 2013	08			SVS, ACS, SIR, A	11.98	Codes Reported Together	February 2010	000	9.8	2.56	203.70	1.51	8142	FALSE		FALSE		February 2	09		TRUE	Decrease
37243	Vascular embolization c	Embolization and Occlusion Prc	April 2013	08			SVS, ACS, SIR, A	14.00	Codes Reported Together	February 2010	000	11.74	3.37	248.20	1.20	13902	FALSE		FALSE		February 2	09		TRUE	Decrease
37244	Vascular embolization c	Embolization and Occlusion Prc	April 2013	08			SVS, ACS, SIR, A	14.00	Codes Reported Together	February 2010	000	13.75	4.07	184.06	1.45	13555	FALSE		FALSE		February 2	09		TRUE	Decrease
37246	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15		RUC	ACR, SIR, SVS	7.00	Codes Reported Together	October 2015	000	7	1.86	46.47	1.26	6890	FALSE		FALSE		October 2(	24	Complete	TRUE	Decrease
37247	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15		RUC	ACR, SIR, SVS	3.50	Codes Reported Together	October 2015	ZZZ	3.5	0.80	12.75	0.71	736	FALSE		FALSE		October 2(	24	Complete	TRUE	Decrease
37248	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15		RUC	ACR, SIR, SVS	6.00	Codes Reported Together	October 2015	000	6	1.78	34.02	0.85	13541	FALSE		FALSE		October 2(	24	Complete	TRUE	Decrease
37249	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15		RUC	ACR, SIR, SVS	2.97	Codes Reported Together	October 2015	ZZZ	2.97	0.75	9.78	0.51	3775	FALSE		FALSE		October 2(	24	Complete	TRUE	Decrease
37250	Intravascular ultrasoun	Intravascular Ultrasound	January 2015	07			ACC, SCAI, SIR, S	Deleted from CPT	Final Rule for 2015	July 2014							FALSE		TRUE	A CCP was submit	October 2(	13	Complete	TRUE	Deleted from CPT
37251	Intravascular ultrasoun	Intravascular Ultrasound	January 2015	07			ACC,SCAI, SIR, S	Deleted from CPT	Final Rule for 2015	July 2014							FALSE		TRUE	A CCP was submit	October 2(	13	Complete	TRUE	Deleted from CPT
37252	Intravascular ultrasoun	Intravascular Ultrasound	October 2018	14			ACC,SCAI, SIR, S	1.80	Final Rule for 2015 / Work	July 2014	ZZZ	1.8	0.45	26.58	0.35	70937	FALSE		FALSE		October 2(	13	Complete	TRUE	Decrease
37253	Intravascular ultrasoun	Intravascular Ultrasound	October 2018	14			ACC,SCAI, SIR, S	1.44	Final Rule for 2015 / Work	July 2014	ZZZ	1.44	0.36	3.42	0.26	107202	FALSE		FALSE		October 2(	13	Complete	TRUE	Decrease
37609	Ligation or biopsy, temp	Ligation	September 2007	16			SVS, ACS	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	010	3.05	2.40	5.69	0.65	11304	FALSE		FALSE						TRUE	PE Only
37619	Ligation of inferior vena	Ligation of Inferior Vena Cava	April 2011	13			ACS, SVS	37.60	Codes Reported Together	February 2011	090	30	13.82	NA	7.54	24	FALSE		FALSE		February 2	15		TRUE	Increase
37620	Interruption, partial or i	Major Vein Revision	April 2010	45			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE	The Workgroup a	February 2	15	Code Deleted	TRUE	Deleted from CPT
37760	Ligation of perforator v	Perforator Vein Ligation	April 2009	10			SVS, ACS	10.69	Site of Service Anomaly	September 2007	090	10.78	3.50	NA	2.63	54	FALSE		TRUE	The RUC referred	February 2	19	Complete	TRUE	Maintain
37761	Ligation of perforator v	Perforator Vein Ligation	April 2009	10			SVS, ACS	9.00	Site of Service Anomaly	April 2009	090	9.13	4.64	NA	2.16	209	FALSE		FALSE						TRUE	Increase
37765	Stab phlebectomy of va	Stab Phlebectomy of Varicose \	April 2018	12			ACS, SIR, SVS	4.80	High Volume Growth1 / C	February 2008	010	4.8	2.10	6.80	1.06	10418	FALSE		FALSE						TRUE	Decrease
37766	Stab phlebectomy of va	Stab Phlebectomy of Varicose \	April 2018	12			ACS, SIR, SVS	6.00	High Volume Growth1 / C	February 2008	010	6	2.45	7.56	1.29	8063	FALSE		FALSE						TRUE	Decrease
37785	Ligation, division, and/c	Ligation	September 2007	16			APMA, SVS, ACS	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	090	3.93	2.67	5.60	0.92	797	FALSE		FALSE						TRUE	PE Only
38220	Diagnostic bone marrov	Diagnostic Bone Marrow Aspira	April 2016	06			ASCO, ASH, CAP	1.20	CMS High Expenditure Pr	February 2016	XXX	1.2	0.70	3.34	0.10	4593	FALSE		FALSE		February 2	16	Complete	TRUE	Decrease
38221	Diagnostic bone marrov	Diagnostic Bone Marrow Aspira	April 2016	06			ASCO, ASH, CAP	1.28	CMS High Expenditure Pr	July 2015	XXX	1.28	0.69	3.44	0.10	7932	FALSE		TRUE	Prior to the Janua	February 2	16	Complete	TRUE	Decrease
38222	Diagnostic bone marrov	Diagnostic Bone Marrow Aspira	April 2016	06			ASCO, ASH, CAP	1.44	CMS High Expenditure Pr	February 2016	XXX	1.44	0.67	3.67	0.12	119073	FALSE		FALSE		February 2	16	Complete	TRUE	Decrease
38505	Biopsy or excision of lyr	Needle Biopsy of Lymph Nodes	October 2020	15			ACR, SIR	1.59	Harvard Valued - Utilizatic	October 2019	000	1.59	0.78	3.54	0.17	35811	FALSE		FALSE						TRUE	Increase
38542	Dissection, deep jugula	Jugular Node Dissection	April 2008	40			ACS, AAO-HNS	7.85	Site of Service Anomaly	September 2007	090	7.95	6.41	NA	1.33	513	FALSE		FALSE						TRUE	Increase
38570	Laparoscopy, surgical; v	Laparoscopy Lymphadenectom	September 2014	12			AUA	9.34	010-Day Global Post-Oper	January 2014	010	8.49	5.41	NA	1.45	6701	FALSE		FALSE						TRUE	Maintain
38571	Laparoscopy, surgical; v	Laparoscopy Lymphadenectom	September 2014	12			AUA	12.00	CMS Fastest Growing / 01	October 2008	010	12	6.04	NA	1.54	17578	FALSE		FALSE						TRUE	Decrease
38572	Laparoscopy, surgical; v	Laparoscopy Lymphadenectom	September 2014	12			ACOG	15.60	010-Day Global Post-Oper	January 2014	010	15.6	8.88	NA	2.45	1653	FALSE		FALSE						TRUE	Decrease
38792	Injection procedure; ra	Radioactive Tracer	January 2018	23				0.65	Negative IWPUT	April 2017	000	0.65	0.23	1.74	0.08	29868	FALSE		FALSE						TRUE	Increase
39400	Mediastinoscopy, inclu	Mediastinoscopy with Biopsy	January 2015	08			STS	Deleted from CPT	Pre-Time Analysis	January 2014							FALSE		TRUE	Referred to CPT fc	October 2(	14	Complete	TRUE	Deleted from CPT
39401	Mediastinoscopy; inclu	Mediastinoscopy with Biopsy	January 2015	08			STS	5.44	Pre-Time Analysis	October 2014	000	5.44	2.34	NA	1.28	290	FALSE		FALSE		October 2(	14	Complete	TRUE	Decrease
39402	Mediastinoscopy; with	Mediastinoscopy with Biopsy	January 2015	08			STS	7.50	Pre-Time Analysis	October 2014	000	7.25	2.86	NA	1.72	2748	FALSE		FALSE		October 2(	14	Complete	TRUE	Increase
40490	Biopsy of lip	Biopsy of Lip	September 2011	21			AAO-HNS, AAD	1.22	Harvard Valued - Utilizatic	April 2011	000	1.22	0.71	2.34	0.12	28071	FALSE		FALSE						TRUE	Maintain
40650	Repair lip, full thickness	PE Subcommittee	April 2016	46			AAOS, ACEP, an	PE Clinical staff pre-time revise	Emergent Procedures	October 2015	090	3.78	4.94	10.00	0.73	357	TRUE	Nov 2016 yes	FALSE						TRUE	PE Only
40800	Drainage of abscess, cy	RAW	April 2014	52				Maintain	010-Day Global Post-Oper	January 2014	010	1.23	2.19	4.73	0.12	2825	FALSE		FALSE						TRUE	Maintain
40801	Drainage of abscess, cy	Ostectomy	January 2020	37			APMA, AAOS	Maintain. Reduced 99238 to 0.	Site of Service Anomaly (S	September 2007	010	2.63	3.00	5.81	0.26	1435	FALSE		FALSE						TRUE	PE Only
40808	Biopsy, vestibule of mo	Biopsy of Mouth Lesion	April 2018	13			AAOHNS, AAOM	1.05	Negative IWPUT	April 2017	010	1.05	1.48	3.93	0.12	9052	FALSE		FALSE						TRUE	Increase
40812	Excision of lesion of mu	RAW	April 2014	52				Maintain	010-Day Global Post-Oper	January 2014	010	2.37	2.87	5.84	0.26	7021	FALSE		FALSE						TRUE	Maintain
40820	Destruction of lesion or	RAW	April 2014	52				Maintain	010-Day Global Post-Oper	January 2014	010	1.34	3.50	6.31	0.14	1357	FALSE		FALSE						TRUE	Maintain
41530	Submucosal ablation of	Submucosal ablation of tongue	April 2015	26		RUC	AAO-HNS	3.50	Final Rule for 2015	July 2014	000	3.5	7.39	23.82	0.47	142	FALSE		FALSE						TRUE	Decrease
42145	Palatopharyngoplasty (a	Palatopharyngoplasty	April 2008	41			AAO-HNS	9.63	Site of Service Anomaly	September 2007	090	9.78	9.53	NA	1.38	373	FALSE		FALSE						TRUE	Maintain
42415	Excision of parotid tum	Excise Parotid Gland/Lesion	February 2011	27			ACS, AAO-HNS	18.12	Site of Service Anomaly	September 2007	090	17.16	12.08	NA	2.50	4761	FALSE		FALSE						TRUE	Maintain
42420	Excision of parotid tum	Excise Parotid Gland/Lesion	February 2011	27			ACS, AAO-HNS	21.00	Site of Service Anomaly	September 2007	090	19.53	13.18	NA	2.84	1333	FALSE		FALSE						TRUE	Maintain
42440	Excision of submandibu	Submandibular Gland Excision	October 2010	64			AAO-HNS, ACS	7.13	Site of Service Anomaly	September 2007	090	6.14	5.48	NA	0.90	1573	FALSE		FALSE						TRUE	Maintain

43191	Esophagoscopy, rigid, t	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	2.78	MPC List	September 2011	000	2.49	1.77	NA	0.37	2355	FALSE			FALSE						TRUE	Increase
43192	Esophagoscopy, rigid, t	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	3.21	MPC List	September 2011	000	2.79	1.86	NA	0.41	241	FALSE			FALSE						TRUE	Increase
43193	Esophagoscopy, rigid, t	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	3.36	MPC List	September 2011	000	2.79	1.85	NA	0.40	203	FALSE			FALSE						TRUE	Increase
43194	Esophagoscopy, rigid, t	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	3.99	MPC List	September 2011	000	3.51	1.63	NA	0.58	100	FALSE			FALSE						TRUE	Increase
43195	Esophagoscopy, rigid, t	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	3.21	MPC List	September 2011	000	3.07	2.00	NA	0.44	560	FALSE			FALSE						TRUE	Increase
43196	Esophagoscopy, rigid, t	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	3.36	MPC List	September 2011	000	3.31	2.06	NA	0.44	377	FALSE			FALSE						TRUE	Increase
43197	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	1.59	MPC List	September 2011	000	1.52	0.68	4.02	0.23	980	FALSE			FALSE						TRUE	Maintain
43198	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AAO-HNS, ASGE	1.89	MPC List	September 2011	000	1.82	0.85	4.33	0.25	279	FALSE			FALSE						TRUE	Maintain
43200	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AAO-HNS, AGA,	1.59	MPC List	September 2011	000	1.42	0.95	6.32	0.22	4084	FALSE			FALSE		May 2012				TRUE	Maintain
43201	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	1.90	MPC List	September 2011	000	1.72	1.08	5.87	0.25	182	FALSE			FALSE		May 2012				TRUE	Decrease
43202	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AAO-HNS, AGA,	1.89	MPC List	September 2011	000	1.72	1.08	8.83	0.23	1889	FALSE			FALSE		May 2012				TRUE	Maintain
43204	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	2.89	MPC List	September 2011	000	2.33	1.37	NA	0.27	11	FALSE			FALSE		May 2012				TRUE	Decrease
43205	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	3.00	MPC List	September 2011	000	2.44	1.42	NA	0.27	84	FALSE			FALSE		May 2012				TRUE	Decrease
43206	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	2.39	MPC List	September 2011	000	2.29	1.35	6.54	0.26	20	FALSE			FALSE						TRUE	Decrease
43211	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	4.58	MPC List	September 2011	000	4.2	2.20	NA	0.49	87	FALSE			FALSE						TRUE	Decrease
43212	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	3.73	MPC List	September 2011	000	3.4	1.60	NA	0.58	524	FALSE			FALSE						TRUE	Decrease
43213	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	5.00	MPC List	September 2011	000	4.63	2.30	32.10	0.73	236	FALSE			FALSE						TRUE	Decrease
43214	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	3.78	MPC List	September 2011	000	3.4	1.83	NA	0.50	182	FALSE			FALSE						TRUE	Decrease
43215	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AAO-HNS, AGA,	2.60	MPC List	September 2011	000	2.44	1.34	9.04	0.37	776	FALSE			FALSE		May 2012				TRUE	Maintain
43216	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	2.40	MPC List	September 2011	000	2.3	1.34	9.78	0.27	117	FALSE			FALSE		May 2012				TRUE	Maintain
43217	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	2.90	MPC List	September 2011	000	2.8	1.57	9.54	0.31	28	FALSE			FALSE		May 2012				TRUE	Maintain
43219	Esophagoscopy, rigid or	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		May 2012				TRUE	Deleted from CPT
43220	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	2.10	MPC List	September 2011	000	2	1.20	25.01	0.27	1733	FALSE			FALSE		May 2012				TRUE	Maintain
43226	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AAO-HNS, AGA,	2.34	MPC List	September 2011	000	2.24	1.25	9.06	0.35	1295	FALSE			FALSE		May 2012				TRUE	Maintain
43227	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	3.26	MPC List	September 2011	000	2.89	1.59	14.68	0.36	147	FALSE			FALSE		May 2012				TRUE	Decrease
43228	Esophagoscopy, rigid or	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		May 2012				TRUE	Deleted from CPT
43229	Esophagoscopy, flexible	Esophagoscopy	October 2012	10		AGA, ASGE, SAG	3.72	MPC List	September 2011	000	3.49	1.85	17.53	0.43	1325	FALSE			FALSE						TRUE	Decrease
43231	Esophagoscopy, flexible	Esophagoscopy	April 2013	10		AGA, ASGE, SAG	3.19	MPC List	September 2011	000	2.8	1.53	NA	0.30	552	FALSE			FALSE		May 2012				TRUE	Maintain
43232	Esophagoscopy, flexible	Esophagoscopy	April 2013	10		AGA, ASGE, SAG	3.83	MPC List	September 2011	000	3.59	1.82	NA	0.38	278	FALSE			FALSE		May 2012				TRUE	Decrease
43233	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.45	MPC List	October 2012	000	4.07	2.05	NA	0.59	1202	FALSE			FALSE		October 2(	14	Complete		TRUE	Decrease
43234	Upper gastrointestinal	Esophagoscopy	April 2013	10		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			TRUE	Several specific cc	February 2 11		Complete		TRUE	Deleted from CPT
43235	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	2.26	MPC List / CMS High Expe	October 2010	000	2.09	1.25	6.31	0.26	260048	FALSE			FALSE		October 2(	14	Complete		TRUE	Decrease
43236	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	2.57	CMS Fastest Growing / M	October 2008	000	2.39	1.38	9.42	0.27	14280	TRUE	Apr 2009 a	Yes	FALSE		October 2(	14	Complete		TRUE	Decrease
43237	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, SAG	3.85	MPC List	September 2011	000	3.47	1.87	NA	0.40	18750	FALSE			TRUE	In the Panel Actio	February 2 12		Complete		TRUE	Decrease
43238	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, SAG	4.50	MPC List	September 2011	000	4.16	2.17	NA	0.47	15422	FALSE			TRUE	In the Panel Actio	February 2 12		Complete		TRUE	Decrease
43239	Esophagogastroduoder	EGD with Biopsy	April 2019	12		ACG, ACS, AGA,	2.39	MPC List / CMS Request -	October 2010	000	2.39	1.38	8.66	0.29	1250880	FALSE			FALSE						TRUE	Maintain
43240	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, SAG	7.25	MPC List	September 2011	000	7.15	3.49	NA	0.82	1060	FALSE			TRUE	In the Panel Actio	February 2 12		Complete		TRUE	Increase
43241	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	2.59	MPC List	September 2011	000	2.49	1.37	NA	0.30	4394	FALSE			FALSE		October 2012				TRUE	Maintain
43242	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, ACG	5.39	CMS Fastest Growing / M	October 2008	000	4.73	2.43	NA	0.55	23927	TRUE	Mar 2009	Yes	TRUE	In the Panel Actio	February 2 12		Complete		TRUE	Decrease
43243	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.37	MPC List	September 2011	000	4.27	2.15	NA	0.54	407	FALSE			FALSE		October 2012				TRUE	Decrease
43244	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.50	MPC List	September 2011	000	4.4	2.28	NA	0.50	18874	FALSE			FALSE		October 2012				TRUE	Decrease
43245	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	3.18	MPC List	September 2011	000	3.08	1.65	14.43	0.43	12832	FALSE			FALSE		October 2012				TRUE	Maintain
43246	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, SAG	4.32	MPC List	September 2011	000	3.56	1.79	NA	0.54	62104	FALSE			FALSE		October 2012				TRUE	Maintain
43247	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	3.27	MPC List	September 2011	000	3.11	1.68	8.02	0.40	24338	FALSE			FALSE		October 2012				TRUE	Decrease
43248	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	3.01	MPC List	September 2011	000	2.91	1.61	9.17	0.35	91867	FALSE			FALSE		October 2012				TRUE	Decrease
43249	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	2.77	MPC List	September 2011	000	2.67	1.50	29.69	0.34	115128	FALSE			FALSE		October 2012				TRUE	Decrease
43250	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	3.07	MPC List	September 2011	000	2.97	1.60	10.19	0.43	3098	FALSE			FALSE		October 2012				TRUE	Decrease
43251	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, SAG	3.57	MPC List	September 2011	000	3.47	1.86	11.03	0.42	37007	FALSE			FALSE		October 2012				TRUE	Decrease
43253	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, SAG	5.39	MPC List	February 2012	000	4.73	2.42	NA	0.55	2054	FALSE			TRUE	In the Panel Actio	February 2 12		Complete		TRUE	Decrease
43254	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	5.25	MPC List	October 2012	000	4.87	2.48	NA	0.56	5572	FALSE			FALSE		October 2(	14	Complete		TRUE	Decrease
43255	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.20	MPC List	September 2011	000	3.56	1.90	14.92	0.41	56328	FALSE			FALSE		October 2012				TRUE	Decrease
43256	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		October 2012				TRUE	Deleted from CPT
43257	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.25	MPC List	September 2011	000	4.15	2.11	NA	0.55	111	FALSE			FALSE		October 2012				TRUE	Decrease
43258	Upper gastrointestinal	EGD	January 2013	08		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		October 2(	14	Complete		TRUE	Deleted from CPT
43259	Esophagogastroduoder	EGD	April 2013	11		AGA, ASGE, ACG	4.74	CMS Fastest Growing	October 2008	000	4.04	2.12	NA	0.44	30363	TRUE	Mar 2009	Yes	TRUE	In the Panel Actio	February 2 12		Complete		TRUE	Decrease
43260	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	5.95	MPC List	September 2011	000	5.85	2.91	NA	0.67	3868	FALSE			TRUE	Several specific cc	February 2 13		Complete		TRUE	Maintain
43261	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	6.25	MPC List	September 2011	000	6.15	3.04	NA	0.72	6723	FALSE			FALSE		January 2013				TRUE	Decrease
43262	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	6.60	MPC List	September 2011	000	6.5	3.20	NA	0.75	26342	FALSE			FALSE		January 2013				TRUE	Decrease
43263	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	7.28	MPC List	September 2011	000	6.5	3.21	NA	0.75	35	FALSE			FALSE		February 2 13				TRUE	Maintain
43264	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	6.73	Harvard Valued - Utilizatic	April 2011	000	6.63	3.25	NA	0.77	53429	FALSE			FALSE		February 2 13				TRUE	Decrease
43265	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	8.03	MPC List	September 2011	000	7.93	3.82	NA	0.91	2356	FALSE			FALSE		February 2 13				TRUE	Decrease
43266	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.40	MPC List	October 2012	000	3.92	1.95	NA	0.51	5790	FALSE			FALSE		October 2(	14	Complete		TRUE	Decrease
43267	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		February 2 13				TRUE	Deleted from CPT
43268	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	Deleted from CPT	Harvard Valued - Utilizatic	April 2011							FALSE			FALSE		February 2 13				TRUE	Deleted from CPT
43269	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		February 2 13				TRUE	Deleted from CPT
43270	Esophagogastroduoder	EGD	January 2013	08		AGA, ASGE, SAG	4.39	MPC List	October 2012	000	4.01	2.10	17.55	0.46	18701	FALSE			FALSE		October 2(	14	Complete		TRUE	Decrease
43271	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		February 2 13				TRUE	Deleted from CPT
43272	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		February 2 13				TRUE	Deleted from CPT
43273	Endoscopic cannulatior	ERCP	April 2013	12		AGA, ASGE, SAG	2.24	MPC List	September 2011	ZZZ	2.24	0.98	NA	0.25	7580	FALSE			FALSE		February 2 13				TRUE	Maintain
43274	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	8.74	MPC List	September 2011	000	8.48	4.07	NA	0.98	40976	FALSE			FALSE		February 2 13				TRUE	Decrease
43275	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	6.96	MPC List	September 2011	000	6.86	3.35	NA	0.79	13323	FALSE			FALSE		February 2 13				TRUE	Decrease
43276	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	9.10	MPC List	September 2011	000	8.84	4.23	NA	1.02	15625	FALSE			FALSE		February 2 13				TRUE	Decrease
43277	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	7.11	MPC List	September 2011	000	6.9	3.38	NA	0.79	6066	FALSE			FALSE		February 2 13				TRUE	Decrease
43278	Endoscopic retrograde	ERCP	April 2013	12		AGA, ASGE, SAG	8.08	MPC List	September 2011	000	7.92	3.82	NA	0.91	453	FALSE			FALSE		February 2 13				TRUE	Decrease
43450	Dilation of esophagus, l	Dilation of Esophagus	October 2012	17		AGA, ASGE, SAG	1.30	MPC List	September 2011	000	1.28	0.91	4.19	0.17	57300	FALSE			FALSE						TRUE	Decrease
43453	Dilation of esophagus, (	Dilation of Esophagus	October 2012	17		AGA, ASGE, SAG	1.51	MPC List	September 2011	000	1.41	0.95	22.69	0.19	1120	FALSE			FALSE		May 2012				TRUE	Maintain
43456	Dilation of esophagus, I	Dilation of Esophagus	October 2012	17		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		October 2(	14	Complete		TRUE	Deleted from CPT
43458	Dilation of esophagus v	Dilation of Esophagus	October 2012	17		AGA, ASGE, SAG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		October 2(	14	Complete		TRUE	Deleted from CPT
43760	Change of gastrostomy	Gastrostomy Tube Replacemen	January 2018	11		ACEP, ACG, ACS	Deleted from CPT	CMS 000-Day Global Typic	July 2016							FALSE			TRUE	In April 2017, the	Septembe	18	Complete		TRUE	Deleted from CPT
43762	Replacement of gastros	Gastrostomy Tube Replacemen	January 2022	20	January 20	RAW	ACEP, ACG, ACS	0.75. CPT Assistant article	CMS 000-Day Global Typic	September 2017	000	0.75	0.22	5.98	0.12	45559	TRUE	June 2022 complete	FALSE						TRUE	Decrease
43763	Replacement of gastros	Gastrostomy Tube Replacemen	January 2022	20	January 20	RAW	ACEP, ACG, ACS	1.41. CPT Assistant article.	CMS 000-Day Global Typic	September 2017	000	1.41	0.91	8.48	0.27	2014	TRUE	June 2022 complete	FALSE						TRUE	Decrease
44143	Colectomy, partial; with	RAW	January 2016	54				99214 visit appropriate. Remo	High Level E/M in Global F	October 2015	090	27.79	15.02	NA	6.40	8737	FALSE			FALSE						TRUE	Remove from Screen
44205	Laparoscopy, surgical; c	Laproscopic Procedures	October 2008	26		ACS, ASCRS		Remove from screen	CMS Fastest Growing	October 2008	090	22.95	11.96	NA	4.71	10846	FALSE			FALSE						TRUE	Remove from Screen
44207	Laparoscopy, surgical; c	Laproscopic Procedures	October 2008	26		ACS, ASCRS		Remove from screen	CMS Fastest Growing	February 2008	090	31.92	15.50	NA	6.23	8667	FALSE			FALSE						TRUE	Remove from Screen
44380	Ileoscopy, through ston	Ileoscopy	October 2013	04		AGA, ASGE, ACG	0.97	MPC List	September 2011	000	0.87	0.70	4.91	0.11	1658	FALSE			FALSE		May 2013		Complete		TRUE	Decrease
44381	Ileoscopy, through ston	Ileoscopy	October 2013	04		AGA, ASGE, ACG	1.48	MPC List	May 2013	000	1.38	0.93	28.25	0.19	146	FALSE			FALSE		May 2013		Complete		TRUE	Decrease
44382	Ileoscopy, through ston	Ileoscopy	Ileoscopy	Ileoscopy	Ileoscopy	Ileo	October 2013	04		AGA, ASGE, ACG	1.27	MPC List	September 2011	000	1.17	0.85	7.68	0.17	1313	FALSE			FALSE		May 2013		Complete		TRUE	Maintain
44383	Ileoscopy, through ston	Ileoscopy	October 2013	04		AGA, ASGE, ACG	Deleted from CPT	MPC List	September 2011							FALSE			FALSE		May 2013		Complete		TRUE	Deleted from CPT
44384	Ileoscopy, through ston	Ileoscopy	October 2013	04		AGA, ASGE, ACG	3.11	MPC List	May 2013	000	2.85	1.34	NA	0.36	87	FALSE			FALSE		May 2013		Complete		TRUE	Decrease
44385	Endoscopic evaluation	Pouchoscopy	October 2013	05		ACG, ACS, AGA,	1.30	MPC List	September 2011	000	1.2	0.78	5.12	0.18	985	FALSE			FALSE		May 2013		Complete		TRUE	Decrease
44386	Endoscopic evaluation	Pouchoscopy	October 2013	05		ACG, ACS, AGA,	1.60	MPC List	September 2011	000	1.5	0.94	7.69	0.19	1889	FALSE			FALSE		May 2013		Complete		TRUE	Decrease
44388	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	2.82	MPC List	September 2011	000	2.72	1.47	6.36	0.41	3361	FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Maintain
44389	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	3.12	MPC List	September 2011	000	3.02	1.62	8.97	0.41	2299	FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Decrease
44390	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	3.82	MPC List	September 2011	000	3.74	1.99	7.96	0.44	19	FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Maintain
44391	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	4.22	MPC List	September 2011	000	4.12	2.14	14.64	0.51	151	FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Decrease
44392	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	3.63	MPC List	September 2011	000	3.53	1.78	7.55	0.56	198	FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Decrease
44393	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	Deleted from CPT	MPC List	September 2011							FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Deleted from CPT
44394	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	4.13	MPC List	September 2011	000	4.03	2.05	8.60	0.54	1817	FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Decrease
44397	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	Deleted from CPT	MPC List	September 2011							FALSE			TRUE	Several specific cc	October 2(	17	Complete		TRUE	Deleted from CPT
44401	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	4.44	MPC List	September 2011	000	4.34	2.26	66.98	0.51	49	FALSE			TRUE		October 2(	17	Complete		TRUE	Decrease
44402	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	4.96	MPC List	January 2014	000	4.7	2.42	NA	0.55	3	FALSE			FALSE		October 2(	17	Complete		TRUE	Decrease
44403	Colonoscopy through st	Colonoscopy through stoma	January 2014	08		ASCRS, ACS, SAC	5.81	MPC List	January 2014	000	5.5	2.77	NA	0.65	71	FALSE			TRUE		October 2(	17	Complete		TRUE	Decrease

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49561	Repair initial incisional (	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					10060	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49565	Repair recurrent incisio	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	October 2019	090					3456	FALSE		TRUE	In October 2019, t	February 2	18	complete		TRUE	Deleted from CPT
49566	Repair recurrent incisio	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					2765	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49568	Implantation of mesh o	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	ZZZ					20065	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49570	Repair epigastric hernia	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					476	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49572	Repair epigastric hernia	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					432	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49580	Repair umbilical hernia,	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					2	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49582	Repair umbilical hernia,	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090						FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49585	Repair umbilical hernia,	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					14622	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49587	Repair umbilical hernia,	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly	September 2007	090					6203	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49590	Repair spigelian hernia	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					510	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49591	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	6.27	Site of Service Anomaly -	February 2021	000	5.96	2.79	NA	1.45		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49592	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	9.00	Site of Service Anomaly -	February 2021	000	8.46	3.65	NA	2.08		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49593	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	10.80	Site of Service Anomaly -	February 2021	000	10.26	4.35	NA	2.48		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49594	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	14.00	Site of Service Anomaly -	February 2021	000	13.46	5.50	NA	3.29		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49595	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	14.88	Site of Service Anomaly -	February 2021	000	13.94	5.70	NA	3.33		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49596	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	20.00	Site of Service Anomaly -	February 2021	000	18.67	7.42	NA	4.41		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49613	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	7.75	Site of Service Anomaly -	February 2021	000	7.42	3.38	NA	1.77		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49614	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	10.79	Site of Service Anomaly -	February 2021	000	10.25	4.32	NA	2.48		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49615	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	12.00	Site of Service Anomaly -	February 2021	000	11.46	4.84	NA	2.77		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49616	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	16.50	Site of Service Anomaly -	February 2021	000	15.55	6.28	NA	3.78		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49617	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	16.97	Site of Service Anomaly -	February 2021	000	16.03	6.57	NA	3.78		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49618	Repair of anterior abdo	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	24.00	Site of Service Anomaly -	February 2021	000	22.67	8.90	NA	5.39		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49621	Repair of parastomal he	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	14.24	Site of Service Anomaly -	February 2021	000	13.7	5.48	NA	2.93		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49622	Repair of parastomal he	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	18.00	Site of Service Anomaly -	February 2021	000	17.06	6.61	NA	3.61		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49623	Removal of total or nea	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	5.00	Site of Service Anomaly -	February 2021	ZZZ	3.75	1.34	NA	0.79		FALSE		FALSE		February 2	18	complete		TRUE	Decrease
49652	Laparoscopy, surgical, r	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly	June 2010	090					8623	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49653	Laparoscopy, surgical, r	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly	June 2010	090					6182	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49654	Laparoscopy, surgical, r	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly	June 2010	090					6511	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49655	Laparoscopy, surgical, r	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	June 2010	090					4650	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49656	Laparoscopy, surgical, r	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					1292	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
49657	Laparoscopy, surgical, r	Anterior Abdominal Hernia Rep	April 2021	09		ACS, ASCRS (col	Deleted from CPT	Site of Service Anomaly -	February 2021	090					1395	FALSE		FALSE		February 2	18	complete		TRUE	Deleted from CPT
50021	Drainage of perirenal or	Drainage of Abscess	January 2013	04			Deleted from CPT	Codes Reported Together	January 2012							FALSE		FALSE		October 2(	06	Complete		TRUE	Deleted from CPT
50080	Percutaneous nephrolit	Percutaneous Nephrostolithotc	January 2022	08		AUA	13.50	Site of Service Anomaly -	October 2019	090	12.41	6.65	NA	1.49	2307	FALSE		TRUE	In January 2020, t	Septembe	22	complete		TRUE	Decrease
50081	Percutaneous nephrolit	Percutaneous Nephrostolithotc	January 2022	08		AUA	22.00	Site of Service Anomaly -	October 2019	090	20.91	9.72	NA	2.48	5692	FALSE		TRUE	In January 2020, t	Septembe	22	complete		TRUE	Decrease
50200	Renal biopsy; percutan	Interventional Radiology Proce	October 2008	13		ACR, SIR	New PE Inputs	CMS Request - Practice E	NA	000	2.38	1.10	12.95	0.23	34139	FALSE		FALSE						TRUE	PE Only
50360	Renal allotransplantatic	Renal Allotransplantation	April 2013	21		ACR, SIR	40.90	Harvard-Valued Annual A	July 2012	090	39.88	23.06	NA	9.58	11349	FALSE		FALSE						TRUE	Maintain
50387	Removal and replacem	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	2.00	Codes Reported Together	October 2012	000	1.75	0.50	14.90	0.18	7932	FALSE		FALSE		October 2(	18	Complete		TRUE	Maintain
50392	Introduction of intracat	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE		TRUE	The Joint Workgrc	October 2(	18	Complete		TRUE	Deleted from CPT
50393	Introduction of uretera	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE		TRUE	The Joint Workgrc	October 2(	18	Complete		TRUE	Deleted from CPT
50394	Injection procedure for	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE		TRUE	The Joint Workgrc	October 2(	18	Complete		TRUE	Deleted from CPT
50395	Introduction of guide in	Dilation of Urinary Tract	January 2018	12		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2014							FALSE		TRUE	In January 2015, t	Septembe	19	complete		TRUE	Deleted from CPT
50398	Change of nephrostom	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE		TRUE	The Joint Workgrc	October 2(	18	Complete		TRUE	Deleted from CPT
50430	Injection procedure for	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	3.15	Codes Reported Together	October 2014	000	2.9	1.29	15.86	0.30	818	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50431	Injection procedure for	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	1.42	Codes Reported Together	October 2014	000	1.1	0.72	8.54	0.11	7737	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50432	Placement of nephrost	Dilation of Urinary Tract	January 2018	12		ACR, SIR	4.00	Codes Reported Together	October 2014	000	4	1.58	23.04	0.40	27988	FALSE		FALSE		October 2(	18	Complete		TRUE	Maintain
50433	Placement of nephrour	Dilation of Urinary Tract	January 2018	12			5.05	Codes Reported Together	September 2017	000	5.05	1.86	28.63	0.51	5296	FALSE		FALSE						TRUE	Maintain
50434	Convert nephrostomy c	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	4.20	Codes Reported Together	October 2014	000	3.75	1.45	23.33	0.37	2179	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50435	Exchange nephrostomy	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	2.00	Codes Reported Together	October 2014	000	1.82	0.91	16.18	0.19	46485	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50436	Dilation of existing trac	Dilation of Urinary Tract	January 2018	12			3.37	Codes Reported Together	September 2017	000	2.78	1.29	NA	0.29	455	FALSE		FALSE						TRUE	Decrease
50437	Dilation of existing trac	Dilation of Urinary Tract	January 2018	12			5.44	Codes Reported Together	September 2017	000	4.85	1.95	NA	0.47	815	FALSE		FALSE						TRUE	Decrease
50542	Laparoscopy, surgical; a	Laproscopic Procedures	October 2008	26		AUA	Remove from screen	CMS Fastest Growing	October 2008	090	21.36	10.38	NA	2.61	104	FALSE		FALSE						TRUE	Remove from Screen
50548	Laparoscopy, surgical; r	Laproscopic Procedures	October 2008	26		AUA	Remove from screen	CMS Fastest Growing	October 2008	090	25.36	10.98	NA	3.06	2250	FALSE		FALSE						TRUE	Remove from Screen
50590	Lithotripsy, extracorpor	Lithotripsy	April 2012	42		AUA	9.77	CMS High Expenditure Pr	September 2011	090	9.77	5.95	11.09	1.15	44587	FALSE		FALSE						TRUE	Maintain
50605	Ureterotomy for inserti	Ureterotomy	October 2015	21	RAW	AUA, SIR	Review action plan at the RAW	CMS Fastest Growing / CF	October 2008	090	16.79	9.43	NA	3.75	2682	TRUE	Dec 2009	Yes	FALSE					TRUE	Maintain
50606	Endoluminal biopsy of (	Genitourinary Catheter Proced	April 2015	08		ACR, SIR	3.16	Codes Reported Together	October 2014	ZZZ	3.16	0.53	11.06	0.37	88	FALSE		TRUE		October 2(	18	Complete		TRUE	Increase
50693	Placement of ureteral s	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	4.60	Codes Reported Together	October 2014	000	3.96	1.59	25.72	0.38	3734	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50694	Placement of ureteral s	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	6.00	Codes Reported Together	October 2014	000	5.25	2.01	27.96	0.51	807	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50695	Placement of ureteral s	Genitourinary Catheter Proced	January 2015	09		ACR, SIR	7.55	Codes Reported Together	October 2014	000	6.8	2.50	33.00	0.65	1158	FALSE		FALSE		October 2(	18	Complete		TRUE	Increase
50705	Ureteral embolization c	Genitourinary Catheter Proced	April 2015	08		ACR, SIR	4.03	Codes Reported Together	October 2014	ZZZ	4.03	0.67	51.21	0.49	67	FALSE		TRUE		October 2(	18	Complete		TRUE	Increase
50706	Balloon dilation, ureter	Genitourinary Catheter Proced	April 2015	08		ACR, SIR	3.80	Codes Reported Together	October 2014	ZZZ	3.8	1.08	21.16	0.38	1315	FALSE		TRUE		October 2(	18	Complete		TRUE	Increase
51040	Cystostomy, cystotomy	Cystostomy	September 2007	16		AUA	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	090	4.49	3.61	NA	0.54	4081	FALSE		FALSE						TRUE	PE Only
51102	Aspiration of bladder; v	Urological Procedures	April 2008	45		AUA	2.70	Site of Service Anomaly	September 2007	000	2.7	1.22	4.20	0.30	12932	FALSE		FALSE						TRUE	Decrease
51700	Bladder irrigation, simp	Bladder Catheter	January 2016	32		AUA	0.60	CMS High Expenditure Pr	July 2015	000	0.6	0.21	1.60	0.08	178463	FALSE		FALSE						TRUE	Decrease
51701	Insertion of non-indwel	Bladder Catheter	January 2016	32		AUA	0.50	CMS High Expenditure Pr	July 2015	000	0.5	0.18	0.76	0.07	142086	FALSE		FALSE						TRUE	Maintain
51702	Insertion of temporary	Bladder Catheter	January 2016	32		AUA	0.50	CMS High Expenditure Pr	July 2015	000	0.5	0.18	1.28	0.06	215814	FALSE		FALSE						TRUE	Maintain
51703	Insertion of temporary	Bladder Catheter	January 2016	32		AUA	1.47	CMS High Expenditure Pr	July 2015	000	1.47	0.60	2.83	0.18	51883	FALSE		FALSE						TRUE	Maintain
51720	Bladder instillation of a	Treatment of Bladder Lesion	January 2016	33		AUA	0.87	CMS High Expenditure Pr	July 2015	000	0.87	0.31	1.64	0.11	164465	FALSE		FALSE						TRUE	Decrease
51726	Complex cystometrogr	Urodynamic Studies	April 2009	16		AUA, ACOG	1.71	Codes Reported Together	February 2008	000	1.71	NA	7.14	0.19	3591	FALSE		TRUE	Referred to the CI	February 2	24	Complete		TRUE	Maintain
51727	Complex cystometrogr	Urodynamic Studies	April 2009	16		AUA, ACOG	2.11	Codes Reported Together	February 2009	000	2.11	NA	8.62	0.24	1768	FALSE		FALSE						TRUE	Decrease
51728	Complex cystometrogr	Urodynamic Studies	September 2022	13		AUA, ACOG	Refer to CPT Assistant. 2.11	Codes Reported Together	February 2009	000	2.11	NA	8.62	0.21	79629	TRUE		FALSE						FALSE	Decrease
51729	Complex cystometrogr	Urodynamic Studies	September 2022	13		AUA, ACOG	Refer to CPT Assistant. 2.51	Codes Reported Together	February 2009	000	2.51	NA	8.79	0.28	51510	TRUE		FALSE						FALSE	Decrease
51736	Simple uroflowmetry (u	Uroflowmetry	October 2010	11		AUA	0.17	Harvard Valued - Utilizatic	February 2010	XXX	0.17	NA	0.21	0.02	8620	FALSE		FALSE						TRUE	Decrease
51741	Complex uroflowmetry	Uroflowmetry	September 2022	13		AUA	Refer to CPT Assistant. 0.17	Harvard Valued - Utilizatic	October 2009	XXX	0.17	NA	0.22	0.03	350551	TRUE		FALSE						FALSE	Decrease
51772	Deleted from CPT	Urodynamic Studies	April 2009	16		AUA	Deleted from CPT	Codes Reported Together	February 2008							FALSE		TRUE	Referred to the CI	February 2	24	Code Deleted		TRUE	Deleted from CPT
51784	Electromyography stud	Electromyography Studies (EM	September 2022	13		AUA	Refer to CPT Assistant. 0.75.	Codes Reported Together	October 2012	XXX	0.75	NA	1.08	0.08	120477	TRUE	Feb 2014	TRUE	The Joint Workgrc	February 2	34	Complete		TRUE	Decrease
51792	Stimulus evoked respor	Urinary Reflex Studies with EM	January 2019	37		AUA	CPT edits and CPT Assistant art	Codes Reported Together	October 2012	000	1.1	NA	6.91	0.14	4455	TRUE	Feb 2014	Yes	TRUE	The Joint Workgrc	February 2	34	Complete		TRUE	Maintain
51795	Deleted from CPT	Urology Studies	February 2008	S			Deleted from CPT	Codes Reported Together	February 2008							FALSE		TRUE	Referred to the CI	February 2	24	Code Deleted		TRUE	Deleted from CPT
51797	Voiding pressure studie	Urology Studies	February 2008	S			0.80	Codes Reported Together	February 2008	ZZZ	0.8	NA	4.90	0.08	97767	FALSE		TRUE	Referred to the CI	February 2	24	Code Revised		TRUE	Maintain
51798	Measurement of post-v	Voiding Pressure Studies	April 2016	25		AUA	PE Only	CMS High Expenditure Pr	July 2015	XXX	0	NA	0.31	0.01	1905320	FALSE		FALSE						TRUE	PE Only
52000	Cystourethroscopy (sep	Cystourethroscopy	January 2016	35		AUA, ACOG	1.75	MPC List / CMS High Expe	October 2010	000	1.53	0.64	5.49	0.19	802751	FALSE		FALSE						TRUE	Decrease
52214	Cystourethroscopy, wit	Cystourethroscopy	October 2017	19		AUA	3.50	High Volume Growth1 / C	June 2008	000	3.5	1.20	18.60	0.42	16046	TRUE	Aug 2009	Yes	FALSE					TRUE	Decrease
52224	Cystourethroscopy, wit	Cystourethroscopy	October 2017	19		AUA	4.05	High Volume Growth1 / C	February 2008	000	4.05	1.39	18.98	0.49	29889	TRUE	Aug 2009	Yes	FALSE					TRUE	Increase
52234	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	January 2021	29		AUA	4.62	Harvard Valued - Utilizatic	September 2011	000	4.62	2.01	NA	0.55	25056	TRUE	May 2016	Yes	FALSE					TRUE	Maintain
52235	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	October 2017	19		AUA	5.44	Harvard Valued - Utilizatic	April 2011	000	5.44	2.33	NA	0.65	32132	TRUE	May 2016	Yes	FALSE					TRUE	Maintain
52240	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	January 2021	29		AUA	8.75	Harvard Valued - Utilizatic	September 2011	000	7.5	3.03	NA	0.90	20534	TRUE	May 2016	Yes	FALSE					TRUE	Decrease
52281	Cystourethroscopy, wit	Cystourethroscopy	April 2010	38		AUA	2.80	Harvard Valued - Utilizatic	October 2009	000	2.75	1.36	6.70	0.34	52235	FALSE		FALSE						TRUE	Maintain
52287	Cystourethroscopy, with injection(s) for chemodenerva		January 2020	37			Remove from Screen	High Volume Growth6	October 2019	000	3.2	1.35	8.06	0.41	55054	FALSE		FALSE						TRUE	Remove from Screen
52332	Cystourethroscopy, wit	Cystourethroscopy	April 2013	13		AUA	2.82	Harvard Valued - Utilizatic	October 2009	000	2.82	1.38	8.88	0.35	142221	FALSE		TRUE	The Joint Workgrc	February 2	15	Complete		TRUE	Maintain
52334	Cystourethroscopy with	Dilation of Urinary Tract	January 2018	12			3.37	Codes Reported Together	September 2017	000	3.37	1.57	NA	0.41	232	FALSE		FALSE						TRUE	Decrease
52341	Cystourethroscopy; wit	Urological Procedures	October 2010	65		AUA	5.35	Site of Service Anomaly	April 2008	000	5.35	2.30	NA	0.65	2071	FALSE		FALSE						TRUE	Decrease
52342	Cystourethroscopy; wit	Urological Procedures	October 2010	65		AUA	5.85	Site of Service Anomaly	April 2008	000	5.85	2.47	NA	0.69	180	FALSE		FALSE						TRUE	Decrease
52343	Cystourethroscopy; wit	Urological Procedures	October 2010	65		AUA	6.55	Site of Service Anomaly	April 2008	000	6.55	2.71	NA	0.78	28	FALSE		FALSE						TRUE	Decrease
52344	Cystourethroscopy with	Urological Procedures	October 2010	65		AUA	7.05	Site of Service Anomaly	September 2007	000	7.05	2.87	NA	0.83	3331	FALSE		FALSE						TRUE	Decrease
52345	Cystourethroscopy with	Urological Procedures	October 2010	65		AUA	7.55	Site of Service Anomaly	April 2008	000	7.55	3.04	NA	0.90	402	FALSE		FALSE						TRUE	Decrease
52346	Cystourethroscopy with	Urological Procedures	October 2010	65		AUA	8.58	Site of Service Anomaly	April 2008	000	8.58	3.40	NA	1.02	323	FALSE		FALSE						TRUE	Decrease
52351	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	September 2011	23		AUA	5.75	Harvard Valued - Utilizatic	September 2011	000	5.75	2.40	NA	0.67	21713	FALSE		FALSE						TRUE	Decrease
52352	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	September 2011	23		AUA	6.75	Harvard Valued - Utilizatic	September 2011	000	6.75	2.78	NA	0.80	21092	FALSE		FALSE						TRUE	Decrease
52353	Cystourethroscopy, wit	Cystourethroscopy	April 2013	13		AUA	7.50	Harvard Valued - Utilizatic	April 2011	000	7.5	3.03	NA	0.90	10320	FALSE		TRUE	The Joint Workgrc	February 2	15	Complete		TRUE	Decrease
52354	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	September 2011	23		AUA	8.58	Harvard Valued - Utilizatic	September 2011	000	8	3.20	NA	0.95	8674	FALSE		FALSE						TRUE	Increase
52355	Cystourethroscopy, wit	Cystourethroscopy and Ureterc	September 2011	23		AUA	10.00	Harvard Valued - Utilizatic	September 2011	000	9	3.55	NA	1.06	857	FALSE		FALSE						TRUE	Increase
52356	Cystourethroscopy, wit	Cystourethroscopy	April 2013	13		AUA	8.00	Codes Reported Together	January 2013	000	8	3.16	NA	0.95	80680	FALSE		FALSE						TRUE	Decrease

52400	Cystourethroscopy with	Urological Procedures	October 2010	65			AUA	8.69	Site of Service Anomaly	September 2007	090	8.69	4.32	NA	1.03	64	FALSE		FALSE						TRUE	Decrease
52442	Cystourethroscopy, wit	PE Subcommittee	October 2020	24			AUA, AACU	Maintain	PE Units Screen	April 2020	ZZZ	1.01	0.35	24.99	0.12	107292	FALSE		FALSE						TRUE	Maintain
52500	Transurethral resection	Urological Procedures	October 2010	65			AUA	8.14	Site of Service Anomaly	September 2007	090	8.14	5.46	NA	0.97	2446	FALSE		FALSE						TRUE	Decrease
52601	Transurethral electrosu	Transurethral Electrosurgical Re	April 2016	26			AUA	13.16	Site of Service Anomaly -	October 2015	090	13.16	6.74	NA	1.56	39991	FALSE		FALSE						TRUE	Decrease
52640	Transurethral resection	Urological Procedures	April 2008	45			AUA	4.79	Site of Service Anomaly	September 2007	090	4.79	4.19	NA	0.58	1332	FALSE		FALSE						TRUE	Decrease
52648	Laser vaporization of pr	Laser Surgery of Prostate	April 2008	57			AUA	Remove from screen	High Volume Growth1	February 2008	090	12.15	6.84	34.77	1.45	15604	FALSE		FALSE						TRUE	Remove from Screen
53445	Insertion of inflatable u	Urological Procedures	February 2011	31			AUA	13.00	Site of Service Anomaly	September 2007	090	13	7.81	NA	1.55	1797	FALSE		FALSE						TRUE	Decrease
53850	Transurethral destructi	Transurethral Destruction of Pr	April 2012	43			AUA	10.08	CMS High Expenditure Pro	September 2011	090	5.42	4.46	36.52	0.65	1154	FALSE		FALSE						TRUE	Maintain
54405	Insertion of multi-comp	Urological Procedures	April 2008	45			AUA	14.39	Site of Service Anomaly	September 2007	090	14.52	7.60	NA	1.73	4430	FALSE		FALSE						TRUE	Maintain
54410	Removal and replacem	Urological Procedures	February 2011	31			AUA	15.18	Site of Service Anomaly	September 2007	090	15.18	8.49	NA	1.80	1146	FALSE		FALSE						TRUE	Decrease
54520	Orchiectomy, simple (ir	Removal of Testical	September 2007	16			AUA	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	090	5.3	3.74	NA	0.69	2184	FALSE		FALSE						TRUE	PE Only
54530	Orchiectomy, radical, fc	Urological Procedures	October 2010	65			AUA	8.46	Site of Service Anomaly	September 2007	090	8.46	5.56	NA	1.06	1019	FALSE		FALSE						TRUE	Decrease
55700	Biopsy, prostate; needl	Biopsy of Prostate	September 2022	13	Septembe	RUC	ACR, AUA	Refer to CPT. 2.50	CMS High Expenditure Pro	July 2015	000	2.5	1.01	4.41	0.30	139901	FALSE		TRUE	In April 2022, the	May 2023				FALSE	Decrease
55706	Biopsies, prostate, nee	RAW	April 2014	52				Maintain	010-Day Global Post-Oper	January 2014	010	6.28	4.11	NA	0.73	2636	FALSE		FALSE						TRUE	Maintain
55840	Prostatectomy, retropubic radical, with or without ner		April 2014	31			AUA	21.36	CMS Request - Final Rule	October 2013	090	21.36	10.48	NA	2.55	1345	FALSE		FALSE						TRUE	Decrease
55842	Prostatectomy, retropubic radical, with or without ner		April 2014	31			AUA	24.16	CMS Request - Final Rule	October 2013	090	21.36	10.48	NA	2.57	99	FALSE		FALSE						TRUE	Decrease
55845	Prostatectomy, retropu	RAW	April 2014	31			AUA	29.07	CMS Request - Final Rule	July 2013	090	25.18	11.80	NA	3.02	589	FALSE		FALSE						TRUE	Decrease
55866	Laparoscopy, surgical p	Laparoscopic Radical Prostatect	April 2015	27		RUC	AUA	26.80	New Technology / CMS Fa	September 2007	090	22.46	10.04	NA	2.68	19282	FALSE		TRUE	The specialty society reported that it wi		Complete			TRUE	Decrease
55873	Cryosurgical ablation of	Cryoablation of Prostate	February 2009	25			AUA	13.45	CMS Request - Practice Ex	September 2007	090	13.6	7.35	157.69	1.61	1093	FALSE		FALSE						TRUE	Decrease
55875	Transperineal placemer	RAW	October 2015	21				Review data at RAW	RUC request	April 2015	090	13.46	8.17	NA	1.39	5121	FALSE		FALSE						TRUE	Not Part of RAW
56515	Destruction of lesion(s)	Destruction of Lesions	September 2007	16			ACOG	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	010	3.08	2.82	4.80	0.50	2305	FALSE		FALSE						TRUE	PE Only
56620	Vulvectomy simple; par	Partial Removal of Vulva	February 2008	D			ACOG	7.35	Site of Service Anomaly	September 2007	090	7.53	8.87	NA	1.25	2828	FALSE		FALSE						TRUE	Decrease
57150	Irrigation of vagina and,	Vaginal Treatments	April 2017	15			ACOG	0.50	CMS 000-Day Global Typic	July 2016	000	0.5	0.19	1.17	0.08	20062	FALSE		FALSE						TRUE	Decrease
57155	Insertion of uterine tan	RAW	January 2017	30			ACOG, ASTRO	5.40	Site of Service Anomaly /	September 2007	000	5.15	2.85	6.28	0.44	2548	FALSE		TRUE	ACOG conducted	October 2(	33	Complete		TRUE	Decrease
57156	Insertion of a vaginal ra	RAW	January 2017	30			ACOG, ASTRO	2.69	Site of Service Anomaly	September 2007	000	2.69	1.60	3.95	0.22	15080	FALSE		FALSE		October 2(	33			TRUE	Decrease
57160	Fitting and insertion of	Vaginal Treatments	April 2017	15			ACOG	0.89	CMS 000-Day Global Typic	July 2016	000	0.89	0.34	1.21	0.14	74669	FALSE		FALSE						TRUE	Maintain
57240	Anterior colporrhaphy,	Colporrhaphy with Cystourethr	January 2017	14			ACOG	10.08	Site of Service Anomaly -	October 2015	090	10.08	6.79	NA	1.54	6409	FALSE		TRUE	In October 2015, t	Septembe	35	yes		TRUE	Decrease
57250	Posterior colporrhaphy,	Colporrhaphy with Cystourethr	January 2017	14			ACOG	10.08	Site of Service Anomaly -	April 2016	090	10.08	6.82	NA	1.60	7699	FALSE		TRUE	In October 2015, t	Septembe	35	yes		TRUE	Decrease
57260	Combined anteroposte	Colporrhaphy with Cystourethr	January 2017	14			ACOG	13.25	Site of Service Anomaly -	April 2016	090	13.25	8.02	NA	2.09	7785	FALSE		TRUE	In October 2015, t	Septembe	35	yes		TRUE	Decrease
57265	Combined anteroposte	Colporrhaphy with Cystourethr	January 2017	14			ACOG	15.00	Site of Service Anomaly -	April 2016	090	15	8.73	NA	2.42	3401	FALSE		TRUE	In October 2015, t	Septembe	35	yes		TRUE	Decrease
57282	Colpopexy, vaginal; extı	Colpopexy	January 2020	26				13.48	Site of Service Anomaly -	October 2019	090	11.63	7.40	NA	1.79	5779	FALSE		FALSE						TRUE	Increase
57283	Colpopexy, vaginal; intr	Colpopexy	January 2020	26				13.51	Site of Service Anomaly -	October 2019	090	11.66	7.46	NA	1.88	4707	FALSE		FALSE						TRUE	Increase
57287	Removal or revision of s	Urological Procedures	February 2008	C			AUA	10.97	Site of Service Anomaly	September 2007	090	11.15	9.48	NA	1.63	1277	FALSE		FALSE						TRUE	Decrease
57288	Sling operation for stre	Sling Operation for Stress Incon	February 2008	O			ACOG, AUA	12.00	New Technology	September 2007	090	12.13	8.33	NA	1.79	18874	FALSE		FALSE						TRUE	Decrease
57425	Laparoscopy, surgical, c	Laparoscopic Colopexy	January 2020	27				18.02	Site of Service Anomaly -	October 2019	090	17.03	9.46	NA	2.61	9056	FALSE		FALSE						TRUE	Increase
58100	Endometrial sampling (	Biopsy of Uterus Lining	April 2017	16			ACOG	1.21	CMS 000-Day Global Typic	July 2016	000	1.21	0.48	1.66	0.19	61999	FALSE		FALSE						TRUE	Decrease
58110	Endometrial sampling (	Biopsy of Uterus Lining	April 2017	16			ACOG	0.77	CMS 000-Day Global Typic	April 2017	ZZZ	0.77	0.30	0.60	0.12	620	FALSE		FALSE						TRUE	Maintain
58555	Hysteroscopy, diagnost	Hysteroscopy	January 2016	37			ACOG	3.07	CMS Request - Practice Ex	NA	000	2.65	1.42	7.88	0.44	1257	FALSE		FALSE						TRUE	Decrease
58558	Hysteroscopy, surgical;	Hysteroscopy	January 2016	37			ACOG	4.37	CMS Request - Practice Ex	NA	000	4.17	2.03	35.64	0.69	41984	FALSE		FALSE						TRUE	Decrease
58559	Hysteroscopy, surgical;	Hysteroscopy	January 2016	37			ACOG	5.54	CMS High Expenditure Pro	July 2015	000	5.2	2.41	NA	0.84	105	FALSE		FALSE						TRUE	Decrease
58560	Hysteroscopy, surgical;	Hysteroscopy	January 2016	37			ACOG	6.15	CMS High Expenditure Pro	July 2015	000	5.75	2.61	NA	0.94	28	FALSE		FALSE						TRUE	Decrease
58561	Hysteroscopy, surgical;	Hysteroscopy	January 2016	37			ACOG	7.00	CMS High Expenditure Pro	July 2015	000	6.6	2.95	NA	1.10	2045	FALSE		FALSE						TRUE	Decrease
58562	Hysteroscopy, surgical;	Hysteroscopy	January 2016	37			ACOG	4.17	CMS Request - Practice Ex	NA	000	4	1.94	8.42	0.66	207	FALSE		FALSE						TRUE	Decrease
58563	Hysteroscopy, surgical;	Hysteroscopy	January 2016	37			ACOG	4.62	CMS Request - Practice Ex	NA	000	4.47	2.12	59.24	0.74	1758	FALSE		FALSE						TRUE	Decrease
58660	Laparoscopy, surgical; v	Laproscopic Procedures	September 2007	16			AUA, ACOG	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	090	11.59	6.70	NA	2.16	693	FALSE		FALSE						TRUE	PE Only
58661	Laparoscopy, surgical; v	Laproscopic Procedures	September 2007	16			ACOG	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	010	11.35	6.31	NA	1.90	11255	FALSE		FALSE						TRUE	PE Only
58823	Drainage of pelvic absc	Drainage of Abscess	January 2013	04				Deleted from CPT	Codes Reported Together	January 2012							FALSE		FALSE		October 2(	06	Complete		TRUE	Deleted from CPT
59400	Routine obstetric care i	Obstetrical Care	October 2009	15			ACOG, AAFP	32.69	High IWPUT	February 2008	MMM	36.58	25.48	NA	9.82	2148	FALSE		FALSE						TRUE	Increase
59409	Vaginal delivery only (w	Obstetrical Care	October 2009	15			ACOG, AAFP	14.37	High IWPUT	February 2008	MMM	14.37	5.76	NA	3.83	1129	FALSE		FALSE						TRUE	Increase
59410	Vaginal delivery only (w	Obstetrical Care	October 2009	15			ACOG, AAFP	18.54	High IWPUT	February 2008	MMM	18.34	8.46	NA	4.94	601	FALSE		FALSE						TRUE	Increase
59412	External cephalic versio	Obstetrical Care	October 2009	15			ACOG, AAFP	1.71	High IWPUT	April 2008	MMM	1.71	0.85	NA	0.51	31	FALSE		FALSE						TRUE	Maintain
59414	Delivery of placenta (se	Obstetrical Care	October 2009	15			ACOG, AAFP	1.61	High IWPUT	April 2008	MMM	1.61	0.63	NA	0.47	44	FALSE		FALSE						TRUE	Maintain
59425	Antepartum care only; ·	Obstetrical Care	October 2009	15			ACOG, AAFP	6.31	High IWPUT	April 2008	MMM	7.8	3.08	6.96	2.10	525	FALSE		FALSE						TRUE	Decrease
59426	Antepartum care only;	Obstetrical Care	October 2009	15			ACOG, AAFP	11.16	High IWPUT	April 2008	MMM	14.3	5.67	12.69	3.87	519	FALSE		FALSE						TRUE	Decrease
59430	Postpartum care only (s	Obstetrical Care	October 2009	15			ACOG, AAFP	2.47	High IWPUT	April 2008	MMM	3.22	1.27	3.87	0.89	642	FALSE		FALSE						TRUE	Increase
59510	Routine obstetric care i	Obstetrical Care	October 2009	15			ACOG, AAFP	36.17	High IWPUT	February 2008	MMM	40.39	27.17	NA	11.97	1825	FALSE		FALSE						TRUE	Increase
59514	Cesarean delivery only;	Obstetrical Care	October 2009	15			ACOG, AAFP	16.13	High IWPUT	October 2008	MMM	16.13	6.33	NA	4.67	974	FALSE		FALSE						TRUE	Increase
59515	Cesarean delivery only;	Obstetrical Care	October 2009	15			ACOG, AAFP	22.00	High IWPUT	April 2008	MMM	22.13	10.43	NA	6.51	602	FALSE		FALSE						TRUE	Increase
59610	Routine obstetric care i	Obstetrical Care	October 2009	15			ACOG, AAFP	34.40	High IWPUT	April 2008	MMM	38.29	25.58	NA	11.42	92	FALSE		FALSE						TRUE	Increase
59612	Vaginal delivery only, af	Obstetrical Care	October 2009	15			ACOG, AAFP	16.09	High IWPUT	April 2008	MMM	16.09	6.22	NA	4.81	36	FALSE		FALSE						TRUE	Increase
59614	Vaginal delivery only, af	Obstetrical Care	October 2009	15			ACOG, AAFP	20.26	High IWPUT	April 2008	MMM	20.06	8.24	NA	6.00	23	FALSE		FALSE						TRUE	Increase
59618	Routine obstetric care i	Obstetrical Care	October 2009	15			ACOG, AAFP	36.69	High IWPUT	April 2008	MMM	40.91	27.25	NA	12.22	17	FALSE		FALSE						TRUE	Increase
59620	Cesarean delivery only,	Obstetrical Care	October 2009	15			ACOG, AAFP	16.66	High IWPUT	April 2008	MMM	16.66	6.44	NA	4.97	14	FALSE		FALSE						TRUE	Decrease
59622	Cesarean delivery only,	Obstetrical Care	October 2009	15			ACOG, AAFP	22.53	High IWPUT	April 2008	MMM	22.66	11.13	NA	6.78	12	FALSE		FALSE						TRUE	Increase
60220	Total thyroid lobectom	Total Thyroid Lobectomy	April 2008	46			ACS, AAO-HNS	12.29	Site of Service Anomaly	September 2007	090	11.19	7.92	NA	2.09	6624	FALSE		FALSE						TRUE	Maintain
60225	Total thyroid lobectom	Total Thyroid Lobectomy	April 2008	46			ACS, AAO-HNS	14.67	Site of Service Anomaly	September 2007	090	14.79	10.46	NA	2.76	208	FALSE		FALSE						TRUE	Maintain
60520	Thymectomy, partial or	RAW Review	January 2013	34				No reliable way to determine a	CMS Request to Re-Revie	November 2011	090	17.16	10.19	NA	3.99	357	FALSE		FALSE						TRUE	Remove from Screen
60521	Thymectomy, partial or	RAW Review	January 2013	34				No reliable way to determine a	CMS Request to Re-Revie	November 2011	090	19.18	9.54	NA	4.54	220	FALSE		FALSE						TRUE	Remove from Screen
60522	Thymectomy, partial or	RAW Review	January 2013	34				No reliable way to determine a	CMS Request to Re-Revie	November 2011	090	23.48	11.24	NA	5.57	91	FALSE		FALSE						TRUE	Remove from Screen
61055	Cisternal or lateral cerv	Myelography	April 2014	17				Editorial change	Codes Reported Together	January 2014	000	2.1	1.06	NA	0.35	135	FALSE		TRUE	This code change	October 2(	21	Complete		TRUE	Remove from Screen
61624	Transcatheter permane	RAW	September 2022	13	Septembe	RUC	AANS, ACR, CNS	Refer to CPT for code bundling	Codes Reported Together	April 2022	000	20.12	8.37	NA	6.06	9239	FALSE		TRUE	In April 2022, the	May 2023				FALSE	
61781	Stereotactic computer-	Stereotactic Computer-Assisted	February 2010	13			NASS, AANS/CN	3.75	CMS Fastest Growing	October 2009	ZZZ	3.75	1.80	NA	1.51	15500	FALSE		FALSE		October 2(	34			TRUE	Decrease
61782	Stereotactic computer-	Stereotactic Computer-Assisted	February 2010	13			NASS, AANS/CN	3.18	CMS Fastest Growing	October 2009	ZZZ	3.18	1.50	NA	0.46	16258	FALSE		FALSE		October 2(	34			TRUE	Decrease
61783	Stereotactic computer-	Stereotactic Computer-Assisted	February 2010	13			NASS, AANS/CN	3.75	CMS Fastest Growing	October 2009	ZZZ	3.75	1.84	NA	1.32	23110	FALSE		FALSE		October 2(	34			TRUE	Decrease
61793	Deleted from CPT	Stereotactic Radiosurgery	October 2008	26			AANS	Deleted from CPT	CMS Fastest Growing, Site	September 2007							FALSE		FALSE		February 2008				TRUE	Deleted from CPT
61795	Deleted from CPT	Stereotactic Radiosurgery	February 2009	38			NASS, AAO-HNS	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE		TRUE	The specialty com	October 2(	34	Code Deleted		TRUE	Deleted from CPT
61796	Stereotactic radiosurge	Stereotactic Radiosurgery	February 2009	38				15.50	CMS Request - 2009 Final	NA	090	13.93	11.30	NA	5.60	6056	FALSE		FALSE						TRUE	Decrease
61797	Stereotactic radiosurge	Stereotactic Radiosurgery	February 2009	38				3.48	CMS Request - 2009 Final	NA	ZZZ	3.48	1.67	NA	1.39	7926	FALSE		FALSE						TRUE	Decrease
61798	Stereotactic radiosurge	Stereotactic Radiosurgery	February 2009	38				19.75	CMS Request - 2009 Final	NA	090	19.85	14.01	NA	7.82	3065	FALSE		FALSE						TRUE	Decrease
61799	Stereotactic radiosurge	Stereotactic Radiosurgery	February 2009	38				4.81	CMS Request - 2009 Final	NA	ZZZ	4.81	2.31	NA	1.93	764	FALSE		FALSE						TRUE	Decrease
61800	Application of stereotax	Stereotactic Radiosurgery	April 2008	16				2.25	CMS Fastest Growing, Site	February 2008	ZZZ	2.25	1.36	NA	0.91	4244	FALSE		FALSE						TRUE	Decrease
61885	Insertion or replacemer	Vagal Nerve Stimulator	February 2010	14			AANS/CNS	6.44	Site of Service Anomaly	September 2007	090	6.05	7.59	NA	2.35	4573	FALSE		TRUE	In Feb 2009, the s	October 2(	35	Complete		TRUE	Decrease
62263	Percutaneous lysis of ej	Epidual Lysis	October 2010	66			AAPM, AANS/CI	6.54	Site of Service Anomaly	September 2007	010	5	3.94	13.64	0.47	167	FALSE		FALSE						TRUE	Maintain
62270	Spinal puncture, lumba	Lumbar Puncture	January 2019	09			ACR, ASNR, SIR	1.44	Different Performing Spe	October 2017	000	1.22	0.41	2.53	0.23	24458	FALSE		TRUE	In January 2018, t	Septembe	24	Complete		TRUE	Increase
62272	Spinal puncture, therap	Lumbar Puncture	January 2019	09				1.80	Different Performing Spe	September 2018	000	1.58	0.69	3.34	0.43	3414	FALSE		FALSE		Septembe	24	Complete		TRUE	Increase
62281	Injection/infusion of ne	Injection of Neurolytic Agent	September 2007	16			ASA	Remove 99238	Site of Service Anomaly (S	September 2007	010	2.66	1.80	4.29	0.25	198	TRUE	Q&A May 2	Yes	FALSE						TRUE	PE Only
62284	Injection procedure for	Myelography	April 2014	17			ACR, ASNR	1.54	Codes Reported Together	October 2012	000	1.54	0.77	4.01	0.18	15012	FALSE		TRUE	Joint Workgroup r	October 2(	21	Complete		TRUE	Maintain
62287	Decompression proced	Percutaneous Diskectomy	September 2007	16			ASA	Reduce 99238 to 0.5	Site of Service Anomaly (S	September 2007	090	9.03	6.86	NA	0.90	87	FALSE		FALSE						TRUE	PE Only
62290	Injection procedure for	Injection for discography	April 2010	45			ASA, AAPM, AA	3.00, CPT Assistant article publ	Different Performing Spe	October 2009	000	3	1.38	7.24	0.27	5927	TRUE	Mar 2011	Yes	FALSE						TRUE	Maintain
62302	Myelography via lumba	Myelography	April 2014	17			ACR, ASNR	2.29	Codes Reported Together	October 2012	000	2.29	1.01	5.23	0.22	2683	FALSE		TRUE	Joint Workgroup r	October 2(	21	Complete		TRUE	Decrease
62303	Myelography via lumba	Myelography	April 2014	17			ACR, ASNR	2.29	Codes Reported Together	October 2012	000	2.29	1.01	5.37	0.22	311	FALSE		TRUE	Joint Workgroup r	October 2(	21	Complete		TRUE	Decrease
62304	Myelography via lumba	Myelography	April 2014	17			ACR, ASNR	2.25	Codes Reported Together	October 2012	000	2.25	1.00	5.22	0.22	11749	FALSE		TRUE	Joint Workgroup r	October 2(	21	Complete		TRUE	Decrease
62305	Myelography via lumba	Myelography	April 2014	17			ACR, ASNR	2.35	Codes Reported Together	October 2012	000	2.35	1.04	5.79	0.22	5024	FALSE		TRUE	Joint Workgroup r	October 2(	21	Complete		TRUE	Decrease
62310	Injection(s), of diagnost	Epidural Injections	October 2015	10		RUC	AAPM, AAPMR,	Deleted from CPT	CMS High Expenditure Pro	January 2012							FALSE		TRUE	In the NPRM for 2	May 2015	15	Complete		TRUE	Deleted from CPT
62311	Injection(s), of diagnost	Epidural Injections	October 2015	10		RUC	AAPM, AAPMR,	Deleted from CPT	CMS High Expenditure Pro	September 2011							FALSE		TRUE	In the NPRM for 2	May 2015	15	Complete		TRUE	Deleted from CPT
62318	Injection(s), including ir	Epidural Injections	October 2015	10		RUC	AAPM, AAPMR,	Deleted from CPT	CMS High Expenditure Pro	January 2012							FALSE		TRUE	In the NPRM for 2	May 2015	15	Complete		TRUE	Deleted from CPT
62319	Injection(s), including ir	Epidural Injections	October 2015	10		RUC	AAPM, AAPMR,	Deleted from CPT	CMS High Expenditure Pro	January 2012							FALSE		TRUE	In the NPRM for 2	May 2015	15	Complete		TRUE	Deleted from CPT
62320	Injection(s), of diagnost	Epidural Injections	October 2015	10		RUC	AANS, AANEM,	1.80	Final Rule for 2015	May 2015	000	1.8	0.92	2.89	0.26	3525	FALSE		FALSE		May 2015	15	Complete		TRUE	Decrease
62321	Injection(s), of diagnost	Epidural Injections	October 2015	10		RUC	AANS, AANEM,	1.95	Final Rule for 2015	May 2015	000	1.95	1.01	5.71	0.19	192290	FALSE		FALSE		May 2015	15	Complete		TRUE	Decrease
62322	Injection(s), of diagnost	Epidural Injections	October 2015	10		RUC	AANS, AANEM,	1.55	Final Rule for 2015	May 2015	000	1.55	0.65	2.41	0.18	28139	FALSE		FALSE		May 2015	15	Complete		TRUE	Decrease
62323	Injection(s), of diagnost	Epidural Injections	October 2015	10		RUC	AANS, AANEM,	1.80	Final Rule for 2015	May 2015	000	1.8	0.94	5.76	0.18	603606	FALSE		FALSE		May 2015	15	Complete		TRUE	Decrease
62324	Injection(s), including ir	Epidural Injections	October 2015	10		RUC	AANS, AANEM,	1.89	Final Rule for 2015	May 2015	000	1.89	0.58	2.07	0.17	13434	FALSE		FALSE		May 2015	15	Complete		TRUE	Decrease

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64708	Neuroplasty, major per	Neuroplasty – Leg or Arm	October 2010	69			AOFAS, ASSH, A	6.36		Site of Service Anomaly	September 2007	090	6.36	7.65	NA	1.06	6398	FALSE			FALSE						TRUE	Maintain		
64712	Neuroplasty, major per	Neuroplasty – Leg or Arm	October 2009	40			AOFAS, ASSH, A	Remove from screen		Site of Service Anomaly	September 2007	090	8.07	8.18	NA	1.63	645	FALSE			TRUE	The specialty soci	February 232		Editorial Chan	TRUE	Remove from Screen		
64831	Suture of digital nerve,	Neurorrhaphy – Finger	October 2010	70			AAOS, ASPS, AS	9.16		Site of Service Anomaly	September 2007	090	9.16	10.04	NA	1.67	794	FALSE			FALSE						TRUE	Decrease		
65105	Enucleation of eye; with	Ophthalmologic Procedures	September 2007	16			AAO	Reduce 99238 to 0.5		Site of Service Anomaly (S	September 2007	090	9.93	17.80	NA	0.77	646	FALSE			FALSE						TRUE	PE Only		
65205	Removal of foreign bod	Removal of Foreign Body - Eye	April 2017	19			AAO, AOA	0.49		CMS 000-Day Global Typic	July 2016	000	0.49	0.33	0.33	0.04	23025	FALSE			FALSE						TRUE	Decrease		
65210	Removal of foreign bod	Removal of Foreign Body - Eye	April 2017	19			AAO, AOA	0.75		CMS 000-Day Global Typic	July 2016	000	0.61	0.41	0.49	0.04	22067	FALSE			FALSE						TRUE	Decrease		
65222	Removal of foreign bod	Removal of Foreign Body	September 2011	26			AAO, AOA (optc	0.93		Harvard Valued - Utilizatic	April 2011	000	0.84	0.59	1.12	0.04	21757	FALSE			FALSE						TRUE	Maintain		
65285	Repair of laceration; co	Repair of Eye Wound	February 2011	8			AAO	16.00		Site of Service Anomaly	September 2007	090	15.36	15.94	NA	1.19	622	FALSE			FALSE						TRUE	Decrease		
65778	Placement of amniotic	Ocular Surface Amniotic Memb	January 2023	18			AAO, AOA	0.84		High Volume Growth8	April 2022	000	1	0.51	38.67	0.04	44738	FALSE			FALSE						TRUE	Decrease		
65779	Placement of amniotic	Ocular Surface Amniotic Memb	January 2023	18			AAO, AOA	1.75		High Volume Growth8	September 2022	000	2.5	1.62	31.48	0.19	621	FALSE			FALSE						TRUE	Decrease		
65780	Ocular surface reconstr	Ocular Surface Amniotic Memb	January 2023	18			AAO, AOA	7.03		CMS Fastest Growing / 05	October 2008	090	7.81	11.31	NA	0.59	1500	TRUE	Jun 2009	Yes	FALSE						TRUE	Decrease		
65800	Paracentesis of anterio	Paracentesis of the Eye	April 2012	21			AAO	1.53		Harvard Valued - Utilizatic	September 2011	000	1.53	0.96	1.89	0.12	21162	FALSE			TRUE	Sept 2011 AAO st	October 2(19		Complete	TRUE	Decrease		
65805	Paracentesis of anterio	Paracentesis of the Eye	April 2012	21			AAO	Deleted from CPT		Harvard Valued - Utilizatic	April 2011							FALSE			TRUE	Sept 2011 AAO st	October 2(19		Complete	TRUE	Deleted from CPT		
65855	Trabeculoplasty by lase	Trabeculoplasty by Laser Surge	April 2015	11	RUC		AAO	3.00		010-Day Global Post-Oper	January 2014	010	3	2.81	4.03	0.23	134166	FALSE			TRUE	Referred to CPT t	February 228		Complete	TRUE	Decrease		
66170	Fistulization of sclera fc	Glaucoma Surgery	April 2015	32	RUC		AAO	13.94		090-Day Global Post-Oper	January 2014	090	13.94	17.17	NA	1.06	5537	FALSE			FALSE						TRUE	Decrease		
66172	Fistulization of sclera fc	Glaucoma Surgery	April 2015	32	RUC		AAO	14.81		090-Day Global Post-Oper	January 2014	090	14.84	19.16	NA	1.13	2229	FALSE			FALSE						TRUE	Decrease		
66174	Transluminal dilation of	Dilation of Aqueous Outflow Ca	January 2021	15			AAO	8.53		New Technology/ New Se	April 2010	090	7.62	10.16	NA	0.58	16775	FALSE			TRUE	In October 2019,	October 2(36		complete	TRUE	Decrease		
66175	Transluminal dilation of	Dilation of Aqueous Outflow Ca	January 2021	15			AAO	10.25		New Technology/ New Se	October 2020	090	9.34	11.26	NA	0.72	431	FALSE			FALSE						TRUE	Decrease		
66179	Aqueous shunt to extra	Aqueous Shunt	January 2014	12			AAO	14.00		Harvard-Valued Annual A	January 2014	090	14	16.71	NA	1.06	691	FALSE			TRUE		October 2(24		Complete	TRUE	Decrease		
66180	Aqueous shunt to extra	Aqueous Shunt	January 2020	37			AAO	Maintain. 15.00		Harvard-Valued Annual A	October 2012	090	15	17.35	NA	1.14	9749	FALSE			TRUE	In April 2013, the	October 2(24		Complete	TRUE	Decrease		
66183	Insertion of anterior se	Aqueous Shunt	January 2020	37			AAO	Maintain. 13.20		Harvard-Valued Annual A	January 2014	090	13.2	16.07	NA	1.01	6717	FALSE			FALSE						TRUE	Maintain		
66184	Revision of aqueous sh	Aqueous Shunt	January 2014	12			AAO	9.58		Harvard-Valued Annual A	January 2014	090	9.58	13.01	NA	0.73	502	FALSE			TRUE		October 2(24		Complete	TRUE	Decrease		
66185	Revision of aqueous sh	Aqueous Shunt	January 2020	37			AAO	Maintain. 10.58		Harvard-Valued Annual A	October 2012	090	10.58	13.65	NA	0.82	1500	FALSE			TRUE	In April 2013, the	October 2(24		Complete	TRUE	Increase		
66711	Ciliary body destruction	Cyclophotocoagulation	January 2019	11			AAO	6.36		Codes Reported Together	October 2017	090	5.62	8.86	NA	0.43	754	FALSE			TRUE	In October 2017,	May 2018	26	Yes	TRUE	Decrease		
66761	Iridotomy/iridectomy b	Iridotomy	January 2020	37			AAO	Maintain. 3.00		High IWPUT / 010-Day Glc	February 2008	010	3	3.72	5.64	0.23	52500	FALSE			TRUE	In April 2009 the \	February 233		Revised	TRUE	Decrease		
66821	Discission of secondary	membranous cataract (opacifie	February 2011	41			AAO	Maintain		MPC List	October 2010	090	3.42	5.52	6.22	0.25	635643	FALSE			FALSE						TRUE	Maintain		
66982	Extracapsular cataract r	Cataract Removal with Drainag	January 2021	16			AAO	10.25		High IWPUT / CMS Fastes	September 2007	090	10.25	10.87	NA	0.77	147982	TRUE	Sep 2009	Yes	FALSE						TRUE	Decrease		
66983	Intracapsular cataract e	Cyclophotocoagulation	January 2019	11				Contractor Price		Codes Reported Together	January 2019	090	0	0.00	0.00	0.00	79	FALSE			FALSE						TRUE	Contractor Price		
66984	Extracapsular cataract r	Cataract Removal with Drainag	January 2021	16			AAO	7.35		High IWPUT / MPC List / C	February 2008	090	7.35	8.09	NA	0.55	1527486	FALSE			TRUE	In October 2017,	May 2018	26	Yes	TRUE	Decrease		
66987	Extracapsular cataract r	Cataract Removal with Drainag	January 2021	16			AAO	13.15		Codes Reported Together	January 2019	090	0	0.00	0.00	0.00	918	FALSE			FALSE						TRUE	Decrease		
66988	Extracapsular cataract r	Cyclophotocoagulation	January 2019	11				10.25		Codes Reported Together	January 2019	090	0	0.00	0.00	0.00	5398	FALSE			FALSE						TRUE	Decrease		
66989	Extracapsular cataract r	Cataract Removal with Drainag	January 2021	16			AAO	12.13		High Volume Category III	January 2021	090	12.13	12.06	NA	0.91		FALSE			FALSE				October 2(37	complete	TRUE	Maintain		
66991	Extracapsular cataract r	Cataract Removal with Drainag	January 2021	16			AAO	9.23		High Volume Category III	January 2021	090	9.23	10.16	NA	0.67		FALSE			FALSE				October 2(37	complete	TRUE	Maintain		
67028	Intravitreal injection of	Treatment of Retinal Lesion	September 2022	13			AAO, ASRS	1.44		High Volume Growth1 / C	February 2008	000	1.44	1.14	1.80	0.11	3951441	FALSE			FALSE						TRUE	Maintain		
67036	Vitrectomy, mechanica	Vitrectomy	October 2013	11			AAO	12.13		Harvard-Valued Annual A	October 2012	090	12.13	13.26	NA	0.91	17220	FALSE			FALSE						TRUE	Decrease		
67038	Deleted from CPT	Ophthalmological Procedures	September 2007	16			AAO	Deleted from CPT		Site of Service Anomaly	September 2007							FALSE			FALSE		February 2007				TRUE	Deleted from CPT		
67039	Vitrectomy, mechanica	Vitrectomy	October 2013	11			AAO	13.20		Site of Service Anomaly (S	September 2007	090	13.2	13.95	NA	1.01	3661	FALSE			FALSE						TRUE	Decrease		
67040	Vitrectomy, mechanica	Vitrectomy	October 2013	11			AAO	14.50		Site of Service Anomaly (S	September 2007	090	14.5	14.77	NA	1.12	6743	FALSE			FALSE						TRUE	Decrease		
67041	Vitrectomy, mechanica	Vitrectomy	October 2013	11			AAO	16.33		Harvard-Valued Annual A	October 2012	090	16.33	15.94	NA	1.26	11425	FALSE			FALSE						TRUE	Decrease		
67042	Vitrectomy, mechanica	Vitrectomy	October 2013	11			AAO	16.33		Harvard-Valued Annual A	October 2012	090	16.33	15.93	NA	1.26	23661	FALSE			FALSE						TRUE	Decrease		
67043	Vitrectomy, mechanica	Vitrectomy	October 2013	11			AAO	17.40		Harvard-Valued Annual A	October 2012	090	17.4	16.61	NA	1.32	289	FALSE			FALSE						TRUE	Decrease		
67101	Repair of retinal detach	Retinal Detachment Repair	October 2015	11	RUC		AAO, ASRS	3.50		090-Day Global Post-Oper	April 2015	010	3.5	4.61	6.13	0.27	286	FALSE			TRUE	In April 2015, the	May 2015	21	Complete	TRUE	Decrease		
67105	Repair of retinal detach	Retinal Detachment Repair	October 2015	11	RUC		AAO, ASRS	3.84		090-Day Global Post-Oper	April 2015	010	3.39	4.44	5.10	0.26	3103	FALSE			TRUE	In April 2015, the	May 2015	21	Complete	TRUE	Decrease		
67107	Repair of retinal detach	Retinal Detachment Repair	April 2015	12			AAO	16.00. Reduce 99238 to 0.5		Site of Service Anomaly (S	September 2007	090	16	15.73	NA	1.21	449	FALSE			FALSE				October 2(23		TRUE	Decrease		
67108	Repair of retinal detach	Retinal Detachment Repair	April 2015	12	RUC		AAO	17.13		Site of Service Anomaly (S	September 2007	090	17.13	16.43	NA	1.31	15259	FALSE			FALSE				October 2(23		TRUE	Decrease		
67110	Repair of retinal detach	Retinal Detachment Repair	April 2015	12			AAO	10.25. Remove 99238		Site of Service Anomaly (S	September 2007	090	10.25	12.88	15.27	0.79	2171	FALSE			FALSE				October 2(23		TRUE	Maintain		
67112	Repair of retinal detach	Retinal Detachment Repair	April 2015	12			AAO	Deleted from CPT		090-Day Global Post-Oper	April 2014							FALSE			TRUE	Added as part of t	October 2(23		Complete	TRUE	Deleted from CPT		
67113	Repair of complex retin	Retinal Detachment Repair	April 2015	12	RUC		AAO	19.00		090-Day Global Post-Oper	January 2014	090	19	18.52	NA	1.48	10813	FALSE			FALSE				October 2(23	Complete	TRUE	Decrease		
67141	Prophylaxis of retinal d	Retinal Detachment Prophylaxi	October 2020	08			AAO, ASRS	2.53		Harvard Valued - Utilizatic	January 2020	090	2.53	3.65	5.26	0.19	1128	FALSE			TRUE	CPT code 67145 w	May 2020		complete	TRUE	Decrease		
67145	Prophylaxis of retinal d	Retinal Detachment Prophylaxi	October 2020	08			AAO, ASRS	2.53		Harvard Valued - Utilizatic	October 2019	090	2.53	3.65	4.46	0.19	30277	FALSE			TRUE	CPT code 67145 w	May 2020		Complete	TRUE	Decrease		
67210	Destruction of localized	Treatment of Retinal Lesion or	October 2010	13			AAO	6.36		High IWPUT	February 2008	090	6.36	7.80	8.35	0.50	41588	FALSE			TRUE	Code originally referred to CPT with req			Complete	TRUE	Decrease		
67220	Destruction of localized	Treatment of Retinal Lesion or	October 2010	13			AAO	6.36		High IWPUT	February 2008	090	6.36	7.80	8.80	0.49	2172	FALSE			TRUE	Code originally referred to CPT with req			Complete	TRUE	Decrease		
67225	Destruction of localized	Photodynamic Therapy of the E	February 2008	P			AAO	0.47		New Technology	September 2007	ZZZ	0.47	0.30	0.35	0.04	125	FALSE			FALSE						TRUE	Maintain		
67228	Treatment of extensive	Treatment of Retinal Lesion or	October 2009	40			AAO	Remove from screen		High IWPUT	February 2008	010	4.39	4.17	5.28	0.35	46728	FALSE			FALSE						TRUE	Remove from Screen		
67255	Scleral reinforcement (s	Aqueous Shunt	January 2014	12			AAO	10.17		Harvard-Valued Annual A	January 2014	090	8.38	11.25	NA	0.65	706	FALSE			TRUE		October 2(24		Complete	TRUE	Maintain		
67311	Strabismus surgery, rec	Strabismus Surgery	October 2020	18			AAO, AAP	5.93		ZZZ Global Post-Operative	April 2020	090	5.93	7.02	NA	0.44	4449	FALSE			FALSE						TRUE	Decrease		
67312	Strabismus surgery, rec	Strabismus Surgery	October 2020	18			AAO, AAP	9.50		ZZZ Global Post-Operative	April 2020	090	9.5	9.29	NA	0.73	1281	FALSE			FALSE						TRUE	Decrease		
67314	Strabismus surgery, rec	Strabismus Surgery	October 2020	18			AAO, AAP	5.93		ZZZ Global Post-Operative	April 2020	090	5.93	7.02	NA	0.44	2238	FALSE			FALSE						TRUE	Decrease		
67316	Strabismus surgery, rec	Strabismus Surgery	October 2020	18			AAO, AAP	10.31		ZZZ Global Post-Operative	April 2020	090	10.31	9.83	NA	0.79	140	FALSE			FALSE						TRUE	Decrease		
67318	Strabismus surgery, any	Strabismus Surgery	October 2020	18			AAO, AAP	9.80		ZZZ Global Post-Operative	April 2020	090	9.8	9.65	NA	0.75	143	FALSE			FALSE						TRUE	Decrease		
67320	Transposition procedur	Strabismus Surgery	October 2020	18			AAO, AAP	3.00		ZZZ Global Post-Operative	October 2019	ZZZ	3	2.75	NA	0.23	290	FALSE			FALSE						TRUE	Decrease		
67331	Strabismus surgery on p	Strabismus Surgery	October 2020	18			AAO, AAP	2.00		ZZZ Global Post-Operative	October 2019	ZZZ	2	3.52	NA	0.17	871	FALSE			FALSE						TRUE	Decrease		
67332	Strabismus surgery on p	Strabismus Surgery	October 2020	18			AAO, AAP	3.50		ZZZ Global Post-Operative	October 2019	ZZZ	3.5	2.39	NA	0.27	1424	FALSE			FALSE						TRUE	Decrease		
67334	Strabismus surgery by p	Strabismus Surgery	October 2020	18			AAO, AAP	2.06		ZZZ Global Post-Operative	October 2019	ZZZ	2.06	3.38	NA	0.17	125	FALSE			FALSE						TRUE	Decrease		
67335	Placement of adjustabl	Strabismus Surgery	October 2020	18			AAO, AAP	3.23		ZZZ Global Post-Operative	October 2019	ZZZ	3.23	2.02	NA	0.25	1511	FALSE			FALSE						TRUE	Increase		
67340	Strabismus surgery invc	Strabismus Surgery	October 2020	18			AAO, AAP	5.00		ZZZ Global Post-Operative	October 2019	ZZZ	5	3.17	NA	0.37	69	FALSE			FALSE						TRUE	Decrease		
67500	Retrobulbar injection; r	Injection – Eye	October 2017	11			AAO, ASRS	1.18		CMS 000-Day Global Typic	October 2017	000	1.18	0.60	0.99	0.10	7736	FALSE			FALSE						TRUE	Decrease		
67505	Retrobulbar injection; a	Injection – Eye	October 2017	11			AAO, ASRS	1.18		CMS 000-Day Global Typic	October 2017	000	1.18	0.85	1.28	0.10	79	FALSE			FALSE						TRUE	Decrease		
67515	Injection of medication	Injection – Eye	October 2017	11			AAO, ASRS	0.84		CMS 000-Day Global Typic	July 2016	000	0.75	0.58	0.72	0.06	20130	FALSE			FALSE						TRUE	Decrease		
67820	Correction of trichiasis;	Correction of Trichiasis	April 2016	29			AOA, AOA (optc	0.32		CMS High Expenditure Pr	July 2015	000	0.32	0.31	0.23	0.02	180998	FALSE			FALSE						TRUE	Decrease		
67914	Repair of ectropion; sut	Repair of Eyelid	April 2013	24			AAO	3.75		Harvard-Valued Annual A	October 2012	090	3.75	5.61	10.52	0.31	1286	FALSE			FALSE						TRUE	Maintain		
67915	Repair of ectropion; the	Repair of Eyelid	April 2013	24			AAO	2.03		Harvard-Valued Annual A	October 2012	090	2.03	3.68	7.27	0.17	229	FALSE			FALSE						TRUE	Decrease		
67916	Repair of ectropion; ex	Repair of Eyelid	April 2013	24			AAO	5.48		Harvard-Valued Annual A	October 2012	090	5.48	6.71	12.27	0.44	1137	FALSE			FALSE						TRUE	Maintain		
67917	Repair of ectropion; ext	Repair of Eyelid	April 2013	24			AAO	5.93		Harvard-Valued Annual A	October 2012	090	5.93	7.00	12.18	0.49	18613	FALSE			FALSE						TRUE	Decrease		
67921	Repair of entropion; su	Repair of Eyelid	April 2013	24			AAO	3.47		Harvard-Valued Annual A	October 2012	090	3.47	5.45	10.54	0.27	3049	FALSE			FALSE						TRUE	Maintain		
67922	Repair of entropion; the	Repair of Eyelid	April 2013	24			AAO	2.03		Harvard-Valued Annual A	October 2012	090	2.03	3.69	6.99	0.17	66	FALSE			FALSE						TRUE	Decrease		
67923	Repair of entropion; ex	Repair of Eyelid	April 2013	24			AAO	5.48		Harvard-Valued Annual A	October 2012	090	5.48	6.72	12.28	0.44	860	FALSE			FALSE						TRUE	Decrease		
67924	Repair of entropion; ex	Repair of Eyelid	April 2013	24			AAO	5.93		Harvard-Valued Annual A	October 2012	090	5.93	7.01	12.96	0.47	9083	FALSE			FALSE						TRUE	Maintain		
68040	Expression of conjuncti	Treatment of Eyelid Lesions	September 2011	51			AAO	Revised parenthetical		High Volume Growth1	February 2008	000	0.85	0.50	0.94	0.04	6286	FALSE			TRUE	AAO to develop (	February 218		Complete	TRUE	Maintain		
68200	Subconjunctival injectic	Subconjunctival Injection	October 2013	18			AAO	0.49		Harvard Valued - Utilizatic	April 2011	000	0.49	0.47	0.70	0.04	5347	FALSE			FALSE						TRUE	Maintain		
68801	Dilation of lacrimal pun	Dilation and Probing of Lacrima	January 2015	23			AAO, AOA (optc	1.00		010-Day Global Post-Oper	January 2014	010	0.82	1.47	2.00	0.04	22177	FALSE			FALSE						TRUE	Maintain		
68810	Probing of nasolacrimal	Dilation and Probing of Lacrima	January 2015	23			AAO, AOA (optc	1.54		Site of Service Anomaly /	September 2007	010	1.54	2.11	3.13	0.12	21662	FALSE			FALSE						TRUE	Decrease		
68811	Probing of nasolacrimal duct, with or without irrigation		January 2015	23			AAO, AOA (optc	2.03		010-Day Global Post-Oper	September 2014	010	1.74	2.09	NA	0.14	349	FALSE			FALSE						TRUE	Decrease		
68815	Probing of nasolacrimal	Dilation and Probing of Lacrima	January 2015	23			AAO, AOA (optc	3.00		010-Day Global Post-Oper	January 2014	010	2.7	3.62	8.32	0.22	6177	FALSE			FALSE						TRUE	Decrease		
68816	Probing of nasolacrimal duct, with or without irrigation		January 2015	23			AAO, AOA (optc	2.35		010-Day Global Post-Oper	September 2014	010	2.1	2.35	23.49	0.18	181	FALSE			FALSE						TRUE	Decrease		
69100	Biopsy external ear	Biopsy of Ear	April 2009	28			AAD	0.81		CMS Fastest Growing	October 2008	000	0.81	0.48	1.99	0.10	159540	FALSE			FALSE						TRUE	Maintain		
69200	Removal foreign body f	Removal of Foreign Body	September 2011	29			AAO-HNS	0.77		Harvard Valued - Utilizatic	April 2011	000	0.77	0.53	1.53	0.11	50973	FALSE			FALSE						TRUE	Maintain		
69210	Removal impacted ceru	Removal of Cerumen	January 2015	29			AAFP, AAO-HNS	0.58.		CMS High Expenditure Pr	September 2011	000	0.61	0.28	0.73	0.08	1423836	FALSE			TRUE	In January 2012, t	October 2(19		Complete	TRUE	Decrease		
69400	Eustachian tube inflatic	Eustachian Tube Procedures	October 2013	18			AAO-HNS	Deleted from CPT		High Volume Growth2	October 2013							FALSE			TRUE	October 2013, the	February 241		Complete	TRUE	Deleted from CPT		
69401	Eustachian tube inflatic	Eustachian Tube Procedures	October 2013	18			AAO-HNS	Deleted from CPT		High Volume Growth2	April 2013							FALSE			TRUE	October 2013, the	February 241		Complete	TRUE	Deleted from CPT		
69405	Eustachian tube cathet	Eustachian Tube Procedures	October 2013	18			AAO-HNS	Deleted from CPT		High Volume Growth2	October 2013							FALSE			TRUE	October 2013, the	February 241		Complete	TRUE	Deleted from CPT		
69433	Tympanostomy (requiri	Tympanostomy	September 2011	30			AAO-HNS	1.57		Harvard Valued - Utilizatic	April 2011	010	1.57	2.19	4.32	0.22	30622	FALSE			FALSE						TRUE	Maintain		
69801	Labyrinthotomy, with p	Labyrinthotomy	October 2015	21			AAO-HNS	Review action plan at RAW Oct		CMS Fastest Growing / Si	September 2007	000	2.06	1.36	4.54	0.29	23490	TRUE	May 2011	Yes	TRUE	The Workgroup p	Feb 2010	34	Revised	TRUE	Decrease		
69802	Labyrinthotomy, with p	Labryinthotomy	April 2010	16			AAO-HNS	Deleted from CPT		CMS Fastest Growing / Site of Service Anomaly (99238-Only)								FALSE			TRUE	Prior to surveying	Feburary 225		Code Deleted	TRUE	Deleted from CPT		
69930	Cochlear device implan	Cochlear Device Implantation	February 2008	M			AAO-HNS	17.60		Site of Service Anomaly	September 2007	090	17.73	16.35	NA	2.52	3904	FALSE			FALSE						TRUE	Maintain		
70030	Radiologic examination	X-Ray of Eye	January 2020	28				0.18		CMS-Other - Utilization o	January 2019	XXX	0.18	NA	0.78	0.02	21076	FALSE			FALSE						TRUE	Increase		
70100	Radiologic examination	RAW	October 2013	18				RUC to submit letter to CMS sp		High Volume Growth2	April 2013	XXX	0.18	NA	0.96	0.02	18627	FALSE			FALSE						TRUE	Maintain		
70210	Radiologic examination	X-Ray Exam - Sinuses	January 2019	24			AAFP, ACP, ACR	0.20		CMS-Other - Utilization o	October 2017	XXX	0.17	NA	0.78	0.02	14260	FALSE			FALSE						TRUE	Increase		
70220	Radiologic examination	X-Ray Exam - Sinuses	January 2019	24			AAFP, ACP, ACR	0.22		CMS-Other - Utilization o	October 2017	XXX	0.22	NA	0.89	0.02	30910	FALSE			FALSE						TRUE	Decrease		
70250	Radiologic examination	X-Ray Exam – Skull	January 2019	25			ACR, ASNR	0.20		CMS-Other - Utilization o	October 2017	XXX	0.18	NA	0.88	0.02	40209	FALSE			FALSE						TRUE	Decrease		
70260	Radiologic examination	X-Ray Exam – Skull	January 2019	25			ACR, ASNR	0.29		CMS-Other - Utilization o	October 2017	XXX	0.28	NA	1.04	0.02	8116	FALSE			FALSE						TRUE	Decrease		
70310	Radiologic examination	RAW	October 2013	18				RUC to submit letter to CMS sp		High Volume Growth2	April 2013	XXX	0.16	NA	1.00	0.02	1368	FALSE			FALSE						TRUE	Maintain		

70360	Radiologic examination X-Ray Exam – Neck	January 2019	26			AAFP, ACP, ACR	0.20	CMS-Other - Utilization o	October 2017	XXX	0.18	NA	0.75	0.02	38451	FALSE			FALSE						TRUE	Increase
70371	Complex dynamic phan	Laryngography	January 2019	37			ACR, AAFP	CPT Assistant article published	Codes Reported Together	October 2012	XXX	0.84	NA	2.36	0.05	980	TRUE	July 2014	Yes	FALSE						TRUE	Maintain
70373	Laryngography, contras	Laryngography	October 2012				ACR, AAFP	CPT Assistant article published	Codes Reported Together	October 2012							TRUE	July 2014	Yes	FALSE						TRUE	Deleted from CPT
70450	Computed tomography	CT Head/Brain	April 2019	15			ACR, ASNR	0.85	CMS-Other - Utilization o	April 2011	XXX	0.85	NA	2.39	0.05	4982473	FALSE			FALSE						TRUE	Maintain
70460	Computed tomography	CT Head/Brain	April 2019	15			ACR, ASNR	1.13	CMS High Expenditure Pr	April 2013	XXX	1.13	NA	3.39	0.07	20993	FALSE			FALSE						TRUE	Maintain
70470	Computed tomography	CT Head/Brain	April 2019	15			ACR, ASNR	1.27	Harvard Valued - Utilizati	October 2009	XXX	1.27	NA	4.04	0.09	70531	FALSE			FALSE						TRUE	Maintain
70480	Computed tomography	CT – Orbit/Ear/Fossa	October 2018	16			ACR, ASNR	1.28	CMS-Other - Utilization o	October 2017	XXX	1.28	NA	3.56	0.08	48924	FALSE			FALSE						TRUE	Maintain
70481	Computed tomography	CT – Orbit/Ear/Fossa	October 2018	16			ACR, ASNR	1.13	CMS-Other - Utilization o	October 2017	XXX	1.13	NA	4.41	0.08	9404	FALSE			FALSE						TRUE	Decrease
70482	Computed tomography	CT – Orbit/Ear/Fossa	October 2018	16			ACR, ASNR	1.27	CMS-Other - Utilization o	October 2017	XXX	1.27	NA	5.20	0.09	4372	FALSE			FALSE						TRUE	Decrease
70486	Computed tomography	CT – Maxillofacial	April 2014	41			ACR, ASNR	0.85	CMS-Other - Utilization o	April 2013	XXX	0.85	NA	3.08	0.05	450568	FALSE			FALSE						TRUE	Decrease
70487	Computed tomography	CT – Maxillofacial	April 2014	41			ACR, ASNR	1.17	CMS-Other - Utilization o	April 2014	XXX	1.13	NA	3.52	0.07	27136	FALSE			FALSE						TRUE	Decrease
70488	Computed tomography	CT – Maxillofacial	April 2014	41			ACR, ASNR	1.30	CMS-Other - Utilization o	April 2014	XXX	1.27	NA	4.39	0.09	3177	FALSE			FALSE						TRUE	Decrease
70490	Computed tomography	CT Soft Tissue Neck	January 2017	21			ACR, ASNR	1.28	CMS High Expenditure Pr	July 2015	XXX	1.28	NA	3.30	0.08	58481	FALSE			FALSE						TRUE	Maintain
70491	Computed tomography	CT Soft Tissue Neck	January 2017	21			ACR, ASNR	1.38	CMS High Expenditure Pr	July 2015	XXX	1.38	NA	4.27	0.09	263568	FALSE			FALSE						TRUE	Maintain
70492	Computed tomography	CT Soft Tissue Neck	January 2017	21			ACR, ASNR	1.62	CMS High Expenditure Pr	July 2015	XXX	1.62	NA	5.18	0.10	21431	FALSE			FALSE						TRUE	Increase
70496	Computed tomographic	CT Angiography – Head & Neck	September 2022	13	Septembe	RUC	ACR, ASNR	Refer to CPT for code bundling	High Volume Growth 1 / C	February 2008	XXX	1.75	NA	6.70	0.14	601126	FALSE			TRUE	In April 2022, the	May 2023				FALSE	Maintain
70498	Computed tomographic	CT Angiography – Head & Neck	September 2022	13	Septembe	RUC	ACR, ASNR	Refer to CPT for code bundling	High Volume Growth 1 / C	February 2008	XXX	1.75	NA	6.69	0.14	622608	FALSE			TRUE	In April 2022, the	May 2023				FALSE	Maintain
70540	Magnetic resonance (eq	MRI Face and Neck	January 2016	39			ACR, ASNR	1.35	CMS High Expenditure Pr	July 2015	XXX	1.35	NA	5.64	0.09	9546	FALSE			FALSE						TRUE	Maintain
70542	Magnetic resonance (eq	MRI Face and Neck	January 2016	39			ACR, ASNR	1.62	CMS High Expenditure Pr	July 2015	XXX	1.62	NA	6.69	0.10	707	FALSE			FALSE						TRUE	Maintain
70543	Magnetic resonance (eq	MRI Face and Neck	January 2016	39			ACR, ASNR	2.15	CMS High Expenditure Pr	July 2015	XXX	2.15	NA	8.32	0.15	61935	FALSE			FALSE						TRUE	Maintain
70544	Magnetic resonance an	Magnetic Resonance Angiograp	September 2022	22	April 2024	RAW	ACR, ASNR	Review action plan. 1.20	CMS High Expenditure Pr	July 2015	XXX	1.2	NA	5.44	0.08	194391	FALSE			FALSE						TRUE	Maintain
70545	Magnetic resonance an	Magnetic Resonance Angiograp	October 2016	18		RUC	ACR, ASNR	1.20	CMS High Expenditure Pr	July 2015	XXX	1.2	NA	5.80	0.10	3043	FALSE			FALSE						TRUE	Maintain
70546	Magnetic resonance an	Magnetic Resonance Angiograp	October 2016	18			ACR, ASNR	1.48	CMS High Expenditure Pr	July 2015	XXX	1.48	NA	8.69	0.12	18663	FALSE			FALSE						TRUE	Decrease
70547	Magnetic resonance an	Magnetic Resonance Angiograp	September 2022	13	April 2024	RAW	ACR, ASNR	Review action plan. 1.20	CMS High Expenditure Pr	July 2015	XXX	1.2	NA	5.45	0.08	64908	FALSE			FALSE						TRUE	Maintain
70548	Magnetic resonance an	Magnetic Resonance Angiograp	October 2016	19		RUC	ACR, ASNR	1.50	CMS High Expenditure Pr	July 2015	XXX	1.5	NA	6.06	0.12	12924	FALSE			FALSE						TRUE	Increase
70549	Magnetic resonance an	Magnetic Resonance Angiograp	October 2016	19		RUC	ACR, ASNR	1.80	CMS High Expenditure Pr	July 2015	XXX	1.8	NA	8.85	0.14	42928	FALSE			FALSE						TRUE	Maintain
70551	Magnetic resonance (eq	MRI-Brain	January 2013	26			ACR, ASNR	1.48	CMS High Expenditure Pr	September 2011	XXX	1.48	NA	4.53	0.10	1069458	FALSE			FALSE						TRUE	Maintain
70552	Magnetic resonance (eq	MRI-Brain	January 2013	26			ACR, ASNR	1.78	CMS High Expenditure Pr	September 2011	XXX	1.78	NA	6.54	0.14	17460	FALSE			FALSE						TRUE	Maintain
70553	Magnetic resonance (eq	MRI-Brain	January 2013	26			ACR, ASNR	2.36	CMS-Other - Utilization o	April 2011	XXX	2.29	NA	7.51	0.16	944689	FALSE			FALSE						TRUE	Maintain
71010	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	Low Value-High Volume /	October 2010							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71015	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71020	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	MPC List / CMS High Expe	October 2010							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71021	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71022	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71023	Radiologic examination	Chest X-Ray	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71030	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71034	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71035	Radiologic examination	Chest X-Rays	April 2016	07			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	20	Complete	TRUE	Deleted from CPT
71045	Radiologic examination	Chest X-Ray	April 2016	07			ACR	0.18	CMS High Expenditure Pr	February 2016	XXX	0.18	NA	0.58	0.02	14823913	FALSE			FALSE		February 2	20	Complete	TRUE	Decrease
71046	Radiologic examination	Chest X-Ray	April 2016	07			ACR	0.22	CMS High Expenditure Pr	February 2016	XXX	0.22	NA	0.77	0.02	6063799	FALSE			FALSE		February 2	20	Complete	TRUE	Decrease
71047	Radiologic examination	Chest X-Ray	April 2016	07			ACR	0.27	CMS High Expenditure Pr	February 2016	XXX	0.27	NA	0.98	0.02	12495	FALSE			FALSE		February 2	20	Complete	TRUE	Decrease
71048	Radiologic examination	Chest X-Ray	April 2016	07			ACR	0.31	CMS High Expenditure Pr	February 2016	XXX	0.31	NA	1.06	0.02	7750	FALSE			FALSE		February 2	20	Complete	TRUE	Decrease
71090	Insertion pacemaker, fl	Insertion/Removal of Pacemea	April 2011	10			ACC	Deleted from CPT	Codes Reported Together	February 2010							FALSE			TRUE	33213 - This code	February 2	13	Complete	TRUE	Deleted from CPT
71100	Radiologic examination	X-Ray of Ribs	April 2016	30			ACR	0.22	CMS-Other - Utilization o	April 2013	XXX	0.22	NA	0.87	0.02	132073	FALSE			FALSE						TRUE	Maintain
71101	Radiologic examination	X-Ray of Ribs	April 2016	30			ACR	0.27	CMS-Other - Utilization o	October 2015	XXX	0.27	NA	0.98	0.02	249946	FALSE			FALSE						TRUE	Maintain
71110	Radiologic examination	X-Ray of Ribs	April 2016	30			ACR	0.29	CMS-Other - Utilization o	October 2015	XXX	0.29	NA	1.01	0.02	20626	FALSE			FALSE						TRUE	Maintain
71111	Radiologic examination	X-Ray of Ribs	April 2016	30			ACR	0.32	CMS-Other - Utilization o	October 2015	XXX	0.32	NA	1.23	0.03	27613	FALSE			FALSE						TRUE	Maintain
71250	Computed tomography	Screening CT of Thorax	October 2019	07			ACR	1.16	CMS Fastest Growing / Ch	October 2008	XXX	1.08	NA	2.98	0.07	2145188	FALSE			FALSE						TRUE	Increase
71260	Computed tomography	Screening CT of Thorax	October 2019	07			ACR	1.38	CMS High Expenditure Pr	July 2015	XXX	1.16	NA	3.94	0.08	1736347	FALSE			FALSE						TRUE	Maintain
71270	Computed tomography	Screening CT of Thorax	October 2019	07			ACR	1.24	CMS High Expenditure Pr	July 2015	XXX	1.25	NA	4.78	0.08	56503	FALSE			FALSE						TRUE	Maintain
71271	Computed tomography	Screening CT of Thorax	October 2019	07				1.16	CMS-Other - Utilization o	May 2019	XXX	1.08	NA	3.12	0.07	324831	FALSE			FALSE						TRUE	Increase
71275	Computed tomographic	CT Angiography-Chest	January 2014	27			ACR, SIR	1.82	CMS Fastest Growing / M	October 2008	XXX	1.82	NA	6.79	0.14	1478442	TRUE	Jun 2009	Yes	FALSE						TRUE	Decrease
72020	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.16	CMS-Other - Utilization o	April 2016	XXX	0.16	NA	0.56	0.02	110300	FALSE			FALSE						TRUE	Increase
72040	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.22	Low Value-High Volume /	October 2010	XXX	0.22	NA	0.95	0.02	558600	FALSE			TRUE	The RUC recomm	October 2	17	Complete	TRUE	Maintain
72050	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.27	Low Value-High Volume /	October 2010	XXX	0.27	NA	1.31	0.02	326846	FALSE			TRUE	The RUC recomm	October 2	17	Complete	TRUE	Decrease
72052	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.30	Low Value-High Volume /	October 2010	XXX	0.3	NA	1.54	0.03	63518	FALSE			TRUE	The RUC recomm	October 2	17	Complete	TRUE	Decrease
72070	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.20	CMS-Other - Utilization o	April 2013	XXX	0.2	NA	0.77	0.02	270070	FALSE			FALSE						TRUE	Decrease
72072	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.23	CMS-Other - Utilization o	April 2016	XXX	0.23	NA	0.93	0.02	150105	FALSE			FALSE						TRUE	Increase
72074	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.25	CMS-Other - Utilization o	October 2016	XXX	0.25	NA	1.06	0.02	10986	FALSE			FALSE						TRUE	Increase
72080	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.21	CMS-Other - Utilization o	October 2016	XXX	0.21	NA	0.81	0.02	41682	FALSE			FALSE						TRUE	Decrease
72100	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.22	Harvard Valued - Utilizati	February 2010	XXX	0.22	NA	0.96	0.02	1583990	FALSE			TRUE	This service was b	October 2	18	Complete	TRUE	Maintain
72110	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.26	Harvard Valued - Utilizati	October 2009	XXX	0.26	NA	1.26	0.02	742086	FALSE			TRUE	April 2010, refer t	October 2	18	Complete	TRUE	Decrease
72114	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.30	Harvard Valued - Utilizati	February 2010	XXX	0.3	NA	1.53	0.03	87900	FALSE			TRUE	This service was b	October 2	18	Complete	TRUE	Decrease
72120	Radiologic examination	X-Ray Spine	January 2019	27			AAOS, ACR, ASN	0.22	Harvard Valued - Utilizati	February 2010	XXX	0.22	NA	0.98	0.02	46212	FALSE			TRUE	Code 72110 was i	October 2	18	Complete	TRUE	Maintain
72125	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.07	CMS Fastest Growing	October 2008	XXX	1	NA	2.97	0.05	1295484	FALSE			FALSE						TRUE	Maintain
72126	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.22	CMS Fastest Growing	February 2009	XXX	1.22	NA	3.94	0.08	18311	FALSE			FALSE						TRUE	Maintain
72127	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.27	CMS Fastest Growing	February 2009	XXX	1.27	NA	4.78	0.09	1728	FALSE			FALSE						TRUE	Maintain
72128	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.00	CMS Fastest Growing	October 2008	XXX	1	NA	2.97	0.05	200681	FALSE			FALSE						TRUE	Maintain
72129	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.22	CMS Fastest Growing	February 2009	XXX	1.22	NA	3.97	0.09	33452	FALSE			FALSE						TRUE	Maintain
72130	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.27	CMS Fastest Growing	February 2009	XXX	1.27	NA	4.84	0.09	1316	FALSE			FALSE						TRUE	Maintain
72131	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.00	CMS Fastest Growing / Ch	February 2009	XXX	1	NA	2.95	0.05	487126	FALSE			FALSE						TRUE	Maintain
72132	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.22	CMS Fastest Growing / Ch	February 2009	XXX	1.22	NA	3.95	0.08	61062	FALSE			FALSE						TRUE	Maintain
72133	Computed tomography	CT Spine	April 2018	18			ACR, ASNR	1.27	CMS Fastest Growing / Ch	February 2009	XXX	1.27	NA	4.80	0.09	3692	FALSE			FALSE						TRUE	Maintain
72141	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25			ACR	1.48	CMS High Expenditure Pr	September 2011	XXX	1.48	NA	4.36	0.10	544579	FALSE			FALSE						TRUE	Decrease
72142	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25			ACR	1.78	CMS High Expenditure Pr	April 2013	XXX	1.78	NA	6.71	0.12	2811	FALSE			FALSE						TRUE	Decrease
72146	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25			ACR	1.48	CMS High Expenditure Pr	April 2013	XXX	1.48	NA	4.36	0.10	212578	FALSE			FALSE						TRUE	Decrease
72147	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25			ACR	1.78	CMS High Expenditure Pr	April 2013	XXX	1.78	NA	6.64	0.12	2629	FALSE			FALSE						TRUE	Decrease
72148	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25			AAOS, AUR, ACF	1.48	CMS-Other - Utilization o	April 2011	XXX	1.48	NA	4.38	0.10	1251695	FALSE			FALSE						TRUE	Maintain
72149	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25				1.78	CMS High Expenditure Pr	April 2013	XXX	1.78	NA	6.56	0.12	4604	FALSE			FALSE						TRUE	Maintain
72156	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25				2.29	CMS High Expenditure Pr	April 2013	XXX	2.29	NA	7.56	0.16	111923	FALSE			FALSE						TRUE	Decrease
72157	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25				2.29	CMS High Expenditure Pr	April 2013	XXX	2.29	NA	7.58	0.16	97003	FALSE			FALSE						TRUE	Decrease
72158	Magnetic resonance (eq	MRI Neck and Lumbar Spine	April 2013	25				2.29	CMS High Expenditure Pr	April 2013	XXX	2.29	NA	7.54	0.16	216368	FALSE			FALSE						TRUE	Decrease
72170	Radiologic examination	X-Ray Exam – Pelvis	January 2019	28			AAOS, ACR	0.17	Low Value-High Volume /	October 2010	XXX	0.17	NA	0.65	0.02	706554	FALSE			TRUE	The Joint Workgro	October 2	27	Complete	TRUE	Maintain
72190	Radiologic examination	X-Ray Exam – Pelvis	January 2019	28			AAOS, ACR	0.25	CMS-Other - Utilization o	October 2017	XXX	0.25	NA	1.00	0.02	54865	FALSE			FALSE						TRUE	Increase
72191	Computed tomographic	CT Angiography	October 2013	12			ACR, SIR	1.81	High Volume Growth 1 / C	February 2008	XXX	1.81	NA	7.56	0.14	2841	FALSE			TRUE	The Workgroup a	October 2	19	Complete	TRUE	Maintain
72192	Computed tomography	CT Pelvis	October 2008	26			ACR	1.09	Codes Reported Together	October 2008	XXX	1.09	NA	2.97	0.07	171942	FALSE			TRUE	The specialty soci	October 2	37	Complete	TRUE	Maintain
72193	Computed tomography	CT Pelvis	October 2008	26			ACR	1.16	Codes Reported Together	October 2008	XXX	1.16	NA	5.95	0.08	34286	FALSE			TRUE	The specialty soci	October 2	37	Complete	TRUE	Maintain
72194	Computed tomography	CT Abdomen and Pelvis	April 2014	44			ACR	1.22	Codes Reported Together	February 2008	XXX	1.22	NA	6.63	0.08	5008	FALSE			TRUE	Referred to the CI	October 2	37	Complete	TRUE	Maintain
72195	Magnetic resonance (eq	MRI Pelvis	October 2016	21		RUC	ACR	1.46	CMS High Expenditure Pr	July 2015	XXX	1.46	NA	5.61	0.10	80763	FALSE			FALSE						TRUE	Maintain
72196	Magnetic resonance (eq	MRI Pelvis	October 2016	21		RUC	ACR	1.73	CMS High Expenditure Pr	July 2015	XXX	1.73	NA	6.57	0.12	2197	FALSE			FALSE						TRUE	Maintain
72197	Magnetic resonance (eq	MRI Pelvis	October 2016	21		RUC	ACR	2.20	CMS High Expenditure Pr	July 2015	XXX	2.2	NA	8.22	0.15	249299	FALSE			FALSE						TRUE	Decrease
72200	Radiologic examination	X-Ray Sacrum	January 2019	29			AAOS, ACR	0.20	CMS-Other - Utilization o	October 2016	XXX	0.17	NA	0.80	0.02	13715	FALSE			FALSE						TRUE	Increase
72202	Radiologic examination	X-Ray Sacrum	January 2019	29			AAOS, ACR	0.26	CMS-Other - Utilization o	October 2016	XXX	0.23	NA	0.93	0.02	38357	FALSE			FALSE						TRUE	Increase
72220	Radiologic examination	X-Ray Sacrum	January 2019	29			AAOS, ACR	0.20	CMS-Other - Utilization o	April 2016	XXX	0.17	NA	0.79	0.02	100892	FALSE			FALSE						TRUE	Increase
72240	Myelography, cervical, t	Myelography	April 2014	17			ACR, ASNR	0.91	Codes Reported Together	October 2012	XXX	0.91	NA	2.46	0.08	356	FALSE			TRUE	Joint Workgroup r	October 2	21	Complete	TRUE	Maintain
72255	Myelography, thoracic,	Myelography	April 2014	17			ACR, ASNR	0.91	Codes Reported Together	October 2013	XXX	0.91	NA	2.59	0.11	90	FALSE			TRUE	This code change	October 2	21	Complete	TRUE	Maintain
72265	Myelography, lumbosac	Myelography	April 2014	17			ACR, ASNR	0.83	Codes Reported Together	October 2012	XXX	0.83	NA	2.41	0.05	2010	FALSE			TRUE	Joint Workgroup r	October 2	21	Complete	TRUE	Maintain
72270	Myelography, 2 or more	Myelography	April 2014	17			ACR, ASNR	1.33	Codes Reported Together	October 2012	XXX	1.33	NA	3.53	0.08	361	FALSE			TRUE	Joint Workgroup r	October 2	21	Complete	TRUE	Maintain
72275	Epidurography, radiolog	Epidurography	January 2020	37			ASA, AAPM, AAI	Deleted from CPT	Different Performing Spe	October 2009	XXX					56054	TRUE	Oct 2009 a	Yes	TRUE	In October 2019, t	October 2	40	complete	TRUE	Deleted from CPT
72291	Radiological supervisior	Percutaneous Vertebroplasty w	April 2014	06				Deleted from CPT	Codes Reported Together	October 2012							FALSE			TRUE	Joint Workgroup r	February 2	16	Complete	TRUE	Deleted from CPT
72292	Radiological supervisior	Percutaneous Vertebroplasty w	April 2014	06				Deleted from CPT	Codes Reported Together	October 2012							FALSE			TRUE	Joint Workgroup r	February 2	16	Complete	TRUE	Deleted from CPT
73000	Radiologic examination	X-Ray – Clavicle/Shoulder	October 2018	17			ACR, AAOS	0.16	CMS-Other - Utilization o	October 2017	XXX	0.16	NA	0.79	0.02	91121	FALSE			FALSE						TRUE	Maintain

73010	Radiologic examination X-Ray – Clavicle/Shoulder	October 2018	17			ACR, AAOS	0.17	CMS-Other - Utilization o	October 2017	XXX	0.17	NA	0.52	0.02	42771	FALSE			FALSE							TRUE	Maintain
73020	Radiologic examination X-Ray – Clavicle/Shoulder	October 2018	17			ACR, AAOS	0.15	CMS-Other - Utilization o	October 2017	XXX	0.15	NA	0.48	0.02	99142	FALSE			FALSE							TRUE	Maintain
73030	Radiologic examination X-Ray – Clavicle/Shoulder	October 2018	17			ACR, AAOS	0.18	Low Value-High Volume /	October 2010	XXX	0.18	NA	0.84	0.02	2525765	FALSE			FALSE							TRUE	Maintain
73050	Radiologic examination X-Ray – Clavicle/Shoulder	October 2018	17			ACR, AAOS	0.18	CMS-Other - Utilization o	October 2017	XXX	0.18	NA	0.66	0.02	6416	FALSE			FALSE							TRUE	Decrease
73060	Radiologic examination X-Ray Exams	September 2014	17			AAOS, ACR	0.16	CMS-Other - Utilization o	April 2013	XXX	0.16	NA	0.79	0.02	303754	FALSE			FALSE							TRUE	Decrease
73070	Radiologic examination X-Ray Elbow/Forearm	January 2019	30			AAOS, ACR, ASS	0.16	CMS-Other - Utilization o	April 2016	XXX	0.16	NA	0.70	0.02	192334	FALSE			FALSE							TRUE	Increase
73080	Radiologic examination X-Ray Elbow/Forearm	January 2019	30			AAOS, ACR, ASS	0.17	Harvard Valued - Utilizatio	October 2009	XXX	0.17	NA	0.79	0.02	372951	FALSE			FALSE							TRUE	Maintain
73090	Radiologic examination X-Ray Elbow/Forearm	January 2019	30			AAOS, ACR, ASS	0.16	CMS-Other - Utilization o	April 2016	XXX	0.16	NA	0.70	0.02	209495	FALSE			FALSE							TRUE	Maintain
73100	Radiologic examination X-Ray Wrist	April 2016	32			ACR	0.16	CMS High Expenditure Pr	July 2015	XXX	0.16	NA	0.84	0.02	229151	FALSE			FALSE							TRUE	Maintain
73110	Radiologic examination X-Ray Wrist	April 2016	32			ACR	0.17	Low Value-High Volume /	October 2010	XXX	0.17	NA	1.04	0.02	986576	FALSE			FALSE							TRUE	Maintain
73120	Radiologic examination X-Ray of Hand/Fingers	April 2016	33			ACR	0.16	CMS High Expenditure Pr	July 2015	XXX	0.16	NA	0.76	0.02	244773	FALSE			FALSE							TRUE	Maintain
73130	Radiologic examination X-Ray of Hand/Fingers	April 2016	33			ACR	0.17	Low Value-High Volume /	October 2010	XXX	0.17	NA	0.92	0.02	1230447	FALSE			FALSE							TRUE	Maintain
73140	Radiologic examination X-Ray of Hand/Fingers	April 2016	33			ACR	0.13	CMS High Expenditure Pr	July 2015	XXX	0.13	NA	0.99	0.02	340779	FALSE			FALSE							TRUE	Maintain
73200	Computed tomography	CT Upper Extremity	October 2009	23			ACR	1.09	CMS Fastest Growing	October 2008	XXX	1	NA	3.98	0.05	127767	FALSE			FALSE							TRUE	Maintain
73201	Computed tomography	CT Upper Extremity	October 2009	40			ACR	Remove from screen	CMS Fastest Growing	February 2009	XXX	1.16	NA	5.04	0.08	20132	FALSE			FALSE							TRUE	Remove from Screen
73202	Computed tomography	CT Upper Extremity	October 2009	40			ACR	Remove from screen	CMS Fastest Growing	February 2009	XXX	1.22	NA	6.49	0.08	1750	FALSE			FALSE							TRUE	Remove from Screen
73206	Computed tomographic	CT Angiography	October 2013	12			ACR, SIR	Survey with all CTA codes for C	CMS Request - Final Rule	May 2013	XXX	1.81	NA	7.32	0.14	7201	FALSE			FALSE							TRUE	Remove from Screen
73218	Magnetic resonance (eq	MRI	October 2013	18			ACR	CPT Assistant published.	CMS Fastest Growing	October 2008	XXX	1.35	NA	8.09	0.11	31297	TRUE	Feb 2011	Yes	FALSE							TRUE	Maintain
73221	Magnetic resonance (eq	MRI	January 2012	20			ACR	1.35	CMS Fastest Growing / CM	October 2008	XXX	1.35	NA	4.88	0.09	428900	FALSE			FALSE							TRUE	Maintain
73500	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	Deleted from CPT	CMS-Other - Utilization o	April 2011							FALSE			TRUE	In Jan 2012, the s	October 2(	27	Complete	TRUE	Deleted from CPT
73501	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.17	Codes Reported Together	October 2014	XXX	0.18	NA	0.79	0.02	225727	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73502	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.22	Codes Reported Together	October 2014	XXX	0.22	NA	1.17	0.02	2397096	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73503	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.27	Codes Reported Together	October 2014	XXX	0.27	NA	1.49	0.02	47178	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73510	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	Deleted from CPT	Havard Valued - Utilizatio	October 2008							FALSE			FALSE		October 2(	27	Complete	TRUE	Deleted from CPT
73520	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	Deleted from CPT	CMS-Other - Utilization o	April 2013							FALSE			TRUE	CPT code 73520 w	October 2(	27	Complete	TRUE	Deleted from CPT
73521	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.22	Codes Reported Together	October 2014	XXX	0.22	NA	1.00	0.02	137912	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73522	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.29	Codes Reported Together	October 2014	XXX	0.29	NA	1.30	0.02	171162	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73523	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.31	Codes Reported Together	October 2014	XXX	0.31	NA	1.52	0.03	102864	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73540	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	Deleted from CPT	Codes Reported Together	October 2014							FALSE			FALSE		October 2(	27	Complete	TRUE	Deleted from CPT
73542	Radiological examinatio	Sacroiliac Joint Arthrography	April 2010	45			ASA, AAPM, AAI	Deleted from CPT	Different Performing Spe	October 2009							TRUE	Deleted fr	Yes	TRUE	The RUC recomm	February 2	76	Code Deleted	TRUE	Deleted from CPT
73550	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	Deleted from CPT	CMS-Other - Utilization o	April 2011							FALSE			TRUE	In Jan 2012, the s	October 2(	27	Complete	TRUE	Deleted from CPT
73551	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.16	Codes Reported Together	October 2014	XXX	0.16	NA	0.70	0.02	30254	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73552	Radiologic examination	Radiologic Exam-Hip and Pelvis	April 2015	14			AAOS, ACR	0.18	Codes Reported Together	October 2014	XXX	0.18	NA	0.87	0.02	505931	FALSE			FALSE		October 2(	27	Complete	TRUE	Decrease
73560	Radiologic examination	X-Ray Exams	September 2014	17			AAOS, ACR	0.16	Low Value-High Volume	October 2010	XXX	0.16	NA	0.85	0.02	1439460	FALSE			FALSE							TRUE	Decrease
73562	Radiologic examination	X-Ray Exams	September 2014	17			AAOS, ACR	0.18	Low Value-High Volume	October 2010	XXX	0.18	NA	1.02	0.02	2216138	FALSE			FALSE							TRUE	Maintain
73564	Radiologic examination	X-Ray Exams	September 2014	17			AAOS, ACR	0.22	Low Value-High Volume	October 2010	XXX	0.22	NA	1.16	0.02	1633314	FALSE			FALSE							TRUE	Maintain
73565	Radiologic examination	X-Ray Exams	September 2014	17			AAOS, ACR	0.16	CMS-Other - Utilization o	April 2013	XXX	0.16	NA	1.02	0.02	120857	FALSE			FALSE							TRUE	Decrease
73580	Radiologic examination	Contrast X-Ray of Knee Joint	October 2021	16			ACR	0.59	High Volume Growth1 / C	February 2008	XXX	0.59	NA	3.18	0.07	17808	TRUE	Jun 2012	Yes	FALSE	These procedures were referred to CPT for possible de						TRUE	Increase
73590	Radiologic examination	X-Ray Exams	September 2014	17			AAOS, ACR	0.16	CMS-Other - Utilization o	April 2013	XXX	0.16	NA	0.77	0.02	446376	FALSE			FALSE							TRUE	Decrease
73600	Radiologic examination	X-Ray Exams	September 2014	17			AAOS, ACR, APN	0.16	CMS-Other - Utilization o	April 2013	XXX	0.16	NA	0.80	0.02	205057	FALSE			FALSE							TRUE	Maintain
73610	Radiologic examination	Radiologic Examination	October 2009	24			ACR, AAOS, APN	0.17	Havard Valued - Utilizatio	October 2008	XXX	0.17	NA	0.92	0.02	1141900	FALSE			FALSE							TRUE	Maintain
73620	Radiologic examination	X-Ray Exam of Foot	April 2011	27			ACR, AAOS, APN	0.16	Low Value-High Volume	October 2010	XXX	0.16	NA	0.67	0.02	449205	FALSE			FALSE							TRUE	Maintain
73630	Radiologic examination	Radiologic Examination	October 2009	24			ACR, AAOS, APN	0.17	Havard Valued - Utilizatio	October 2008	XXX	0.17	NA	0.84	0.02	2542826	FALSE			FALSE							TRUE	Maintain
73650	Radiologic examination	X-Ray Heel	January 2019	31			AAOS, ACR, APN	0.16	CMS-Other - Utilization o	April 2016	XXX	0.16	NA	0.68	0.02	66700	FALSE			FALSE							TRUE	Maintain
73660	Radiologic examination	X-Ray Toe	January 2019	32			AAOS, ACR, APN	0.13	CMS-Other - Utilization o	April 2016	XXX	0.13	NA	0.73	0.02	98154	FALSE			FALSE							TRUE	Maintain
73700	Computed tomography	CT Lower Extremity	April 2018	21			ACR	1.00	CMS Fastest Growing	October 2008	XXX	1	NA	2.96	0.05	338121	FALSE			FALSE							TRUE	Maintain
73701	Computed tomography	CT Lower Extremity	April 2018	21			ACR	1.16	High Volume Growth1 / C	February 2009	XXX	1.16	NA	3.94	0.08	49729	FALSE			FALSE							TRUE	Maintain
73702	Computed tomography	CT Lower Extremity	April 2018	21			ACR	1.22	High Volume Growth1	February 2009	XXX	1.22	NA	4.77	0.08	4736	FALSE			FALSE							TRUE	Maintain
73706	Computed tomographic	CT Angiography	October 2013	12			ACR, SIR	Survey for October 2013. Rem	High Volume Growth1	February 2008	XXX	1.9	NA	8.04	0.14	18273	FALSE			FALSE							TRUE	Remove from Screen
73718	Magnetic resonance (eq	MRI Lower Extremity	October 2016	20	RUC		ACR	1.35	CMS High Expenditure Pr	July 2015	XXX	1.35	NA	5.56	0.09	130744	FALSE			FALSE							TRUE	Maintain
73719	Magnetic resonance (eq	MRI Lower Extremity	October 2016	20	RUC		ACR	1.62	CMS High Expenditure Pr	July 2015	XXX	1.62	NA	6.50	0.10	996	FALSE			FALSE							TRUE	Maintain
73720	Magnetic resonance (eq	MRI Lower Extremity	October 2016	20	RUC		ACR	2.15	CMS High Expenditure Pr	July 2015	XXX	2.15	NA	8.28	0.15	59489	FALSE			FALSE							TRUE	Maintain
73721	Magnetic resonance (eq	MRI of Lower Extremity Joint	January 2012	20			ACR	1.35	MPC List	October 2010	XXX	1.35	NA	4.87	0.09	597704	FALSE			FALSE							TRUE	Maintain
74000	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	Deleted from CPT	Low Value-High Volume /	October 2010							FALSE			FALSE		February 2	21	Complete	TRUE	Deleted from CPT
74010	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	21	Complete	TRUE	Deleted from CPT
74018	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	0.18	CMS High Expenditure Pr	February 2016	XXX	0.18	NA	0.70	0.02	1943803	FALSE			FALSE		February 2	21	Complete	TRUE	Decrease
74019	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	0.23	CMS High Expenditure Pr	February 2016	XXX	0.23	NA	0.86	0.02	301854	FALSE			FALSE		February 2	21	Complete	TRUE	Decrease
74020	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			FALSE		February 2	21	Complete	TRUE	Deleted from CPT
74021	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	0.27	CMS High Expenditure Pr	February 2016	XXX	0.27	NA	1.00	0.02	40490	FALSE			FALSE		February 2	21	Complete	TRUE	Decrease
74022	Radiologic examination	Abdominal X-Ray	April 2016	08			ACR	0.32	CMS High Expenditure Pr	July 2015	XXX	0.32	NA	1.15	0.03	154690	FALSE			FALSE		February 2	21	Complete	TRUE	Maintain
74150	Computed tomography	CT Abdomen	February 2008	S			ACR	Review PE. 0.35	Codes Reported Together	February 2008	XXX	1.19	NA	2.98	0.07	62048	FALSE			TRUE	Referred to the CI	October 2(	37	Complete	TRUE	Maintain
74160	Computed tomography	CT Abdomen and Pelvis	April 2014	44			ACR	0.42	Codes Reported Together	February 2008	XXX	1.27	NA	5.96	0.09	85997	FALSE			TRUE	Referred to the CI	October 2(	37	Complete	TRUE	Maintain
74170	Computed tomography	CT Abdomen	April 2012	34			ACR	1.40	Codes Reported Together	February 2008	XXX	1.4	NA	6.72	0.09	98664	FALSE			TRUE	Referred to the CI	October 2(	37	Complete	TRUE	Maintain
74174	Computed tomographic	CT Angiography	October 2013	12			ACR, SIR	2.20	Codes Reported Together	75% or More-Part	XXX	2.2	NA	9.50	0.16	326502	FALSE			FALSE							TRUE	Decrease
74175	Computed tomographic	CT Angiography	October 2013	12			ACR, SIR	1.82	CMS Fastest Growing / Cc	October 2008	XXX	1.82	NA	7.60	0.14	30514	FALSE			TRUE	The ACR submitte	October 2(	19	Complete	TRUE	Decrease
74176	Computed tomography	CT Abdomen/CT Pelvis	February 2010	16			ACR	1.74	CMS Fastest Growing	October 2009	XXX	1.74	NA	3.82	0.12	1996910	FALSE			FALSE		October 2(	37		TRUE	Decrease
74177	Computed tomography	CT Abdomen and Pelvis	April 2014	44			ACR	1.82	CMS Fastest Growing / CM	October 2009	XXX	1.82	NA	7.58	0.12	3314771	FALSE			FALSE		October 2(	37		TRUE	Decrease
74178	Computed tomography	CT Abdomen/CT Pelvis	February 2010	16			ACR	2.01	CMS Fastest Growing	October 2009	XXX	2.01	NA	8.53	0.12	488616	FALSE			FALSE		October 2(	37		TRUE	Decrease
74181	Magnetic resonance (eq	MRI of Abdomen	October 2016	21	RUC		ACR	1.46	CMS High Expenditure Pr	July 2015	XXX	1.46	NA	4.57	0.10	104564	FALSE			FALSE							TRUE	Maintain
74182	Magnetic resonance (eq	MRI of Abdomen	October 2016	21	RUC		ACR	1.73	CMS High Expenditure Pr	July 2015	XXX	1.73	NA	7.63	0.14	3787	FALSE			FALSE							TRUE	Maintain
74183	Magnetic resonance (eq	MRI of Abdomen	October 2016	21	RUC		ACR	2.20	CMS High Expenditure Pr	July 2015	XXX	2.2	NA	8.26	0.15	381929	FALSE			FALSE							TRUE	Decrease
74210	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12			ACR	0.59	CMS-Other - Utilization o	October 2016	XXX	0.59	NA	2.28	0.05	1014	FALSE			FALSE							TRUE	Maintain
74220	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12			ACR	0.60	CMS-Other - Utilization o	April 2016	XXX	0.6	NA	2.34	0.05	101875	FALSE			FALSE							TRUE	Decrease
74221	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12				0.70	CMS-Other - Utilization o	October 2018	XXX	0.7	NA	2.61	0.05	62697	FALSE			FALSE							TRUE	Increase
74230	Radiologic examination	X-Ray Esophagus	April 2017	25			ACR	0.53	CMS-Other - Utilization o	April 2013	XXX	0.53	NA	3.24	0.05	300780	FALSE			FALSE							TRUE	Maintain
74240	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12			ACR	0.80	CMS-Other - Utilization o	October 2017	XXX	0.8	NA	2.89	0.05	69897	FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Increase
74241	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12			ACR	Deleted from CPT	CMS-Other - Utilization o	October 2017							FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Deleted from CPT
74245	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12			ACR	Deleted from CPT	CMS-Other - Utilization o	October 2017							FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Deleted from CPT
74246	Radiologic examination	X-Ray Exam – Upper GI	January 2019	12			ACR	0.90	CMS-Other - Utilization o	October 2017	XXX	0.9	NA	3.29	0.05	51276	FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Increase
74247	Radiological examinatio	X-Ray Exam – Upper GI	January 2019	12			ACR	Deleted from CPT	Harvard Valued - Utilizatio	April 2011							FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Deleted from CPT
74248	Radiologic small intestir	X-Ray Exam – Upper GI	January 2019	12				0.70	CMS-Other - Utilization o	October 2018	ZZZ	0.7	NA	1.76	0.05	16404	FALSE			TRUE	In January 2019, t	February 2	EC-T Issue	complete	TRUE	Increase
74249	Radiological examinatio	X-Ray Exam – Upper GI	January 2019	12			ACR	Deleted from CPT	CMS-Other - Utilization o	October 2017							FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Deleted from CPT
74250	Radiologic examination	Lower Gastroinetstinal Tract Im	October 2018	11			ACR	0.81	CMS-Other - Utilization o	October 2017	XXX	0.81	NA	2.86	0.05	44087	FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Increase
74251	Radiologic examination	Lower Gastroinetstinal Tract Im	October 2018	11			ACR	1.17	CMS-Other - Utilization o	October 2017	XXX	1.17	NA	9.99	0.07	351	FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Increase
74260	Duodenography, hypot	X-Ray Exam – Small Intestine/C	October 2018	11			ACR	Deleted from CPT	CMS-Other - Utilization o	October 2017							FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Deleted from CPT
74270	Radiologic examination	Lower Gastroinetstinal Tract Im	October 2018	11			ACR	1.04	CMS-Other - Utilization o	October 2017	XXX	1.04	NA	3.58	0.05	21188	FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Increase
74280	Radiologic examination	Lower Gastroinetstinal Tract Im	October 2018	11			ACR	1.26	Harvard Valued - Utilizatio	April 2011	XXX	1.26	NA	5.38	0.09	5661	FALSE			TRUE	In January 2018, t	May 2018	27	Yes	TRUE	Increase
74300	Cholangiography and/o	X-Rays at Surgery Add-On	April 2019	19			ACR, SAGES	0.32	CMS-Other - Utilization o	October 2018	XXX	0	NA	0.00	0.00	22738	FALSE			FALSE							TRUE	Decrease
74301	Cholangiography and/o	X-Rays at Surgery Add-On	October 2020	19			ACR, ACS, SAGE	0.21	CMS-Other - Utilization o	October 2018	ZZZ	0	NA	0.00	0.00	72	FALSE			FALSE	This service was identified with 74300. In January 2019				TRUE	Maintain
74305	Deleted from CPT	Percutaneous Biliary Procedure	October 2015	06	RUC		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE			TRUE	The Joint Workgr	February 2	16	Complete	TRUE	Deleted from CPT
74320	Cholangiography, percu	Percutaneous Biliary Procedure	October 2015	06	RUC		ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE			TRUE	The Joint Workgr	February 2	16	Complete	TRUE	Deleted from CPT
74327	Postoperative biliary du	Percutaneous Biliary Procedure	October 2015	06	RUC		ACR, SIR	Deleted from CPT	Codes Reported Together	February 2015							FALSE			FALSE		February 2	16		TRUE	Deleted from CPT
74328	Endoscopic catheteriza	X-Rays at Surgery Add-On	April 2019	19			ACR, SAGES	0.47	CMS-Other - Utilization o	October 2018	XXX	0	NA	0.00	0.00	61638	FALSE			FALSE							TRUE	Decrease
74329	Endoscopic catheteriza	X-Rays at Surgery Add-On	April 2019	19			ACR, SAGES	0.50	CMS-Other - Utilization o	October 2018	XXX	0	NA	0.00	0.00	2577	FALSE			FALSE							TRUE	Decrease
74330	Combined endoscopic c	X-Rays at Surgery Add-On	April 2019	19			ACR, SAGES	0.70	CMS-Other - Utilization o	October 2018	XXX	0	NA	0.00	0.00	11174	FALSE			FALSE							TRUE	Decrease
74400	Urography (pyelograph	Contrast X-Ray Exams	September 2011	31			ACR	0.49	Harvard Valued - Utilizatio	April 2011	XXX	0.49	NA	3.55	0.06	3315	FALSE			FALSE							TRUE	Maintain
74420	Urography, retrograde,	X-Ray Urinary Tract	April 2017	26			ACR, AUA	0.52	CMS-Other - Utilization o	April 2016	XXX	0.52	NA	1.76	0.03	149626	FALSE			FALSE							TRUE	Increase
74425	Urography, antegrade,	Urography	October 2018	18			ACR, AUA, SIR	0.51, editorially revised	Codes Reported Together	October 2012	XXX	0.51	NA	3.58	0.03	1469	FALSE			TRUE	CPT code 74425 w	Septembe	27	yes	TRUE	Increase
74475	Introduction of intracat	Genitourinary Catheter Procedu	January 2015	09			ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE			TRUE	The Joint Workgr	October 2(	18	Complete	TRUE	Deleted from CPT
74480	Introduction of uretera	Genitourinary Catheter Procedu	January 2015	09			ACR, SIR	Deleted from CPT	Codes Reported Together	October 2012							FALSE			TRUE	The Joint Workgr	October 2(	18	Complete	TRUE	Deleted from CPT
74485	Dilation of ureter(s) or u	Dilation of Urinary Tract	January 2018	12				0.83	Codes Reported Together	September 2017	XXX	0.83	NA	2.70	0.05	1316	FALSE			FALSE							TRUE	Increase
75561	Cardiac magnetic resonance imaging for morphology ar		January 2021	29				Maintain	High Volume Growth7	October 2020	XXX	2.6	NA	8.65	0.13	36144	FALSE			FALSE							TRUE	Remove from Screen

75571	Computed tomography	RAW	September 2022	13			ACC, ACR, SCCT	Maintain	High Volume Growth	8	April 2022	XXX	0.58	NA	2.46	0.05	48132	FALSE			FALSE						TRUE	Maintain
75572	Computed tomography, heart, with contrast material, f		January 2021	29				Maintain	High Volume Growth	7	October 2020	XXX	1.75	NA	5.16	0.12	37654	FALSE			FALSE						TRUE	Remove from Screen
75574	Computed tomographic angiography, heart, coronary a		January 2021	29			ACR, SIR, ACC	Maintain	CMS Request - Final Rule		May 2013	XXX	2.4	NA	7.38	0.15	110974	FALSE			FALSE						TRUE	Remove from Screen
75625	Aortography, abdomina	Abdominal Aortography	October 2018	19			ACC, SCAI, SIR, S	1.75	CMS-Other - Utilization o		October 2017	XXX	1.44	NA	2.14	0.20	77919	FALSE			FALSE						TRUE	Increase
75630	Aortography, abdomina	Abdominal Aortography	October 2018	19			ACC, SCAI, SIR, S	2.00	CMS-Other - Utilization o		October 2017	XXX	2	NA	2.48	0.21	19887	FALSE			FALSE						TRUE	Increase
75635	Computed tomographic	CT Angiography of Abdominal A	April 2016	34			ACR	2.40	High Volume Growth	1 / C	February 2008	XXX	2.4	NA	10.17	0.16	105000	FALSE			FALSE						TRUE	Maintain
75650	Angiography, carotid, c	Carotid Angiography	April 2010	45			ACC, ACR, ASNR	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup re	February 2	12	Complete		TRUE	Deleted from CPT
75671	Angiography, carotid, c	Carotid Angiography	April 2010	45			AANS/CNS, ACC	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup re	February 2	12	Complete		TRUE	Deleted from CPT
75680	Angiography, carotid, c	Carotid Angiography	April 2010	45			AANS/CNS, ACC	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup re	February 2	12	Complete		TRUE	Deleted from CPT
75710	Angiography, extremity	Angiography of Extremities	January 2021	29	January 20	RAW	ACR, ACC, RPA, '	Refer to CPT Assistant and revi	CMS High Expenditure Pr		July 2015	XXX	1.75	NA	2.51	0.24	132977	TRUE	July 2021	complete	FALSE						FALSE	Increase
75716	Angiography, extremity	Angiography of Extremities	October 2016	22		RUC	ACR, ACC, RPA, '	1.97	CMS High Expenditure Pr		July 2015	XXX	1.97	NA	2.67	0.22	57043	FALSE			FALSE						TRUE	Increase
75722	Angiography, renal, uni	Renal Angiography	April 2010	45			ACC, ACR, ASNR	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup re	February 2	06	Code Deleted		TRUE	Deleted from CPT
75724	Angiography, renal, bila	Renal Angiography	April 2010	45			ACC, ACR, ASNR	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup re	February 2	06	Code Deleted		TRUE	Deleted from CPT
75726	Angiography, visceral, s	Angiography	October 2018	20			SCAI, SIR, SVS	2.05	CMS-Other - Utilization o		October 2017	XXX	2.05	NA	2.89	0.19	38496	FALSE			FALSE						TRUE	Increase
75774	Angiography, selective,	Angiography	October 2018	20			SCAI, SIR, SVS	1.01	CMS-Other - Utilization o		October 2017	ZZZ	1.01	NA	1.81	0.09	73664	FALSE			FALSE						TRUE	Increase
75790	Deleted from CPT	Arteriovenous Shunt Imaging	April 2009	9			SVS, SIR, ACR	Deleted from CPT	Codes Reported Together		February 2008							FALSE			TRUE	Referred to the CI	February 2	31	Deleted		TRUE	Deleted from CPT
75791	Angiography, arteriover	Dialysis Circuit -1	January 2016	14			ACR, RPA, SIR, S	Deleted from CPT	Codes Reported Together		95% or More							FALSE			FALSE		October 2(	24	Complete		TRUE	Deleted from CPT
75820	Venography, extremity,	Venography	January 2020	29				1.05	CMS-Other - Utilization o		January 2019	XXX	1.05	NA	2.13	0.09	21725	FALSE			FALSE						TRUE	Increase
75822	Venography, extremity,	Venography	January 2020	29				1.48	CMS-Other - Utilization o		October 2019	XXX	1.48	NA	2.37	0.13	10013	FALSE			FALSE						TRUE	Increase
75885	Percutaneous transhep	Interventional Radiology Proce	February 2009	21			ACR, SIR	New PE inputs	CMS Request - Practice E		NA	XXX	1.44	NA	2.53	0.12	276	FALSE			FALSE						TRUE	PE Only
75887	Percutaneous transhep	Interventional Radiology Proce	February 2009	21			ACR, SIR	New PE inputs	CMS Request - Practice E		NA	XXX	1.44	NA	2.59	0.12	615	FALSE			FALSE						TRUE	PE Only
75894	Transcatheter therapy,	Transcatheter Procedures	September 2022	13	Septembe	RUC	AANS, ACR, CNS	Refer to CPT to create a code t	Codes Reported Together		February 2010	XXX	0	NA	0.00	0.00	10086	FALSE			TRUE	In April 2022, the	May 2023				FALSE	Maintain
75896	Transcatheter therapy,	Intracranial Endovascular Interv	April 2015	09			AANS/CNS, ACR	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	AANS indicated th	February 2	21 & 14	Complete		TRUE	Deleted from CPT
75898	Angiography through e	Intracranial Endovascular Interv	September 2022	13	Septembe	RUC	AANS, ACR, CNS	Refer to CPT for code bundling	Codes Reported Together		February 2010	XXX	0	NA	0.00	0.00	13562	TRUE	Septembe	complete	TRUE	In April 2022, the	May 2023	February 2014	February 2(		FALSE	Contractor Price
75940	Percutaneous placemer	Major Vein Revision	April 2010	45			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup ar	February 2	14	Code Deleted		TRUE	Deleted from CPT
75945	Intravascular ultrasoun	Intravascular Ultrasound	January 2015	07			ACC,SCAI, SIR, S	Deleted from CPT	Final Rule for 2015		July 2014							FALSE			TRUE	A CCP was submit	October 2(	13	Complete		TRUE	Deleted from CPT
75946	Intravascular ultrasoun	Intravascular Ultrasound	January 2015	07			ACC,SCAI, SIR, S	Deleted from CPT	Final Rule for 2015		July 2014							FALSE			TRUE	A CCP was submit	October 2(	13	Complete		TRUE	Deleted from CPT
75952	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, A/	Deleted from CPT	Codes Reported Together		October 2015							FALSE			FALSE						TRUE	Deleted from CPT
75953	Placement of proximal	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, A/	Deleted from CPT	Codes Reported Together		October 2015							FALSE			FALSE						TRUE	Deleted from CPT
75954	Endovascular repair of i	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, A/	Deleted from CPT	Codes Reported Together		January 2017							FALSE			FALSE						TRUE	Deleted from CPT
75960	Transcatheter introduc	RAW	October 2012	27			ACC, ACR, SIR, S	Deleted from CPT	High Volume Growth	1 / Codes Reported Together 75% or More-Part								FALSE			TRUE	In February 2010,	February 2	10	Code Deleted		TRUE	Deleted from CPT
75961	Transcatheter retrieval,	Transcatheter Procedures	April 2010	45			ACC, ACR, SIR, S	Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	The Workgroup ar	June 2011		Code Deleted		TRUE	Deleted from CPT
75962	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15			ACR, SIR, SVS	Deleted from CPT	High Volume Growth	1 / C	April 2010							FALSE			TRUE	The Workgroup ac	October 2(	24	Complete		TRUE	Deleted from CPT
75964	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15			ACR, SIR, SVS	Deleted from CPT	High Volume Growth	1								FALSE			TRUE	In February 2010,	October 2(	24	Complete		TRUE	Deleted from CPT
75966	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together		January 2015							FALSE			TRUE	In January 2015, t	October 2(	24	Complete		TRUE	Deleted from CPT
75968	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15			ACR, SIR, SVS	Deleted from CPT	Codes Reported Together		January 2015							FALSE			TRUE	In January 2015, t	October 2(	24	Complete		TRUE	Deleted from CPT
75978	Transluminal balloon ar	Open and Percutaneous Transl	January 2016	15			ACR, SIR, SVS	Deleted from CPT	CMS-Other - Utilization o		April 2013							FALSE			TRUE	CPT code 75978 w	October 2(	24	Complete		TRUE	Deleted from CPT
75980	Percutaneous transhep	Percutaneous Biliary Procedure	October 2015	06		RUC	ACR, SIR	Deleted from CPT	Codes Reported Together		October 2012							FALSE			TRUE	The Joint Workgr	February 2	16	Complete		TRUE	Deleted from CPT
75982	Percutaneous placemer	Percutaneous Biliary Procedure	October 2015	06		RUC	ACR, SIR	Deleted from CPT	Codes Reported Together		October 2012							FALSE			TRUE	The Joint Workgr	February 2	16	Complete		TRUE	Deleted from CPT
75984	Change of percutaneou	Introduction of Catheter or Ste	April 2019	17			ACR, SIR	0.83	Codes Reported Together		October 2012	XXX	0.83	NA	2.00	0.05	19778	FALSE			FALSE		RAW will assess	Oct 2018			TRUE	Increase
75992	Deleted from CPT	Transluminal Arthrectomy	April 2008	57			SIR, ACR, SVS	Deleted from CPT	High Volume Growth	1	February 2008							FALSE			TRUE	The RUC recomm	February 207		Deleted-new c		TRUE	Deleted from CPT
75993	Deleted from CPT	Transluminal Arthrectomy	April 2008	57			SIR, ACR, SVS	Deleted from CPT	High Volume Growth	1	February 2008							FALSE			TRUE	The RUC recomm	February 207		Deleted-new c		TRUE	Deleted from CPT
75994	Revised to Category III	Transluminal Arthrectomy	April 2008	57			SIR, ACR, SVS	Deleted from CPT	High Volume Growth	1	April 2008							FALSE			TRUE	The RUC recomm	February 207		Category III		TRUE	Deleted from CPT
75995	Revised to Category III	Transluminal Arthrectomy	April 2008	57			SIR, ACR, SVS	Deleted from CPT	High Volume Growth	1	April 2008							FALSE			TRUE	The RUC recomm	February 207		Category III		TRUE	Deleted from CPT
75996	Revised to Category III	Transluminal Arthrectomy	April 2008	57			SIR, ACR, SVS	Deleted from CPT	High Volume Growth	1	April 2008							FALSE			TRUE	The RUC recomm	February 207		Category III		TRUE	Deleted from CPT
76000	Fluoroscopy (separate p	Fluoroscopy	April 2017	27			ACR, APMA	0.30	Low Value-Billed in Multi		October 2010	XXX	0.3	NA	0.95	0.05	102019	FALSE			FALSE						TRUE	Increase
76001	Fluoroscopy, physician	Fluoroscopy	April 2017	27			ACR	Deleted from CPT	CMS-Other - Utilization o		October 2016							FALSE			TRUE	In April 2017 the s	Septembe	27	complete		TRUE	Deleted from CPT
76098	Radiological examinatio	X-Ray Exam Specimen	October 2018	21			ACR	0.31	CMS-Other - Utilization o		October 2017	XXX	0.31	NA	0.92	0.03	69462	FALSE			FALSE						TRUE	Increase
76100	Radiologic examination	Fluroscopy	April 2009	27			ACR, ISIS	New PE inputs	CMS Request - Practice E		April 2009	XXX	0.58	NA	2.07	0.05	6850	FALSE			FALSE						TRUE	PE Only
76101	Radiologic examination	Fluroscopy	April 2009	27			ACR, ISIS	New PE inputs	CMS Request - Practice E		April 2009	XXX					1	FALSE			FALSE						TRUE	PE Only
76102	Radiologic examination	Fluroscopy	April 2009	27			ACR, ISIS	New PE inputs	CMS Request - Practice E		April 2009	XXX					2793	FALSE			FALSE						TRUE	PE Only
76376	3d rendering with inter	3D Rendering	April 2018	23			ACR, ASNR	0.20	Negative IWPUT		April 2017	XXX	0.2	NA	0.50	0.02	279233	FALSE			FALSE						TRUE	Maintain
76377	3d rendering with inter	3D Rendering with Interpretatic	October 2021	17			ACR, ASNR	0.79	CMS Request - Final Rule		July 2019	XXX	0.79	NA	1.43	0.05	172788	FALSE			FALSE						TRUE	Maintain
76510	Ophthalmic ultrasound,	Opthalmic Ultrasound	October 2016	23		RUC	AAO, ASRS, AO/	0.70	CMS High Expenditure Pr		April 2016	XXX	0.7	NA	1.34	0.02	12903	FALSE			FALSE						TRUE	Decrease
76511	Ophthalmic ultrasound,	Opthalmic Ultrasound	October 2016	23		RUC	AAO, ASRS, AO/	0.64	CMS High Expenditure Pr		April 2016	XXX	0.64	NA	1.04	0.02	3771	FALSE			FALSE						TRUE	Decrease
76512	Ophthalmic ultrasound,	Opthalmic Ultrasound	October 2016	23		RUC	AAO, ASRS, AO/	0.56	CMS High Expenditure Pr		July 2015	XXX	0.56	NA	0.85	0.02	209882	FALSE			FALSE						TRUE	Decrease
76513	Ophthalmic ultrasound,	Ophthalmic Ultrasound Anterio	January 2020	17			AAO, AOA (optc	0.60 and CPT Assistant article p	High Volume Growth	1 / C	February 2008	XXX	0.6	NA	1.62	0.02	15878	TRUE	Apr 2013	Yes	TRUE	At the April 2019	Septembe	28	yes		TRUE	Decrease
76514	Ophthalmic ultrasound,	Echo Exam of Eye Thickness	October 2017	12			AAO, AOA (optc	0.17	Negative IWPUT		April 2017	XXX	0.14	NA	0.18	0.02	438672	FALSE			FALSE						TRUE	Maintain
76516	Ophthalmic biometry b	Opthalmic Biometry	April 2016	36			AAO, AOA (optc	0.40	CMS High Expenditure Pr		April 2016	XXX	0.4	NA	0.97	0.02	2273	FALSE			FALSE						TRUE	Decrease
76519	Ophthalmic biometry b	Opthalmic Biometry	April 2016	36			AAO, AOA (optc	0.54	CMS High Expenditure Pr		July 2015	XXX	0.54	NA	1.45	0.02	137533	FALSE			FALSE						TRUE	Maintain
76536	Ultrasound, soft tissues	Soft Tissue Ultrasound	April 2009	29			ACR, ASNR, TES,	0.56	CMS Fastest Growing		October 2008	XXX	0.56	NA	2.74	0.05	874305	FALSE			FALSE						TRUE	Maintain
76604	Ultrasound, chest (incl	Ultrasound Exam - Chest	April 2018	24			ACR	0.59	CMS-Other - Utilization o		October 2017	XXX	0.59	NA	1.06	0.05	103362	FALSE			FALSE						TRUE	Increase
76641	Ultrasound, breast, unil	Breast Ultrasound	January 2014	13			ACR	0.73	CMS-Other - Utilization o		January 2014	XXX	0.73	NA	2.33	0.05	685993	FALSE			FALSE		October 2(	26	Complete		TRUE	Increase
76642	Ultrasound, breast, unil	Breast Ultrasound	January 2014	13			ACR	0.68	CMS-Other - Utilization o		January 2014	XXX	0.68	NA	1.83	0.05	736738	FALSE			FALSE		October 2(	26	Complete		TRUE	Increase
76645	Ultrasound, breast(s) (a	Breast Ultrasound	January 2014	13			ACR	Deleted from CPT	CMS-Other - Utilization o		April 2011							FALSE			TRUE	Code 76645, Ultra	October 2(	26	Complete		TRUE	Deleted from CPT
76700	Ultrasound, abdominal,	Ultrasound	October 2013	13			ACR	0.81	MPC List		October 2010	XXX	0.81	NA	2.65	0.05	765508	FALSE			FALSE						TRUE	Maintain
76705	Ultrasound, abdominal,	Ultrasound	October 2013	13			ACR, ASBS	0.59	CMS-Other - Utilization o		April 2011	XXX	0.59	NA	2.01	0.05	994878	FALSE			FALSE						TRUE	Maintain
76706	Ultrasound, abdominal	Abdominal Aorta Ultrasound Sc	October 2015	12			ACR, SIR, SVS	0.55	Final Rule for 2015		May 2015	XXX	0.55	NA	2.61	0.05	140849	TRUE	Jan 2017	Yes	FALSE		May 2015	23	Complete		TRUE	Decrease
76770	Ultrasound, retroperito	Ultrasound	October 2013	13			ACR	0.74	CMS-Other - Utilization o		April 2011	XXX	0.74	NA	2.48	0.05	1216019	FALSE			FALSE						TRUE	Maintain
76775	Ultrasound, retroperito	Ultrasound	October 2013	13			ACR	0.58	CMS-Other - Utilization o		April 2011	XXX	0.58	NA	1.14	0.05	448875	FALSE			FALSE						TRUE	Maintain
76819	Fetal biophysical profile	RAW	October 2013	18				Remove from screen	High Volume Growth	2	April 2013	XXX	0.77	NA	1.72	0.03	10377	FALSE			FALSE						TRUE	Remove from Screen
76830	Ultrasound, transvagina	Transvaginal and Transrectal Ul	April 2012	44			ACOG, ACR, AU/	0.69	CMS High Expenditure Pr		September 2011	XXX	0.69	NA	2.87	0.05	386332	FALSE			FALSE						TRUE	Maintain
76856	Ultrasound, pelvic (non	Ultrasound	October 2013	13			ACR	0.69	CMS-Other - Utilization o		April 2011	XXX	0.69	NA	2.44	0.05	369449	FALSE			FALSE						TRUE	Maintain
76857	Ultrasound, pelvic (non	Ultrasound	October 2013	13			ACR	0.50	CMS-Other - Utilization o		April 2013	XXX	0.5	NA	0.93	0.03	190635	FALSE			FALSE						TRUE	Decrease
76870	Ultrasound, scrotum ar	Ultrasound Exam - Scrotum	April 2017	28			ACR, AUA	0.64	CMS-Other - Utilization o		April 2016	XXX	0.64	NA	2.35	0.05	130406	FALSE			FALSE						TRUE	Maintain
76872	Ultrasound, transrectal	Transvaginal and Transrectal Ul	September 2022	13	Septembe	RUC	ACOG, ACR, AU/	Refer to CPT. 0.69	CMS High Expenditure Pr		September 2011	XXX	0.69	NA	5.30	0.04	197470	FALSE			TRUE	In April 2022, the	May 2023				FALSE	Maintain
76880	Deleted from CPT	Lower Extremity Ultrasound	October 2009	26			APMA, ACR	Deleted from CPT	CMS Fastest Growing		October 2008							FALSE			TRUE	The RUC recomm	February 237		Deleted		TRUE	Deleted from CPT
76881	Ultrasound, complete ju	Neuromuscular Ultrasound (PE	January 2023	19			AAN, AANEM, A	New PE Inputs. 0.90	CMS Fastest Growing / Ne		April 2010	XXX	0.9	NA	0.66	0.05	181541	TRUE	Clinical Exa	Yes	TRUE	In February 2010,	June 2017	13	yes		TRUE	Decrease
76882	Ultrasound, limited, joi	Neuromuscular Ultrasound (PE	January 2023	19			AAN, AANEM, A	New PE Inputs. 0.69	CMS Fastest Growing / Ne		April 2010	XXX	0.69	NA	0.52	0.05	279657	TRUE	Clinical Exa	Yes	TRUE	In February 2010,	June 2017	13	yes		TRUE	Decrease
76883	Ultrasound, nerve(s) an	Neuromuscular Ultrasound (PE	January 2023	19			AAN, AANEM, A	New PE Inputs. 1.21	New Technology/New Se		October 2021	XXX	1.21	NA	0.87	0.07		FALSE			FALSE						TRUE	Increase
76930	Ultrasonic guidance for Pericardiocentesis and Pericard		January 2019	04			ACC	Deleted from CPT	CMS Request - Final Rule		July 2013							FALSE			FALSE		Septembe	14	Complete		TRUE	Deleted from CPT
76932	Ultrasonic guidance for Ultrasound Guidance		April 2014	34			ACC	0.67	CMS Request - Final Rule		July 2013	YYY	0	NA	0.00	0.00	1031	FALSE			FALSE						TRUE	Maintain
76936	Ultrasound guided com	RAW	October 2013	18				Maintain	CMS Request - Final Rule		July 2013	XXX	1.99	NA	5.51	0.26	593	FALSE			FALSE						TRUE	Maintain
76937	Ultrasound guidance fo	Ultrasound Guidance for Vascu	September 2022	07			ACR, SIR, SVS	0.30	Identified in RUC review c		January 2018	ZZZ	0.3	NA	0.84	0.04	642405	FALSE			FALSE						TRUE	Maintain
76940	Ultrasound guidance fo	Ultrasound Guidance	January 2015	29			ACS, ACR, SIR	2.00	CMS Request - Final Rule		July 2013	YYY	0	NA	0.00	0.00	1199	FALSE			FALSE						TRUE	Maintain
76942	Ultrasonic guidance for Somatic Nerve Injections		October 2021	05			AAPM, AAPM&I	0.67	CMS-Other - Utilization o		April 2011	XXX	0.67	NA	1.02	0.05	1121629	FALSE			TRUE	During the Octob	May 2021	14	complete		TRUE	Maintain
76948	Ultrasonic guidance for Echo Guidance for Ova Aspirati		January 2015	25			ACOG	0.85	CMS Request - Final Rule		July 2013	XXX	0.67	NA	1.72	0.02	8	FALSE			FALSE						TRUE	Increase
76950	Ultrasonic guidance for Ultrasound Guidance		April 2014	34				Deleted from CPT	Codes Reported Together		February 2010							FALSE			TRUE	At the April 2013	October 2(	28	Complete		TRUE	Deleted from CPT
76965	Ultrasonic guidance for Ultrasound Guidance		September 2014	21			NO INTERESET	Maintain	CMS Request - Final Rule		July 2013	XXX	1.34	NA	1.40	0.05	4906	FALSE			FALSE						TRUE	Maintain
76970	Ultrasound study follow	IMRT with Ultrasound Guidanc	October 2019	17			ACS, ACR, AACE	Deleted from CPT	High Volume Growth	1 / C	February 2008							FALSE			TRUE	In October 2018, I	February 29		Complete		TRUE	Deleted from CPT
76998	Ultrasonic guidance, int	Intraoperative Ultrasound Servi	September 2022	05			AATS, ACC, ACS,	1.20	CMS-Other - Utilization o		January 2019	XXX	0	NA	0.00	0.00	28257	FALSE			TRUE	In October 2018, I	May 2022	20	complete		TRUE	Maintain
77001	Fluoroscopic guidance f	PICC Line Procedures	January 2018	09		RUC	AANS, AANEM,	0.38	MPC List / CMS Request -		January 2012	ZZZ	0.38	NA	2.59	0.05	269997	FALSE			TRUE	In the NPRM for 2	October 2015		Complete		TRUE	Maintain
77002	Fluoroscopic guidance f	Somatic Nerve Injections	October 2021	05			AAPM, AAPM&I	0.54	MPC List / CMS Request -		January 2012	ZZZ	0.54	NA	2.91	0.05	544134	FALSE			TRUE	In the NPRM for 2	October 2015		Complete		TRUE	Maintain
77003	Fluoroscopic guidance f	Somatic Nerve Injections	October 2021	05			AAPM, AAPM&I	0.60	MPC List / CMS Request -		October 2010	ZZZ	0.6	NA	2.53	0.05	27200	FALSE			TRUE	In the NPRM for 2	October 2015		Complete		TRUE	Maintain
77011	Computed tomography	IMRT with CT Guidance	October 2010	15			ASTRO, ACRO	New PE inputs	CMS Request - Practice E		Expense Review	XXX	1.21	NA	5.42	0.09	3899	FALSE			FALSE						TRUE	PE Only
77012	Computed tomography	Lung Biopsy-CT Guidance Bundl	April 2019	05	Septembe	RUC	ACR, SIR	Bundled 32405 and 77012. 1.5(	CMS-Other - Utilization o		April 2016	XXX	1.5	NA	2.63	0.11	137969	FALSE			TRUE	In October 2017, I	February 211		complete		TRUE	Increase
77014	Computed tomography	IMRT with CT Guidance	October 2021	20			ASTRO, ACR	Remove from screen	CMS Request - Practice E		October 2010	XXX	0.85	NA	2.71	0.05	2435082	FALSE			FALSE						TRUE	Maintain
77031	Stereotactic localizatior	Breast Biopsy	April 2013	04				Deleted from CPT	Codes Reported Together		January 2012							FALSE			FALSE		October 2(	08	Complete		TRUE	Deleted from CPT
77032	Mammographic guidan	Breast Biopsy	April 2013	04				Deleted from CPT	Codes Reported Together		January 2012							FALSE			FALSE		October 2(	08	Complete		TRUE	Deleted from CPT
77046	Magnetic resonance im	Breast MRI with Computer-Aide	October 2017	06			ACR	1.45	CMS High Expenditure Pr		June 2017	XXX	1.45	NA	5.09	0.09	270	FALSE			FALSE		June 2017	14			TRUE	Decrease
77047	Magnetic resonance im	Breast MRI with Computer-Aide	October 2017	06			ACR	1.60	CMS High Expenditure Pr		June 2017	XXX	1.6	NA	5.17	0.10	3146	FALSE			FALSE		June 2017	14			TRUE	Decrease
77048	Magnetic resonance im	Breast MRI with Computer-Aide	October 2017	06			ACR	2.10	CMS High Expenditure Pr		June 2017	XXX	2.1	NA	8.29	0.15	980	FALSE			FALSE		June 2017	14			TRUE	Increase

77049	Magnetic resonance im	Breast MRI with Computer-Aide	October 2017	06		ACR	2.30	CMS High Expenditure Pr	June 2017	XXX	2.3	NA	8.30	0.16	99387	FALSE		FALSE	June 2017	14		TRUE	Increase
77051	Computer-aided detect	Mammography-Computer Aide	January 2016	20		ACR	Deleted from CPT	CMS-Other - Utilization over 250,000 / Final Rule for 2015								FALSE		FALSE	October 2(	38	Complete	TRUE	Deleted from CPT
77052	Computer-aided detect	Mammography-Computer Aide	January 2016	20		ACR	Deleted from CPT	Low Value-High Volume	October 2010							FALSE		FALSE	October 2(	38	Complete	TRUE	Deleted from CPT
77055	Mammography; unilate	Mammography-Computer Aide	January 2016	20		ACR	Deleted from CPT	CMS-Other - Utilization o	January 2014							FALSE		TRUE	In the NPRM for 2	October 2(	38	Complete	TRUE	Deleted from CPT
77056	Mammography; bilater	Mammography-Computer Aide	January 2016	20		ACR	Deleted from CPT	CMS-Other - Utilization o	January 2014							FALSE		TRUE	In the NPRM for 2	October 2(	38	Complete	TRUE	Deleted from CPT
77057	Screening mammograp	Mammography-Computer Aide	January 2016	20		ACR	Deleted from CPT	CMS-Other - Utilization o	January 2014							FALSE		TRUE	In the NPRM for 2	October 2(	38	Complete	TRUE	Deleted from CPT
77058	Magnetic resonance im	Breast MRI with Computer-Aide	October 2017	06		ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE		TRUE	In preparation to	June 2017	14	yes	TRUE	Deleted from CPT
77059	Magnetic resonance im	Breast MRI with Computer-Aide	October 2017	06		ACR	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE		TRUE	In preparation to	June 2017	14	yes	TRUE	Deleted from CPT
77065	Diagnostic mammogra	Mammography-Computer Aide	January 2016	20		ACR	0.81	Final Rule for 2015	October 2015	XXX	0.81	NA	2.90	0.05	714474	FALSE		FALSE	October 2(	38	Complete	TRUE	Increase
77066	Diagnostic mammogra	Mammography-Computer Aide	January 2016	20		ACR	1.00	Final Rule for 2015	October 2015	XXX	1	NA	3.69	0.05	560729	FALSE		FALSE	October 2(	38	Complete	TRUE	Increase
77067	Screening mammograp	Mammography-Computer Aide	January 2016	20		ACR	0.76	Final Rule for 2015	October 2015	XXX	0.76	NA	3.04	0.05	5691064	FALSE		FALSE	October 2(	38	Complete	TRUE	Maintain
77073	Bone length studies (or	X-Ray Exam - Bone	April 2018	25		AAOS, ACR	0.26	CMS-Other - Utilization o	October 2017	XXX	0.26	NA	1.06	0.03	57264	FALSE		FALSE				TRUE	Decrease
77074	Radiologic examination	X-Ray Exam - Bone	April 2018	25		ACR	0.44	CMS-Other - Utilization o	October 2017	XXX	0.44	NA	1.48	0.03	3132	FALSE		FALSE				TRUE	Decrease
77075	Radiologic examination	X-Ray Exam - Bone	April 2018	25		ACR	0.55	CMS-Other - Utilization o	October 2017	XXX	0.55	NA	2.39	0.06	32611	FALSE		FALSE				TRUE	Increase
77076	Radiologic examination	X-Ray Exam - Bone	April 2018	25		ACR	0.70	CMS-Other - Utilization o	October 2017	XXX	0.7	NA	2.47	0.06	19	FALSE		FALSE				TRUE	Maintain
77077	Joint survey, single viev	X-Ray Exam - Bone	April 2018	25		ACR	0.33	CMS-Other - Utilization o	October 2017	XXX	0.33	NA	1.05	0.03	35153	FALSE		FALSE				TRUE	Increase
77079	Computed tomography	CT Bone Density Study	February 2010	31		ACR, AAFP, ACP	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The Workgroup re	October 2(	22	Complete	TRUE	Deleted from CPT
77080	Dual-energy x-ray absor	Dual Energy X-Ray	October 2013	07		AACE, ACNM, A	0.20	CMS Request - Final Rule	September 2011	XXX	0.2	NA	0.92	0.02	2615040	FALSE		TRUE	In Oct 2012, the Ja	May 2013		Complete	TRUE	Maintain
77081	Dual-energy x-ray absor	Dual-energy X-Ray Absorptiome	January 2018	25			0.20	Negative IWPUT	April 2017	XXX	0.2	NA	0.72	0.02	52608	FALSE		FALSE				TRUE	Decrease
77082	Dual-energy X-ray abso	Dual Energy X-Ray	October 2013	07		AACE, ACNM, A	Deleted from CPT	CMS Request - Final Rule	September 2011							FALSE		TRUE	In Oct 2012, the Ja	May 2013		Complete	TRUE	Deleted from CPT
77083	Radiographic absorptio	Radiographic Absorptiometry	February 2010	31		ACR, ACP	Deleted from CPT	Different Performing Spe	October 2009							FALSE		TRUE	The Workgroup re	October 2(	22	Complete	TRUE	Deleted from CPT
77085	Dual-energy x-ray absor	Dual Energy X-Ray	October 2013	07		AACE, ACNM, A	0.30	Codes Reported Together	75% or More-Part	XXX	0.3	NA	1.23	0.02	101080	FALSE		FALSE	May 2013		Complete	TRUE	Decrease
77086	Vertebral fracture asse	Dual Energy X-Ray	October 2013	07		AACE, ACNM, A	0.17	Codes Reported Together	75% or More-Part	XXX	0.17	NA	0.80	0.02	1954	FALSE		FALSE	May 2013		Complete	TRUE	Maintain
77261	Therapeutic radiology t	Radiation Therapy Planning	April 2016	37		ASTRO	1.30	CMS High Expenditure Pr	July 2015	XXX	1.3	0.72	0.72	0.08	8395	FALSE		FALSE				TRUE	Decrease
77262	Therapeutic radiology t	Radiation Therapy Planning	April 2016	37		ASTRO	2.00	CMS High Expenditure Pr	July 2015	XXX	2	1.07	1.07	0.14	2895	FALSE		FALSE				TRUE	Decrease
77263	Therapeutic radiology t	Radiation Therapy Planning	April 2016	37		ASTRO	3.14	CMS High Expenditure Pr	July 2015	XXX	3.14	1.63	1.63	0.25	283609	FALSE		FALSE				TRUE	Maintain
77280	Therapeutic radiology s	Set Radiation Therapy Field	January 2013	14		ASTRO	0.70	Harvard Valued - Utilizatio	April 2011	XXX	0.7	NA	7.32	0.05	371120	FALSE		TRUE	ASTRO reviewed t	October 2(	22	Complete	TRUE	Maintain
77285	Therapeutic radiology s	Respiratory Motion Manageme	January 2013	14		ASTRO	1.05	Harvard Valued - Utilizatio	September 2011	XXX	1.05	NA	12.10	0.06	4932	FALSE		TRUE	ASTRO reviewed t	October 2(	22	Complete	TRUE	Maintain
77290	Therapeutic radiology s	Respiratory Motion Manageme	January 2013	14		ASTRO	1.56	MPC List / Harvard Value	October 2010	XXX	1.56	NA	11.89	0.09	183127	FALSE		TRUE	ASTRO reviewed t	October 2(	22	Complete	TRUE	Maintain
77293	Respiratory motion mai	Respiratory Motion Manageme	January 2013	14		ASTRO	2.00	Harvard Valued - Utilizatio	over 30,000	ZZZ	2	NA	10.24	0.12	32996	FALSE		FALSE	October 2(	22	Complete	TRUE	Decrease
77295	3-dimensional radiothe	Surface Radionuclide High Does	January 2013	14		ASTRO	4.29	Harvard Valued - Utilizatio	September 2011	XXX	4.29	NA	9.75	0.25	121922	FALSE		TRUE	ASTRO reviewed t	October 2(	22, 28/29	Complete	TRUE	Decrease
77300	Basic radiation dosimet	Surface Radionuclide High Does	April 2014	20		ASTRO	0.62	MPC List / Codes Reporte	October 2010	XXX	0.62	NA	1.30	0.05	1190989	FALSE		TRUE	On 8-21-12, the Jc	February 2	44, 28/29	complete	TRUE	Maintain
77301	Intensity modulated rac	IMRT - PE Only	April 2013	28		ASTRO	New PE Inputs. 7.99. CPT Assis	CMS Fastest Growing / Ch	October 2008	XXX	7.99	NA	46.30	0.65	155356	TRUE	Nov 2009	Yes	FALSE				TRUE	Maintain
77305	Teletherapy, isodose pl	Isodose Calculation with Isodos	April 2014	20		ASTRO	Deleted from CPT	Codes Reported Together	October 2010							FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Deleted from CPT
77306	Teletherapy isodose pla	Isodose Calculation with Isodos	April 2014	20			1.40	Codes Reported Together	October 2010	XXX	1.4	NA	2.93	0.08	1211	FALSE		FALSE				TRUE	Decrease
77307	Teletherapy isodose pla	Isodose Calculation with Isodos	April 2014	20			2.90	Codes Reported Together	October 2010	XXX	2.9	NA	5.48	0.16	30833	FALSE		FALSE				TRUE	Decrease
77310	Teletherapy, isodose pl	Isodose Calculation with Isodos	April 2014	20		ASTRO	Deleted from CPT	Codes Reported Together	October 2010							FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Deleted from CPT
77315	Teletherapy, isodose pl	Isodose Calculation with Isodos	April 2014	20		ASTRO	Deleted from CPT	Codes Reported Together	October 2010							FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Deleted from CPT
77316	Brachytherapy isodose	Isodose Calculation with Isodos	April 2014	20			1.50	Codes Reported Together	October 2012	XXX	1.4	NA	5.80	0.10	4167	FALSE		FALSE				TRUE	Decrease
77317	Brachytherapy isodose	Isodose Calculation with Isodos	April 2014	20			1.83	Codes Reported Together	October 2012	XXX	1.83	NA	7.63	0.14	2168	FALSE		FALSE				TRUE	Decrease
77318	Brachytherapy isodose	Isodose Calculation with Isodos	October 2015	21			2.90	Codes Reported Together	October 2012	XXX	2.9	NA	10.53	0.20	4713	FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Decrease
77326	Brachytherapy isodose	Isodose Calculation with Isodos	April 2014	20			Deleted from CPT	Codes Reported Together	October 2012							FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Deleted from CPT
77327	Brachytherapy isodose	Isodose Calculation with Isodos	April 2014	20		ASTRO	Deleted from CPT	Codes Reported Together	October 2010							FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Deleted from CPT
77328	Brachytherapy isodose	Isodose Calculation with Isodos	April 2014	20			Deleted from CPT	Codes Reported Together	October 2012							FALSE		TRUE	On 8-21-12, the Jc	February 2	44	Complete	TRUE	Deleted from CPT
77332	Treatment devices, des	RAW	January 2016	40	RUC	ASTRO	0.54	CMS High Expenditure Pr	April 2015	XXX	0.45	NA	0.66	0.03	62457	FALSE		FALSE				TRUE	Maintain
77333	Treatment devices, des	RAW	January 2016	40	RUC	ASTRO	0.84	CMS High Expenditure Pr	April 2015	XXX	0.75	NA	3.32	0.05	10502	FALSE		FALSE				TRUE	Maintain
77334	Treatment devices, design and construction; complex (		January 2016	40	RUC	ASTRO	1.24	MPC List / RUC request /	October 2010	XXX	1.15	NA	2.53	0.05	751878	FALSE		FALSE				TRUE	Maintain
77336	Continuing medical phy	Continuing Medical Physics Cor	April 2013	31		ASTRO	New PE Inputs	CMS Request - Final Rule	October 2012	XXX	0	NA	2.50	0.08	363375	FALSE		FALSE				TRUE	PE Only
77338	Multi-leaf collimator (m	IMRT - PE Only	April 2013	28			New PE Inputs	Services with Stand-Alone	October 2012	XXX	4.29	NA	9.31	0.26	173297	FALSE		FALSE				TRUE	PE Only
77371	Radiation treatment de	Radiation Treatment Delivery, S	April 2009	30		ASTRO	New PE inputs	CMS Request - Practice Ex	NA	XXX	0	0.00	0.00	0.00	109	FALSE		FALSE				TRUE	PE Only
77372	Radiation treatment de	Radiation Treatment Delivery -	October 2013	18			New PE Inputs	Services with Stand-Alone	October 2012	XXX	0	NA	28.75	0.19	726	FALSE		FALSE				TRUE	PE Only
77373	Stereotactic body radia	Radiation Treatment Delivery -	October 2013	18		ACR, ASTRO, AC	New PE inputs	Services with Stand-Alone	July 2012	XXX	0	NA	29.84	0.23	36453	FALSE		FALSE				TRUE	PE Only
77385	Intensity modulated rac	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	PE Only, revised introductory g	Services with Stand-Alone	January 2014	XXX	0	0.00	0.00	0.00		FALSE		FALSE	October 2(	28	Complete	TRUE	PE Only
77386	Intensity modulated rac	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	PE Only, revised introductory g	Services with Stand-Alone	January 2014	XXX	0	0.00	0.00	0.00		FALSE		FALSE	October 2(	28	Complete	TRUE	PE Only
77387	Guidance for localizatio	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	0.58	Services with Stand-Alone	January 2014	XXX	0	0.00	0.00	0.00		FALSE		FALSE	October 2(	28	Complete	TRUE	Decrease
77401	Radiation treatment de	Radiation Treatement Delivery	January 2020	31			New PE Inputs	High Volume Growth5	October 2018	XXX	0	NA	1.22	0.01	237180	FALSE		TRUE	In October 2018, t	May 2019	08	Withdrawn at	TRUE	PE Only
77402	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	PE Only, revised introductory g	Services with Stand-Alone	October 2012	XXX	0	0.00	0.00	0.00		FALSE		TRUE	At the April 2013	October 2(	28 & 45	Complete	TRUE	PE Only
77403	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77404	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77406	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77407	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	PE Only, revised introductory g	Services with Stand-Alone	October 2012	XXX	0	0.00	0.00	0.00		FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	PE Only
77408	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77409	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77411	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77412	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	PE Only, revised introductory g	Services with Stand-Alone	October 2012	XXX	0	0.00	0.00	0.00		FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	PE Only
77413	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77414	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77416	Radiation treatment de	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	At the April 2013	October 2(	28	Complete	TRUE	Deleted from CPT
77418	Intensity modulated tre	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	CMS Fastest Growing / Se	October 2008							TRUE	Nov 2009	Yes	TRUE		October 2(	28	Complete	TRUE	Deleted from CPT
77421	Stereoscopic X-ray guid	Radiation Treatment Delivery -	January 2014	14		ACRO, ASTRO	Deleted from CPT	Codes Reported Together	February 2010							FALSE		TRUE	In Jan 2012, the s	October 2(	28	Complete	TRUE	Deleted from CPT
77422	High energy neutron ra	High Energy Neutron Radiation	April 2015	35	RUC	AAOS, ASPS, AS	Contractor Price	CMS Request - Final Rule	November 2014							FALSE		FALSE				TRUE	Deleted from CPT
77423	High energy neutron ra	High Energy Neutron Radiation	April 2015	35	RUC	AAOS, ASPS, AS	Contractor Price	CMS Request - Final Rule	November 2014	XXX	0	0.00	0.00	0.00		FALSE		FALSE				TRUE	Maintain
77427	Radiation treatment ma	Radiation Treatment Managem	January 2016	54		ASTRO	3.45. Remove from high E/M s	Site of Service Anomaly /	September 2007	XXX	3.37	2.06	2.06	0.26	939960	FALSE		TRUE	In October 2008 t	June 2009	21	Complete	TRUE	Decrease
77435	Stereotactic body radia	RAW	January 2017	30			Remove from screen	High Volume Growth4	October 2016	XXX	11.87	6.31	6.31	0.91	40892	FALSE		FALSE				TRUE	Remove from Screen
77470	Special treatment proc	Special Radiation Treatment	January 2016	41		ASTRO	2.03	CMS High Expenditure Pr	July 2015	XXX	2.03	NA	2.00	0.12	83022	FALSE		FALSE				TRUE	Decrease
77520	Proton treatment delive	Proton Beam Treatment Delive	April 2019	19		ASTRO	New PE Inputs	Contractor Priced High Vc	October 2018	XXX	0	0.00	0.00	0.00	153	FALSE		FALSE				TRUE	PE Only
77522	Proton treatment deliv	Proton Beam Treatment Delive	April 2019	19		ASTRO	New PE Inputs	Contractor Priced High Vc	January 2018	XXX	0	0.00	0.00	0.00	10249	FALSE		FALSE				TRUE	PE Only
77523	Proton treatment deliv	Proton Beam Treatment Delive	April 2019	19		ASTRO	New PE Inputs	High Volume Growth4 / C	October 2016	XXX	0	0.00	0.00	0.00	70873	FALSE		FALSE				TRUE	PE Only
77525	Proton treatment deliv	Proton Beam Treatment Delive	April 2019	19		ASTRO	New PE Inputs	Contractor Priced High Vc	October 2018	XXX	0	0.00	0.00	0.00	12383	FALSE		FALSE				TRUE	PE Only
77600	Hyperthermia, external	Hyperthermia - PE Only	April 2013	30			New PE Inputs	Services with Stand-Alone	October 2012	XXX	1.31	NA	14.41	0.12	9027	FALSE		FALSE				TRUE	PE Only
77767	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO, ACRO	1.05	Codes Reported Together	October 2014	XXX	1.05	NA	6.31	0.08	4110	FALSE		FALSE	October 2(	28/29	Complete	TRUE	Decrease
77768	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO, ACRO	1.40	Codes Reported Together	October 2014	XXX	1.4	NA	9.34	0.13	6054	FALSE		FALSE	October 2(	28/29	Complete	TRUE	Decrease
77770	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO, ACRO	1.95	Codes Reported Together	October 2014	XXX	1.95	NA	8.27	0.12	15268	FALSE		FALSE	October 2(	28/29	Complete	TRUE	Decrease
77771	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO, ACRO	3.80	Codes Reported Together	October 2014	XXX	3.8	NA	13.90	0.27	12435	FALSE		FALSE	October 2(	28/29	Complete	TRUE	Decrease
77772	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO, ACRO	5.40	Codes Reported Together	October 2014	XXX	5.4	NA	20.96	0.39	3720	FALSE		FALSE	October 2(	28/29	Complete	TRUE	Decrease
77776	Interstitial radiation so	Interstitial Radiation Source Co	April 2015	17		ACR, ASTRO	Deleted from CPT	Codes Reported Together	February 2015							FALSE		FALSE	February 2	35	Complete	TRUE	Deleted from CPT
77777	Interstitial radiation so	Interstitial Radiation Source Co	April 2015	17		ACR, ASTRO	Deleted from CPT	Codes Reported Together	February 2015							FALSE		FALSE	February 2	35	Complete	TRUE	Deleted from CPT
77778	Interstitial radiation so	Interstitial Radiation Source Co	October 2015	21		ACR, ASTRO	8.78	Codes Reported Together	October 2012	000	8.78	NA	17.94	0.53	3532	FALSE		TRUE	The Joint Workgrc	February 2	35	Complete	TRUE	Decrease
77781	Deleted from CPT	Brachytherapy	October 2008	26		ASTRO	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE		TRUE	Deleted from CPT	February 2	36	Code Deleted	TRUE	Deleted from CPT
77782	Deleted from CPT	Brachytherapy	February 2008	S		ASTRO	Deleted from CPT	High Volume Growth1 / C	February 2008							FALSE		TRUE	Deleted from CPT	February 2	36	Code Deleted	TRUE	Deleted from CPT
77784	Deleted from CPT	Brachytherapy	February 2008	S		ASTRO	Deleted from CPT	CMS Fastest Growing	February 2008							FALSE		TRUE	Deleted from CPT	February 2	36	Code Deleted	TRUE	Deleted from CPT
77785	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO	Deleted from CPT	High Volume Growth1 / CMS Fastest Growing/CMS Request - Practice Expense / Services with Stand-Alone PE Pro								FALSE		TRUE	In October 2012, t	October 2(	28/29	Complete	TRUE	Deleted from CPT
77786	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO	Deleted from CPT	High Volume Growth1 / CMS Fastest Growing/CMS Request - Practice Expense / Services with Stand-Alone PE Pro								FALSE		TRUE	In October 2012, t	October 2(	28/29	Complete	TRUE	Deleted from CPT
77787	Remote afterloading hi	Surface Radionuclide High Does	January 2015	16		ASTRO	Deleted from CPT	High Volume Growth1 / C	October 2012							FALSE		TRUE	In October 2012, t	October 2(	28/29	Complete	TRUE	Deleted from CPT
77790	Supervision, handling, l	Interstitial Radiation Source Co	October 2015	21		ACR, ASTRO, SIR	0.00	Codes Reported Together	October 2012	XXX	0	NA	0.50	0.02	32	FALSE		TRUE	The Joint Workgrc	February 2	35	Complete	TRUE	Decrease
78000	Thyroid uptake; single c	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilization	over 30,000							FALSE		TRUE	Identified with 78	February 2	13	Complete	TRUE	Deleted from CPT
78001	Thyroid uptake; multipl	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilization	over 30,000							FALSE		TRUE	Identified with 78	February 2	13	Complete	TRUE	Deleted from CPT
78003	Thyroid uptake; stimula	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilization	over 30,000							FALSE		TRUE	Identified with 78	February 2	13	Complete	TRUE	Deleted from CPT
78006	Thyroid imaging, with u	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilization	over 30,000							FALSE		TRUE	Identified with 78	February 2	13	Complete	TRUE	Deleted from CPT
78007	Thyroid imaging, with u	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilizatio	April 2011							FALSE		TRUE	Specialty requests	February 2	13	Complete	TRUE	Deleted from CPT
78010	Thyroid imaging; only	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilization	over 30,000							FALSE		TRUE	Identified with 78	February 2	13	Complete	TRUE	Deleted from CPT
78011	Thyroid imaging; with v	Thyroid Uptake/Imaging	April 2012	22		ACR, ACNM, SNI	Deleted from CPT	Harvard Valued - Utilization	over 30,000							FALSE		TRUE	Identified with 78	February 2	13	Complete	TRUE	Deleted from CPT

78012	Thyroid uptake, single c	Thyroid Uptake/Imaging	April 2012	22			ACR, ACNM, SNI	0.19		Harvard Valued - Utilization over 30,000	XXX	0.19	NA	2.18	0.05	975	FALSE			TRUE	Identified with 78	February 2	13	Complete	TRUE	Decrease
78013	Thyroid imaging (includ	Thyroid Uptake/Imaging	April 2012	22			ACR, ACNM, SNI	0.37		Harvard Valued - Utilization over 30,000	XXX	0.37	NA	4.91	0.06	870	FALSE			TRUE	Identified with 78	February 2	13	Complete	TRUE	Decrease
78014	Thyroid imaging (includ	Thyroid Uptake/Imaging	April 2012	22			ACR, ACNM, SNI	0.50		Harvard Valued - Utilization over 30,000	XXX	0.5	NA	6.10	0.06	12722	FALSE			TRUE	Identified with 78	February 2	13	Complete	TRUE	Decrease
78070	Parathyroid planar imag	Parathyroid Imaging	January 2016	54			ACR, ACNM, SNI	0.80		Harvard Valued - Utilizatic	April 2011	XXX	0.8	NA	7.31	0.08	9919	TRUE	Dec 2016	yes	FALSE					TRUE	Maintain
78071	Parathyroid planar imag	Parathyroid Imaging	January 2016	54			ACR, ACNM, SNI	1.20		Harvard Valued - Utilizatic	April 2011	XXX	1.2	NA	8.48	0.10	6665	TRUE	Dec 2016	yes	FALSE					TRUE	Maintain
78072	Parathyroid planar imag	Parathyroid Imaging	January 2016	54			ACR, ACNM, SNI	1.60		Harvard Valued - Utilizatic	April 2011	XXX	1.6	NA	10.49	0.10	11357	TRUE	Dec 2016	yes	FALSE					TRUE	Maintain
78223	Hepatobiliary ductal sys	Hepatobiliary Ductal System Im	February 2011	12			ACR, SNM	Deleted from CPT		Harvard Valued - Utilizatic	October 2009						FALSE				TRUE	The specialties wi	October 2	21	Complete	TRUE	Deleted from CPT
78226	Hepatobiliary system in	Hepatobiliary System Imaging	February 2011	12			ACR, SNM, ACNI	0.74		Harvard Valued - Utilization over 100,000	XXX	0.74	NA	8.25	0.08	51132	FALSE			FALSE					TRUE	Decrease
78227	Hepatobiliary system in	Hepatobiliary System Imaging	February 2011	12			ACR, SNM, ACNI	0.90		Harvard Valued - Utilization over 100,000	XXX	0.9	NA	11.18	0.11	44564	FALSE			FALSE					TRUE	Decrease
78265	Gastric emptying imagi	Colon Transit Imaging	April 2015	18			ACNM, ACR, SNI	CPT Assistant article published		New code for CPT 2016.	April 2015	XXX	0.98	NA	9.83	0.10	553	TRUE	Dec 2015	yes	FALSE					TRUE	Not Part of RAW
78266	Gastric emptying imagi	Colon Transit Imaging	April 2015	18			ACNM, ACR, SNI	CPT Assistant article published		New code for CPT 2016.	April 2015	XXX	1.08	NA	11.21	0.11	275	TRUE	Dec 2015	yes	FALSE					TRUE	Not Part of RAW
78278	Acute gastrointestinal b	Acute GI Blood Loss Imaging	September 2011	34			ACR, SNM, ACNI	0.99		Harvard Valued - Utilizatic	April 2011	XXX	0.99	NA	8.65	0.08	19163	FALSE			FALSE					TRUE	Maintain
78300	Bone and/or joint imag	Bone Imaging	April 2016	38			ACNM, ACR, SNI	0.62		CMS High Expenditure Pr	July 2015	XXX	0.62	NA	5.65	0.08	4626	FALSE			FALSE					TRUE	Maintain
78305	Bone and/or joint imag	Bone Imaging	April 2016	38			ACNM, ACR, SNI	0.83		CMS High Expenditure Pr	July 2015	XXX	0.83	NA	6.81	0.08	772	FALSE			FALSE					TRUE	Maintain
78306	Bone and/or joint imag	Bone Imaging	April 2016	38			ACNM, ACR, SNI	0.86		CMS High Expenditure Pr	July 2015	XXX	0.86	NA	7.31	0.08	224828	FALSE			FALSE					TRUE	Maintain
78429	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	1.76		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	972	FALSE			FALSE					TRUE	Increase
78430	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	1.67		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	443	FALSE			FALSE					TRUE	Increase
78431	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	1.90		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	57480	FALSE			FALSE					TRUE	Increase
78432	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	2.07		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	51	FALSE			FALSE					TRUE	Increase
78433	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	2.26		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	1321	FALSE			FALSE					TRUE	Increase
78434	Absolute quantitation c	Myocardial PET	January 2019	13			ACC, ACR, ACNI	0.63		High Volume Growth4	May 2018	ZZZ	0	NA	0.00	0.00	53560	FALSE			FALSE					TRUE	Increase
78451	Myocardial perfusion in	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	1.40		Codes Reported Together	NA	XXX	1.38	NA	7.99	0.08	26101	FALSE			FALSE					TRUE	Increase
78452	Myocardial perfusion in	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	1.75		Codes Reported Together	NA	XXX	1.62	NA	11.36	0.13	1436710	FALSE			FALSE					TRUE	Decrease
78453	Myocardial perfusion in	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	1.00		Codes Reported Together	NA	XXX	1	NA	7.08	0.08	1261	FALSE			FALSE					TRUE	Decrease
78454	Myocardial perfusion in	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	1.34		Codes Reported Together	NA	XXX	1.34	NA	10.69	0.14	6679	FALSE			FALSE					TRUE	Decrease
78459	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	1.61		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	795	FALSE			FALSE					TRUE	Increase
78460	Deleted from CPT	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	Deleted from CPT		Codes Reported Together	95% or More							FALSE			FALSE		October 2	23		TRUE	Deleted from CPT
78461	Deleted from CPT	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	Deleted from CPT		Codes Reported Together	95% or More							FALSE			FALSE		October 2	23		TRUE	Deleted from CPT
78464	Deleted from CPT	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	Deleted from CPT		Codes Reported Together	95% or More							FALSE			FALSE		October 2	23		TRUE	Deleted from CPT
78465	Deleted from CPT	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	Deleted from CPT		Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2	23	Code Deleted	TRUE	Deleted from CPT
78472	Cardiac blood pool imag	Cardiac Blood Pool Imaging	September 2011	35			ACC, ACR, SNM,	0.98		Harvard Valued - Utilizatic	April 2011	XXX	0.98	NA	5.31	0.08	12036	FALSE			FALSE					TRUE	Maintain
78478	Deleted from CPT	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	Deleted from CPT		Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2	23	Code Deleted	TRUE	Deleted from CPT
78480	Deleted from CPT	Myocardial Perfusion Imaging	February 2009	16			SNM, ACR, ASN	Deleted from CPT		Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2	23	Code Deleted	TRUE	Deleted from CPT
78491	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	1.56		High Volume Growth4	May 2018	XXX	0	NA	0.00	0.00	455	FALSE			FALSE					TRUE	Increase
78492	Myocardial imaging, po	Myocardial PET	January 2019	13			ACC, ACR, ACNI	1.80		High Volume Growth4	October 2016	XXX	0	NA	0.00	0.00	135259	FALSE			TRUE	This service was ir	May 2018	28	Yes	TRUE	Increase
78579	Pulmonary ventilation i	Pulmonary Imaging	February 2011	13			ACR, SNM	0.49		Harvard Valued - Utilizatic	February 2010	XXX	0.49	NA	4.73	0.06	248	FALSE			TRUE		October 2	23	Complete	TRUE	Decrease
78580	Pulmonary perfusion in	Pulmonary Imaging	September 2022	13	April 2024	RAW	SNM, ACR	Review action plan. 0.74		Harvard Valued - Utilizatic	February 2010	XXX	0.74	NA	5.80	0.08	80607	FALSE			TRUE	The specialties rev	October 2	23	complete	FALSE	Maintain
78582	Pulmonary ventilation (	Pulmonary Imaging	February 2011	13			ACR, SNM	1.07		Harvard Valued - Utilizatic	February 2010	XXX	1.07	NA	8.11	0.08	47160	FALSE			TRUE		October 2	23	Complete	TRUE	Decrease
78584	Pulmonary perfusion in	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78585	Pulmonary perfusion in	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	October 2009							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78586	Pulmonary ventilation i	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78587	Deleted from CPT	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78588	Deleted from CPT	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78591	Deleted from CPT	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78593	Deleted from CPT	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78594	Deleted from CPT	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78596	Deleted from CPT	Pulmonary Perfusion Imaging	February 2010	31			SNM, ACR	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	The specialties rev	October 2	23	Code Deleted	TRUE	Deleted from CPT
78597	Quantitative differentia	Pulmonary Imaging	February 2011	13			ACR, SNM	0.75		Harvard Valued - Utilizatic	February 2010	XXX	0.75	NA	4.80	0.08	2480	FALSE			FALSE		October 2	23		TRUE	Decrease
78598	Quantitative differentia	Pulmonary Imaging	February 2011	13			ACR, SNM	0.85		Harvard Valued - Utilizatic	February 2010	XXX	0.85	NA	7.51	0.08	1174	FALSE			TRUE		October 2	23	Complete	TRUE	Decrease
78803	Radiopharmaceutical lo	RAW	January 2019	14			ACR, ACNM, SNI	1.20		Harvard Valued - Utilizatic	January 2016	XXX	1.09	NA	9.46	0.08	37154	TRUE	Dec 2016	yes	FALSE					TRUE	Increase
78815	Positron emission tomography (pet) with concurrently		February 2011	41			ACR, SNM	Reaffirmed RUC recommendat		MPC List	October 2010	XXX	0	NA	0.00	0.00	592418	FALSE			FALSE					TRUE	Maintain
79101	Radiopharmaceutical th	Radiopharmaceutical Therapy	February 2010	31			SNM, ACR	Article published Feb 2012		Different Performing Spe	October 2009	XXX	1.96	NA	2.33	0.09	9889	TRUE	Feb 2012	Yes	FALSE					TRUE	Maintain
80500	Clinical pathology consu	Pathology Clinical Consult	January 2021	20			CAP	Deleted from CPT		CMS-Other - Utilization o	January 2019	XXX					16592	FALSE			TRUE	In October 2018, t	October 2	50	complete	TRUE	Deleted from CPT
80502	Clinical pathology consu	Pathology Clinical Consult	January 2021	20			CAP	Deleted from CPT		CMS-Other - Utilization o	January 2021	XXX					10332	FALSE			FALSE		October 2	50	complete	TRUE	Deleted from CPT
80503	Pathology clinical cons	Pathology Clinical Consult	January 2021	20			CAP	0.50		CMS-Other - Utilization o	January 2021	XXX	0.43	0.20	0.35	0.02		FALSE			FALSE		October 2	50	complete	TRUE	Decrease
80504	Pathology clinical cons	Pathology Clinical Consult	January 2021	20			CAP	0.91		CMS-Other - Utilization o	January 2021	XXX	0.91	0.45	0.62	0.04		FALSE			FALSE		October 2	50	complete	TRUE	Decrease
80505	Pathology clinical cons	Pathology Clinical Consult	January 2021	20			CAP	1.80		CMS-Other - Utilization o	January 2021	XXX	1.71	0.85	1.03	0.10		FALSE			FALSE		October 2	50	complete	TRUE	Decrease
80506	Pathology clinical cons	Pathology Clinical Consult	January 2021	20			CAP	0.80		CMS-Other - Utilization o	January 2021	XXX	0.8	NA	0.43	0.04		FALSE			FALSE		October 2	50	complete	TRUE	Decrease
85060	Blood smear, peripheral	Blood Smear Interpretation	April 2017	30			CAP	0.45		CMS-Other - Utilization o	April 2016	XXX	0.45	0.22	NA	0.04	181850	FALSE			FALSE					TRUE	Maintain
85097	Bone marrow, smear in	Bone Marrow Interpretation	April 2017	31			CAP	1.00		CMS-Other - Utilization o	April 2016	XXX	0.94	0.43	1.06	0.04	133378	FALSE			FALSE					TRUE	Increase
85390	Fibrinolysins or coagulo	Fibrinolysins Screen	January 2018	26				0.75		Negative IWPUT	April 2017	XXX	0	0.00	0.00	0.00	34629	FALSE			FALSE					TRUE	Increase
88104	Cytopathology, fluids, v	Cytopathology	April 2015	36			AUR, ASC, CAP	New PE Inputs. 0.56		Harvard Valued - Utilizatic	October 2009	XXX	0.56	NA	1.47	0.03	47598	FALSE			FALSE					TRUE	Maintain
88106	Cytopathology, fluids, v	Cytopathology	April 2015	36			AUR, ASC, CAP	New PE Inputs. 0.56		Harvard Valued - Utilizatic	February 2010	XXX	0.37	NA	1.69	0.02	2306	FALSE			FALSE					TRUE	Maintain
88107	Deleted from CPT	Cytopathology	October 2010	17			AUR, ASC, CAP	Deleted from CPT		Harvard Valued - Utilizatic	February 2010							FALSE			TRUE	This service was b	October 2	30	Complete	TRUE	Deleted from CPT
88108	Cytopathology, concent	Cytopathology Concentration T	April 2015	36	RUC		ACR, CAP	New PE Inputs. 0.56		Harvard Valued - Utilizatic	February 2010	XXX	0.44	NA	1.51	0.02	192453	FALSE			FALSE					TRUE	Maintain
88112	Cytopathology, selectiv	Cytopathology Concentration T	April 2015	36	RUC		ACR, CAP	New PE Inputs. 0.56		CMS High Expenditure Pr	September 2011	XXX	0.56	NA	1.41	0.02	761461	FALSE			FALSE					TRUE	Decrease
88120	Cytopathology, in situ h	RAW review	October 2017	19				Utilization shift is appropriate.		CMS Request - Final Rule	November 2012	XXX	1.2	NA	16.56	0.06	44750	FALSE			FALSE					TRUE	Maintain
88121	Cytopathology, in situ h	RAW review	October 2017	19				Utilization shift is appropriate.		CMS Request - Final Rule	November 2012	XXX	1	NA	11.49	0.03	22780	FALSE			FALSE					TRUE	Maintain
88141	Cytopathology, cervical	Cytopathology Cervical/Vaginal	April 2018	26			CAP	0.42		CMS-Other - Utilization o	October 2017	XXX	0.26	0.41	0.41	0.01	46295	FALSE			FALSE					TRUE	Maintain
88160	Cytopathology, smears,	Cytopathology Concentration T	April 2015	36				New PE Inputs		CMS Request - Final Rule	April 2015	XXX	0.5	NA	1.71	0.03	5607	FALSE			FALSE					TRUE	PE Only
88161	Cytopathology, smears,	Cytopathology Concentration T	April 2015	36				New PE Inputs		CMS Request - Final Rule	April 2015	XXX	0.5	NA	1.76	0.03	3925	FALSE			FALSE					TRUE	PE Only
88162	Cytopathology, smears,	Cytopathology Concentration T	April 2015	36				New PE Inputs		CMS Request - Final Rule	April 2015	XXX	0.76	NA	2.75	0.03	1282	FALSE			FALSE					TRUE	PE Only
88184	Flow cytometry, cell sur	Flow Cytometry	January 2016				CAP	New PE Inputs. Removed from		CMS High Expenditure Pr	July 2015	XXX	0	NA	2.20	0.02	104898	FALSE			FALSE					TRUE	PE Only
88185	Flow cytometry, cell sur	Flow Cytometry	January 2016				CAP	New PE Inputs. Removed from		CMS High Expenditure Pr	July 2015	ZZZ	0	NA	0.71	0.00	1956734	FALSE			FALSE					TRUE	PE Only
88187	Flow cytometry, interpr	Flow Cytometry Interpretation	January 2016	42			CAP	0.74		CMS High Expenditure Pr	July 2015	XXX	0.74	0.26	0.26	0.04	40982	FALSE			FALSE					TRUE	Decrease
88188	Flow cytometry, interpr	Flow Cytometry Interpretation	January 2016	42			CAP	1.40		CMS High Expenditure Pr	July 2015	XXX	1.2	0.56	0.56	0.06	38785	FALSE			FALSE					TRUE	Decrease
88189	Flow cytometry, interpr	Flow Cytometry Interpretation	January 2016	42			CAP	1.70		CMS High Expenditure Pr	July 2015	XXX	1.7	0.68	0.68	0.08	235162	FALSE			FALSE					TRUE	Decrease
88300	Level i - surgical patholo	Pathology Consultations	January 2012	24			AAD, AGA, CAP,	0.08 and new PE inputs		Havard Valued - Utilizatio	February 2009	XXX	0.08	NA	0.38	0.02	171872	FALSE			FALSE					TRUE	Maintain
88302	Level ii - surgical patho	Pathology Consultations	January 2012	24			AAD, AGA, CAP,	0.13 and new PE inputs		Havard Valued - Utilizatio	February 2009	XXX	0.13	NA	0.83	0.02	60721	FALSE			FALSE					TRUE	Maintain
88304	Level iii - surgical patho	Pathology Consultations	January 2012	24			AAD, AGA, CAP,	0.22 and new PE inputs		Havard Valued - Utilizatio	October 2008	XXX	0.22	NA	1.03	0.02	810872	FALSE			FALSE					TRUE	Maintain
88305	Level iv - surgical patho	Pathology Consultations	January 2012	24			AAD, AGA, CAP,	0.75 and new PE inputs		Havard Valued - Utilizatio	October 2008	XXX	0.75	NA	1.35	0.02	15994812	FALSE			FALSE					TRUE	Maintain
88307	Level v - surgical patholo	Pathology Consultations	January 2012	24			AAD, AGA, CAP,	1.59 and new PE inputs		Havard Valued - Utilizatio	February 2009	XXX	1.59	NA	6.97	0.08	921197	FALSE			FALSE					TRUE	Maintain
88309	Level vi - surgical patho	Pathology Services	January 2012	24			AAD, AGA, CAP,	2.80 and new PE inputs		Havard Valued - Utilizatio	February 2009	XXX	2.8	NA	10.15	0.08	135868	FALSE			FALSE					TRUE	Maintain
88312	Special stain including i	Special Stains	January 2012	33			CAP	0.54		Havard Valued - Utilizatio	October 2008	XXX	0.54	NA	2.79	0.02	1221288	FALSE			TRUE	At the February 2	June 2010	12	Complete	TRUE	Maintain
88313	Special stain including i	Special Stains	February 2011	33			CAP	0.24		Havard Valued - Utilizatio	October 2008	XXX	0.24	NA	2.18	0.02	1300022	FALSE			TRUE	At the February 2	June 2010	12	Complete	TRUE	Maintain
88314	Special stain including i	Special Stains	February 2011	33			CAP	0.45		Havard Valued - Utilizatio	February 2009	XXX	0.45	NA	2.23	0.02	23532	FALSE			TRUE	At the February 2	June 2010	12	Complete	TRUE	Maintain
88318	Deleted from CPT	Special Stains	February 2010	22			CAP, AAD	Deleted from CPT		Havard Valued - Utilization over 1 Million								FALSE			TRUE	At the February 2	June 2010	12	Complete	TRUE	Deleted from CPT
88319	Special stain including i	Special Stains	February 2011	33			CAP	0.53		Havard Valued - Utilization over 1 Million		XXX	0.53	NA	3.48	0.03	13606	FALSE			TRUE	At the February 2	June 2010	12	Complete	TRUE	Maintain
88321	Consultation and repor	Microslide Consultation	January 2016	43			CAP, ASC	1.63		CMS High Expenditure Pr	July 2015	XXX	1.63	0.74	1.16	0.08	167407	FALSE			FALSE					TRUE	Maintain
88323	Consultation and repor	Microslide Consultation	January 2016	43			CAP, ASC	1.83		CMS High Expenditure Pr	July 2015	XXX	1.83	NA	1.53	0.02	33552	FALSE			FALSE					TRUE	Maintain
88325	Consultation, comprehe	Microslide Consultation	January 2016	43			CAP, ASC	2.85		CMS High Expenditure Pr	July 2015	XXX	2.85	0.95	1.64	0.12	11472	FALSE			FALSE					TRUE	Increase
88329	Pathology consultation	Pathology Consultation During	October 2010	18			CAP	0.67		Harvard Valued - Utilizatic	February 2010	XXX	0.67	0.33	0.96	0.04	24809	FALSE			FALSE					TRUE	Maintain
88331	Pathology consultation	Pathology Consultation During	October 2010	18			CAP	1.19		Harvard Valued - Utilizatic	October 2009	XXX	1.19	NA	1.81	0.03	363762	FALSE			FALSE					TRUE	Maintain
88332	Pathology consultation	Pathology Consultation During	October 2010	18			CAP	0.59		Harvard Valued - Utilizatic	October 2009	XXX	0.59	NA	1.02	0.02	131752	FALSE			FALSE					TRUE	Maintain
88333	Pathology consultation	Pathology Consultation During	April 2016	39			ASC, CAP	1.20		CMS Request - Final Rule	July 2015	XXX	1.2	NA	1.53	0.03	62814	FALSE			FALSE					TRUE	Maintain
88334	Pathology consultation	Pathology Consultation During	April 2016	39			ASC, CAP	0.73		CMS Request - Final Rule	July 2015	ZZZ	0.73	NA	0.93	0.01	29401	FALSE			FALSE					TRUE	Maintain
88341	Immunohistochemistry	Morphometric Analysis In Situ H	April 2014	21			CAP	0.65		CMS Request - Final Rule	November 2013	ZZZ	0.56	NA	2.00	0.01	3228472	FALSE			FALSE					TRUE	Decrease
88342	Immunohistochemistry	Morphometric Analysis In Situ H	April 2014	21			CAP	0.70		CMS-Other - Utilization o	April 2011	XXX	0.7	NA	2.26	0.02	2108253	FALSE			TRUE	In Jan 2012, the s	May 2012		Complete	TRUE	Decrease
88343	Immunohistochemistry	Morphometric Analysis In Situ H	April 2014	21			CAP	Deleted from CPT		CMS Request - Final Rule	November 2013							FALSE			FALSE					TRUE	Deleted from CPT
88344	Immunohistochemistry	Morphometric Analysis In Situ H	April 2014	21			CAP	0.77		CMS Request - Final Rule	November 2013	XXX	0.77	NA	4.22	0.02	146075	FALSE			FALSE					TRUE	Decrease
88346	Immunofluorescence, s	Immunofluorescent Studies	January 2015	17			CAP, ASC	0.74		CMS-Other - Utilization o	April 2013	XXX	0.74	NA	3.77	0.02	57304	FALSE			TRUE	In April 2013, the	October 2	45	Complete	TRUE	Decrease
88347	Immunofluorescent stu	Immunofluorescent Studies	January 2015	17			CAP, ASC	Deleted from CPT		CMS-Other - Utilization o	October 2013							FALSE			TRUE	In April 2013, the	October 2	45	Complete	TRUE	Deleted from CPT

88348	Electron microscopy, di	Electron Microscopy-PE Only	October 2013	14			CAP	New PE Inputs	Services with Stand-Alone	October 2012	XXX	1.51	NA	12.49	0.10	16007	FALSE		FALSE					TRUE	PE Only
88349	Electron microscopy; sc	Electron Microscopy-PE Only	October 2013	14			CAP	Deleted from CPT	Services with Stand-Alone	October 2012							FALSE		TRUE	Refer to CPT to de	Oct 2013	Complete	TRUE	Deleted from CPT
88350	Immunofluorescence, p	Immunofluorescent Studies	January 2015	17			CAP, ASC	0.70	CMS-Other - Utilization o	October 2014	ZZZ	0.59	NA	2.86	0.02	248542	FALSE		FALSE		October 2(	45 Complete	TRUE	Decrease
88356	Morphometric analysis;	RAW	April 2014	37			ASCP, CAP	2.80	High Volume Growth	2 April 2013	XXX	2.8	NA	4.08	0.06	23286	FALSE		FALSE				TRUE	Decrease
88360	Morphometric analysis,	Tumor Immunohistochemistry	April 2016	40			ASC, CAP	0.85	CMS High Expenditure Pr	July 2015	XXX	0.85	NA	2.65	0.02	597559	FALSE		FALSE				TRUE	Decrease
88361	Morphometric analysis,	Tumor Immunohistochemistry	April 2016	40			ASC, CAP	0.95	CMS High Expenditure Pr	July 2015	XXX	0.95	NA	2.55	0.02	155453	FALSE		FALSE				TRUE	Decrease
88364	In situ hybridization (eg	Morphometric Analysis In Situ H	April 2014	21			CAP, ASCP, ASC	0.88	CMS Request - Final Rule	November 2013	ZZZ	0.7	NA	3.35	0.02	34725	FALSE		FALSE				TRUE	Decrease
88365	In situ hybridization (eg	Morphometric Analysis In Situ H	April 2014	21			CAP	0.88	CMS Request - Final Rule	September 2011	XXX	0.88	NA	4.47	0.03	55276	TRUE	Dec 2011 E	Yes	TRUE	In April 2013, the	May 2013	Complete	TRUE	Decrease
88366	In situ hybridization (eg	Morphometric Analysis In Situ H	April 2014	21			CAP, ASCP, ASC	1.24	CMS Request - Final Rule	May 2013	XXX	1.24	NA	7.03	0.04	2123	FALSE			FALSE		May 2013	Complete	TRUE	Decrease
88367	Morphometric analysis,	Morphometric Analysis In Situ H	September 2014	18			CAP, ASCP, ASC	0.86	CMS Request - Final Rule	September 2011	XXX	0.73	NA	2.64	0.02	4250	TRUE	Dec 2011 E	Yes	TRUE	In April 2013, the	May 2013	Complete	TRUE	Decrease
88368	Morphometric analysis,	Morphometric Analysis In Situ H	September 2014	18			CAP, ASCP, ASC	0.88	CMS Request - Final Rule	September 2011	XXX	0.88	NA	3.33	0.03	17611	TRUE	Dec 2011 E	Yes	TRUE	In April 2013, the	May 2013	Complete	TRUE	Decrease
88373	Morphometric analysis,	Morphometric Analysis In Situ H	April 2014	21			CAP, ASCP, ASC	0.86	CMS Request - Final Rule	November 2013	ZZZ	0.58	NA	1.46	0.00	5541	FALSE			FALSE				TRUE	Decrease
88374	Morphometric analysis,	Morphometric Analysis In Situ H	April 2014	21			CAP, ASCP, ASC	1.04	CMS Request - Final Rule	for 2014	XXX	0.93	NA	8.09	0.02	137899	FALSE			FALSE				TRUE	Decrease
88377	Morphometric analysis,	Morphometric Analysis In Situ H	October 2020	24			CAP, ASCP, ASC	1.40	CMS Request - Final Rule	May 2013	XXX	1.4	NA	10.38	0.03	140599	FALSE			FALSE		May 2013	Complete	TRUE	Decrease
88381	Microdissection (ie, san	RAW	September 2022	13	April 2025	RAW	ASC, AP	Review action plan	High Volume Growth	8 April 2022	XXX	0.53	NA	5.44	0.05	47358	FALSE		FALSE				FALSE	
90460	Immunization administ	Immunization Administration	April 2021	19			AAFP, AAP, ACC	0.24	CMS Request-Final Rule fo	July 2020	XXX	0.24	NA	0.41	0.02	179	FALSE		FALSE				TRUE	Increase
90461	Immunization administ	Immunization Administration	April 2021	19			AAFP, AAP, ACC	0.18	CMS Request-Final Rule fo	July 2020	ZZZ	0.18	NA	0.11	0.01	27	FALSE		FALSE				TRUE	Increase
90465	Deleted from CPT	Immunization Administration	February 2008	R			AAP	New PE inputs	CMS Request - Practice E	NA							FALSE		FALSE				TRUE	Deleted from CPT
90467	Deleted from CPT	Immunization Administration	February 2008	R			AAP	New PE inputs	CMS Request - Practice E	NA							FALSE		FALSE				TRUE	Deleted from CPT
90471	Immunization administ	Immunization Administration	April 2021	19			AAFP, AAP, ACC	0.17	CMS Request - Practice E	February 2008	XXX	0.17	NA	0.42	0.01	261636	FALSE		FALSE				TRUE	Maintain
90472	Immunization administ	Immunization Administration	April 2021	19			AAFP, AAP, ACC	0.15	CMS Request - Practice E	February 2008	ZZZ	0.15	NA	0.27	0.01	19058	FALSE		FALSE				TRUE	Maintain
90473	Immunization administ	Immunization Administration	April 2021	19			AAFP, AAP, ACC	0.17	CMS Request - Practice E	NA	XXX	0.17	NA	0.31	0.01		FALSE		FALSE				TRUE	Maintain
90474	Immunization administ	Immunization Administration	April 2021	19			AAFP, AAP, ACC	0.15	CMS Request - Practice E	NA	ZZZ	0.15	NA	0.19	0.01		FALSE		FALSE				TRUE	Maintain
90785	Interactive complexity (	Psychotherapy for Crisis and Int	January 2020	37	Septembe	RUC	APA, APA (HCP/	Refer to CPT Review in 3 years	CMS High Expenditure Pr	April 2013	ZZZ	0.33	0.05	0.10	0.01	346678	FALSE		TRUE	CPT February 201	October 2(	55 Complete	FALSE	Increase
90791	Psychiatric diagnostic e	Psychotherapy	April 2012	26			APA, APA (HCP/	3.00	CMS High Expenditure Pr	April 2013	XXX	3.84	0.51	1.22	0.10	712884	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90792	Psychiatric diagnostic e	Psychotherapy	April 2012	26			APA, APA (HCP/	3.25	CMS High Expenditure Pr	April 2013	XXX	4.16	0.74	1.46	0.18	514485	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90801	Psychiatric diagnostic ir	RAW review	January 2012	30				Deleted from CPT	CMS High Expenditure Pr	September 2011							FALSE		TRUE	January 2012, the	February 2	93 Complete	TRUE	Deleted from CPT
90805	Individual psychotherap	RAW review	January 2012	30				Deleted from CPT	CMS High Expenditure Pr	September 2011							FALSE		TRUE	January 2012, the	February 2	93 Complete	TRUE	Deleted from CPT
90806	Individual psychotherap	RAW review	January 2012	30				Deleted from CPT	CMS High Expenditure Pr	September 2011							FALSE		TRUE	January 2012, the	February 2	93 Complete	TRUE	Deleted from CPT
90808	Individual psychotherap	RAW review	January 2012	30				Deleted from CPT	CMS High Expenditure Pr	September 2011							FALSE		TRUE	January 2012, the	February 2	93 Complete	TRUE	Deleted from CPT
90818	Individual psychotherap	RAW review	January 2012	30				Deleted from CPT	CMS High Expenditure Pr	September 2011							FALSE		TRUE	January 2012, the	February 2	93 Complete	TRUE	Deleted from CPT
90832	Psychotherapy, 30 minu	Psychotherapy	April 2012	26			APA, APA (HCP/	1.50	CMS High Expenditure Pr	April 2013	XXX	1.7	0.22	0.49	0.04	2184946	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90833	Psychotherapy, 30 minu	Psychotherapy	April 2012	26			APA, APA (HCP/	1.50	CMS High Expenditure Pr	April 2013	ZZZ	1.5	0.27	0.49	0.06	1367087	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90834	Psychotherapy, 45 minu	Psychotherapy	April 2012	26			APA, APA (HCP/	2.00	CMS High Expenditure Pr	April 2013	XXX	2.24	0.30	0.65	0.06	4201662	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90836	Psychotherapy, 45 minu	Psychotherapy	April 2012	26			APA, APA (HCP/	1.90	CMS High Expenditure Pr	April 2013	ZZZ	1.9	0.34	0.62	0.08	454175	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90837	Psychotherapy, 60 minu	Psychotherapy	April 2012	26			APA, APA (HCP/	3.00	CMS High Expenditure Pr	April 2013	XXX	3.31	0.43	0.95	0.08	6075835	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90838	Psychotherapy, 60 minu	Psychotherapy	April 2012	26			APA, APA (HCP/	2.50	CMS High Expenditure Pr	April 2013	ZZZ	2.5	0.47	0.83	0.11	95661	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90839	Psychotherapy for crisis	Psychotherapy for Crisis and Int	April 2013	35			APA, APA (HCP/	3.13	CMS High Expenditure Pr	April 2013	XXX	3.13	0.46	0.94	0.10	21022	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90840	Psychotherapy for crisis	Psychotherapy for Crisis and Int	April 2013	35			APA, APA (HCP/	1.50	CMS High Expenditure Pr	April 2013	ZZZ	1.5	0.27	0.49	0.08	8005	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90845	Psychoanalysis	Psychotherapy	October 2011					2.10	CMS High Expenditure Pr	April 2013	XXX	2.1	0.31	0.63	0.06	9551	FALSE		FALSE				TRUE	Increase
90846	Family psychotherapy (	Psychotherapy	April 2012	26			APA, APA (HCP/	2.40	CMS High Expenditure Pr	April 2013	XXX	2.4	0.34	0.35	0.07	24871	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90847	Family psychotherapy (	Psychotherapy	April 2012	26			APA, APA (HCP/	2.50	CMS High Expenditure Pr	April 2013	XXX	2.5	0.36	0.37	0.07	132346	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90853	Group psychotherapy (o	Psychotherapy	April 2012	26			APA, APA (HCP/	0.59	CMS High Expenditure Pr	April 2013	XXX	0.59	0.08	0.18	0.02	458295	FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Maintain
90862	Pharmacologic manage	RAW review	January 2012	30				Deleted from CPT	CMS High Expenditure Pr	September 2011							FALSE		TRUE	January 2012, the	February 2	93 Complete	TRUE	Deleted from CPT
90863	Pharmacologic manage	Pharmacologic Management w	April 2013	40			APA (HCPAC)	0.48	CMS High Expenditure Pr	April 2013	XXX	0.48	0.19	0.23	0.04		FALSE		TRUE	CPT February 201	February 2	93 Complete	TRUE	Increase
90868	Therapeutic repetitive t	RAW	September 2022	13			APA (psychiatry	Maintain	Contractor Priced High V	January 2018	000	0	0.00	0.00	0.00	224895	FALSE		FALSE				TRUE	Maintain
90870	Electroconvulsive thera	Electroconvulsive Therapy	April 2010	41			APA	2.50	Harvard Valued - Utilizatio	October 2009	000	2.5	0.51	2.51	0.10	95284	FALSE		FALSE				TRUE	Increase
90911	Biofeedback training, p	Biofeedback Training	January 2019	15			ACOG, AUA	Deleted from CPT	Negative IWPUT	April 2017							FALSE		TRUE	At the April 2018	Septembe	34 complete	TRUE	Deleted from CPT
90912	Biofeedback training, p	Biofeedback Training	January 2019	15				0.90	Negative IWPUT	September 2018	000	0.9	0.32	1.46	0.04	22282	FALSE		TRUE	In January 2019, t	February 2	EC-T Issue complete	TRUE	Increase
90913	Biofeedback training, p	Biofeedback Training	January 2019	15				0.50	Negative IWPUT	September 2018	ZZZ	0.5	0.18	0.42	0.04	14519	FALSE		TRUE	In January 2019, t	February 2	EC-T Issue complete	TRUE	Increase
90935	Hemodialysis procedur	Hemodialysis-Dialysis Services	October 2009	30			RPA	1.48	Havard Valued - Utilizatio	October 2008	000	1.48	0.53	NA	0.10	796339	FALSE		FALSE				TRUE	Increase
90937	Hemodialysis procedur	Hemodialysis-Dialysis Services	October 2009	30			RPA	2.11	Havard Valued - Utilizatio	February 2009	000	2.11	0.77	NA	0.12	35544	FALSE		FALSE				TRUE	Maintain
90945	Dialysis procedure othe	Hemodialysis-Dialysis Services	October 2009	30			RPA	1.56	Havard Valued - Utilizatio	February 2009	000	1.56	0.86	NA	0.10	146794	FALSE		FALSE				TRUE	Increase
90947	Dialysis procedure othe	Hemodialysis-Dialysis Services	October 2009	30			RPA	2.52	Havard Valued - Utilizatio	February 2009	000	2.52	0.91	NA	0.18	11765	FALSE		FALSE				TRUE	Increase
90951	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	23.92	9.10	9.10	1.60	38	FALSE		FALSE				TRUE	PE Only
90952	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	0	0.00	0.00	0.00	5	FALSE		FALSE				TRUE	PE Only
90953	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	0	0.00	0.00	0.00	1	FALSE		FALSE				TRUE	PE Only
90954	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	20.86	7.51	7.51	1.32	426	FALSE		FALSE				TRUE	PE Only
90955	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	10.32	4.43	4.43	0.59	93	FALSE		FALSE				TRUE	PE Only
90956	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	6.64	3.21	3.21	0.38	43	FALSE		FALSE				TRUE	PE Only
90957	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	15.46	6.27	6.27	0.96	1361	FALSE		FALSE				TRUE	PE Only
90958	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	9.87	4.28	4.28	0.60	495	FALSE		FALSE				TRUE	PE Only
90959	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	6.19	3.01	3.01	0.38	279	FALSE		FALSE				TRUE	PE Only
90960	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised ph	CMS Request - Practice E	February 2009	XXX	6.77	3.24	3.24	0.40	1684812	FALSE		FALSE				TRUE	PE Only
90961	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised ph	CMS Request - Practice E	February 2009	XXX	5.52	2.80	2.80	0.34	561187	FALSE		FALSE				TRUE	PE Only
90962	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	3.57	2.17	2.17	0.22	167843	FALSE		FALSE				TRUE	PE Only
90963	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	12.09	5.06	5.06	0.75	182	FALSE		FALSE				TRUE	PE Only
90964	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	10.25	4.46	4.46	0.65	810	FALSE		FALSE				TRUE	PE Only
90965	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	9.8	4.32	4.32	0.59	1070	FALSE		FALSE				TRUE	PE Only
90966	End-stage renal disease	End-Stage Renal Disease	April 2009	29			RPA	RUC Recommended revised cli	CMS Request - Practice E	February 2009	XXX	5.52	2.79	2.79	0.34	351039	FALSE		FALSE				TRUE	PE Only
91038	Esophageal function te	Gastroenterological Tests	February 2010	23			AGA, ASGE	New PE Inputs	CMS Request - Practice E	February 2010	000	1.1	NA	11.10	0.06	4122	FALSE		FALSE				TRUE	PE Only
91110	Gastrointestinal tract in	Gastrointestinal Tract Imaging	January 2016	44			ACG, AGA, ASGE	2.49	CMS High Expenditure Pr	July 2015	XXX	2.24	NA	20.01	0.08	45759	FALSE		FALSE				TRUE	Decrease
91111	Gastrointestinal tract in	Gastrointestinal Tract Imaging	January 2016	44			ACG, AGA, ASGE	1.00	CMS High Expenditure Pr	July 2015	XXX	0.9	NA	25.84	0.05	145	FALSE		FALSE				TRUE	Maintain
91132	Electrogastrography, di	Electrogastrography	February 2010	24			AGA, ACG, ASGE	New PE Inputs	CMS Request - Practice E	Expense Review	XXX	0.52	NA	12.81	0.03	175	FALSE		FALSE				TRUE	PE Only
91133	Electrogastrography, di	Electrogastrography	February 2010	24			AGA, ACG, ASGE	New PE Inputs	CMS Request - Practice E	Expense Review	XXX	0.66	NA	13.37	0.03	51	FALSE		FALSE				TRUE	PE Only
92065	Orthoptic training; perf	Orthoptic Training	April 2021	10			AAO, AOA (optc	0.71	Harvard Valued - Utilizatio	October 2019	XXX	0.71	NA	0.49	0.02	27946	FALSE		TRUE	This service was ir	February 2	35 Complete	TRUE	Increase
92066	Orthoptic training; und	Orthoptic Training	April 2021	10			AAO, AOA (optc	New PE Inputs	Harvard Valued - Utilizatio	February 2021	XXX	0	NA	0.76	0.01		FALSE		FALSE				TRUE	PE Only
92081	Visual field examinatior	Visual Field Examination	April 2010	42			AAO, AOA (optc	0.30	Harvard Valued - Utilizatio	October 2009	XXX	0.3	NA	0.67	0.02	78884	FALSE		FALSE				TRUE	Decrease
92082	Visual field examinatior	Visual Field Examination	April 2010	42			AAO, AOA (optc	0.40	Harvard Valued - Utilizatio	October 2009	XXX	0.4	NA	0.97	0.02	105241	FALSE		FALSE				TRUE	Decrease
92083	Visual field examinatior	Visual Field Examination	April 2012	46			AAO, AOA (optc	0.50	MPC List / CMS High Expe	October 2010	XXX	0.5	NA	1.34	0.02	2670714	FALSE		FALSE				TRUE	Maintain
92100	Serial tonometry (separ	Serial Tonometry	September 2011	36			AAO, AOA (optc	0.61	Harvard Valued - Utilizatio	April 2011	XXX	0.61	0.32	1.91	0.02	25855	FALSE		FALSE				TRUE	Decrease
92133	Scanning computerized	Computerized Scanning Ophtha	April 2010	23			AAO, AOA (eye)	0.50	CMS Fastest Growing	October 2009	XXX	0.4	NA	0.67	0.02	2628575	FALSE		FALSE		October 2(	44	TRUE	Decrease
92134	Scanning computerized	Computerized Scanning Ophtha	September 2022	13			AAO, AOA (eye)	0.50	CMS Fastest Growing / Co	October 2008	XXX	0.45	NA	0.73	0.02	7384135	FALSE		FALSE		October 2(	44	TRUE	Decrease
92135	Deleted from CPT	Ophthalmic Diagnostic Imaging	October 2009	31			AAO, AOA	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE		TRUE	Revise to specify (	October 2(	44 Code Deleted	TRUE	Deleted from CPT
92136	Ophthalmic biometry b	Ophthalmic Biometry	April 2016	36			AAO	0.54	CMS Fastest Growing / CH	October 2008	XXX	0.54	NA	0.84	0.02	1571536	FALSE		FALSE				TRUE	Maintain
92140	Provocative tests for gl	Glaucoma Provocative Tests	April 2016	41			AAO, AOA (optc	Deleted from CPT	Harvard Valued - Utilizatio	October 2015							FALSE		TRUE	The specialty soci	May 2016	26 Complete	TRUE	Deleted from CPT
92201	Ophthalmoscopy, exter	Ophthalmoscopy	April 2018	05			AAO, AOA (Optc	0.40	Negative IWPUT	February 2018	XXX	0.4	0.24	0.31	0.02	461255	FALSE		FALSE		February 2	22	TRUE	Decrease
92202	Ophthalmoscopy, exter	Ophthalmoscopy	April 2018	05			AAO, AOA (Optc	0.26	Negative IWPUT	February 2018	XXX	0.26	0.16	0.19	0.01	715800	FALSE		FALSE		February 2	22	TRUE	Decrease
92225	Ophthalmoscopy, exter	Ophthalmoscopy	April 2018	05			AAO, AOA (Optc	Deleted from CPT	Negative IWPUT	April 2017							FALSE		TRUE	A RUC member re	February 2	22 complete	TRUE	Deleted from CPT
92226	Ophthalmoscopy, exter	Ophthalmoscopy	April 2018	05			AAO, AOA (Optc	Deleted from CPT	Negative IWPUT	February 2018							FALSE		FALSE		February 2	22	TRUE	Deleted from CPT
92235	Fluorescein angiograph	Ophthalmoscopic Angiography	January 2016	21		RUC	AAO, ASRS	0.75	Harvard Valued - Utilizatio	April 2011	XXX	0.75	NA	3.32	0.02	337073	FALSE		TRUE	In January 2015, t	October 2(	55 Complete	TRUE	Decrease
92240	Indocyanine-green angi	Ophthalmoscopic Angiography	January 2016	21		RUC	AAO, ASRS	0.80	Codes Reported Together	January 2015	XXX	0.8	NA	4.80	0.09	8086	FALSE		TRUE	In January 2015, t	October 2(	55 Complete	TRUE	Decrease
92242	Fluorescein angiograph	Ophthalmoscopic Angiography	January 2016	21		RUC	AAO, ASRS	0.95	Codes Reported Together	October 2015	XXX	0.95	NA	6.72	0.05	33308	FALSE		TRUE	In January 2015, t	October 2(	55 Complete	TRUE	Decrease
92250	Fundus photography w	Fundus Photography	January 2016	45			AAO, ASRS, AOA	0.40	MPC List / CMS High Expe	October 2010	XXX	0.4	NA	0.69	0.02	3321369	FALSE		FALSE				TRUE	Decrease
92270	Electro-oculography wi	Electro-oculography	October 2017	19			AAO-HNS	CPT Assistant article published	High Volume Growth	1 / H February 2008	XXX	0.81	NA	2.41	0.03	1521	TRUE	Aug 2008 E	Yes	TRUE	The specialties in	February 2	87 Complete	TRUE	Maintain
92273	Electroretinography (er	Electroretinography	January 2021	29	January 20	RAW		Review action plan. 0.80	CMS High Expenditure Pr	September 2017	XXX	0.69	NA	3.06	0.03	93455	FALSE		FALSE				TRUE	Decrease
92274	Electroretinography (er	Electroretinography	January 2021	29	January 20	RAW		Review action plan. 0.72	CMS High Expenditure Pr	September 2017	XXX	0.61	NA	2.02	0.02	4761	FALSE		FALSE				TRUE	Decrease
92275	Electroretinography wit	Electroretinography	January 2018	17			AAO, ASRS, AOA	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE		TRUE	In January 2016, t	June 2017	24 yes	TRUE	Deleted from CPT
92284	Diagnostic dark adaptat	Dark Adaption Eye Exam	April 2021	20	Septembe	RAW	AAO, AOA (optc	0.14. Review Technology	Harvard Valued - Utilizatio	October 2020	XXX	0	NA	1.37	0.01	40706	FALSE		TRUE	In April 2021, the	May 2021	EC-M complete	TRUE	Decrease
92285	External ocular photogr	Ocular Photography	October 2009	32			AAO, AOA	0.05 and new PE inputs	CMS Fastest Growing, Ha	October 2008	XXX	0.05	NA	0.62	0.02	390304	FALSE		TRUE	The specialty not e	February 2010	Complete	TRUE	Decrease
92286	Anterior segment imagi	Anterior Segment Imaging	April 2012	28			AAO, AOA (optc	0.40	Harvard Valued - Utilizatio	April 2011	XXX	0.4	NA	0.74	0.02	100570	FALSE		TRUE	The specialty soci	October 2(	20 Complete	TRUE	Decrease
92287	Anterior segment imagi	Anterior Segment Imaging	April 2021	21			AAO, ASRS	0.40	Harvard Valued - Utilization over 30,000 / CP		XXX	0.4	NA	3.89	0.02	4600	TRUE	Mar 2013	Yes	TRUE	The specialty soci	October 2(	20 Complete	TRUE	Decrease

92504	Binocular microscopy (s	Binocular Microscopy	April 2010	43		AAO-HNS	0.18	Harvard Valued - Utilizatic	October 2009	XXX	0.18	0.09	0.68	0.01	224957	FALSE			FALSE							TRUE	Maintain			
92506	Evaluation of speech, la	Speech Language Pathology Ser	February 2010	28		ASHA	Deleted from CPT	CMS Request/Speech Language Pathology Request								FALSE			TRUE	The specialty soci	October 2(	28		Complete	TRUE	Deleted from CPT			
92507	Treatment of speech, la	Speech Language Pathology Ser	January 2016	54		ASHA	1.30 work RVU and clinical staf	CMS Request/Speech Lan	October 2015	XXX	1.3	NA	0.94	0.04	449244	FALSE			FALSE							TRUE	Decrease			
92508	Treatment of speech, la	Speech Language Pathology Ser	February 2010	28		ASHA	0.43 work RVU and clinical staf	CMS Request/Speech Language Pathology Re		XXX	0.33	NA	0.37	0.01	2278	FALSE			FALSE							TRUE	Decrease			
92521	Evaluation of speech flu	Speech Evaluation	January 2013	32		ASHA	1.75	CMS Request/Speech Language Pathology Re		XXX	2.24	NA	1.66	0.06	218	FALSE			FALSE		October 2(	28		Complete	TRUE	Increase			
92522	Evaluation of speech so	Speech Evaluation	January 2013	32		ASHA	1.50	CMS Request/Speech Language Pathology Re		XXX	1.92	NA	1.32	0.07	3754	FALSE			FALSE		October 2(	28		Complete	TRUE	Increase			
92523	Evaluation of speech so	Speech Evaluation	January 2013	32		ASHA	3.36	CMS Request/Speech Language Pathology Re		XXX	3.84	NA	2.85	0.10	24897	FALSE			FALSE		October 2(	28		Complete	TRUE	Increase			
92524	Behavioral and qualitati	Speech Evaluation	January 2013	32		ASHA	1.75	CMS Request/Speech Language Pathology Re		XXX	1.92	NA	1.28	0.07	17456	FALSE			FALSE		October 2(	28		Complete	TRUE	Increase			
92526	Treatment of swallowir	Speech Language Pathology Ser	October 2020	23		ASHA, AAO-HNS	Maintain	CMS Request/Speech Lan	NA	XXX	1.34	NA	1.15	0.04	165185	FALSE			FALSE							TRUE	Decrease			
92537	Caloric vestibular test w	Vestibular Caloric Irrigation	January 2015	18		AAA, AAN, AAO	0.80	CMS-Other - Utilization o	October 2014	XXX	0.6	NA	0.58	0.02	56804	FALSE			FALSE		October 2(	54		Complete	TRUE	Increase			
92538	Caloric vestibular test w	Vestibular Caloric Irrigation	January 2015	18		AAA, AAN, AAO	0.55	CMS-Other - Utilization o	October 2014	XXX	0.3	NA	0.35	0.02	5808	FALSE			FALSE		October 2(	54		Complete	TRUE	Increase			
92540	Basic vestibular evaluat	EOG VNG	April 2014	24		AAN, ASHA, AA(	1.50	Codes Reported Together	95% or More	XXX	1.5	NA	1.69	0.05	72645	FALSE			FALSE							TRUE	Decrease			
92541	Spontaneous nystagmu	EOG VNG	April 2014	24		AAN, ASHA, AA(	0.40	Codes Reported Together	February 2008	XXX	0.4	NA	0.33	0.02	11711	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Maintain			
92542	Positional nystagmus te	EOG VNG	April 2014	24		AAN, ASHA, AA(	0.48	Codes Reported Together	February 2008	XXX	0.48	NA	0.36	0.02	16253	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Increase			
92543	Caloric vestibular test, (	Vestibular Caloric Irrigation	January 2015	18		AAA, AAN, AAO	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	The RUC discusse	October 2(	54		Complete	TRUE	Deleted from CPT			
92544	Optokinetic nystagmus	EOG VNG	April 2014	24		AAN, ASHA, AA(	0.27	Codes Reported Together	February 2008	XXX	0.27	NA	0.24	0.02	2578	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Increase			
92545	Oscillating tracking test	EOG VNG	April 2014	24		AAN, ASHA, AA(	0.25	Codes Reported Together	February 2008	XXX	0.25	NA	0.23	0.02	4130	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Increase			
92546	Sinusoidal vertical axis r	EOG VNG	April 2014	24			Editorial change only	CMS-Other - Utilization o	February 2014	XXX	0.29	NA	3.47	0.03	35961	FALSE			TRUE	Referred to the CI	February 2	87		Complete	TRUE	Maintain			
92547	Use of vertical electrod	EOG VNG	April 2014	24			Editorial change only	CMS-Other - Utilization o	February 2014	ZZZ	0	NA	0.32	0.00	22400	FALSE			TRUE	Referred to the CI	February 2	87		Complete	TRUE	Maintain			
92548	Computerized dynamic	Computerized Dynamic Posturc	January 2019	16		AAA, AAN, ASH/	0.76	CMS-Other - Utilization o	February 2014	XXX	0.67	NA	0.71	0.03	32836	FALSE			TRUE	In 2014 the RUC r	Septembe	35		complete	TRUE	Increase			
92549	Computerized dynamic	Computerized Dynamic Posturc	January 2019	16	RUC		0.96	CMS-Other - Utilization o	September 2018	XXX	0.87	NA	1.04	0.02	6600	FALSE			FALSE		Septembe	35		complete	TRUE	Increase			
92550	Tympanometry and refl	Bundled Audiology Tests	April 2009	22		ASHA, AAO-HNS	0.35	Codes Reported Together	95% or More	XXX	0.35	NA	0.30	0.01	190130	FALSE			FALSE							TRUE	Decrease			
92557	Comprehensive audiom	Bundled Audiology Tests	April 2009	22		ASHA, AAO-HNS	0.60	work RVU and clinical sta	Codes Reported Together	February 2008	XXX	0.6	0.32	0.48	0.02	1145427	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Decrease			
92558	Evoked otoacoustic em	Otoacoustic Emissions Measure	April 2011	35		ASHA	0.17	CMS Fastest Growing	February 2011	XXX	0.17	0.07	0.10	0.01		FALSE			FALSE		February 2011					TRUE	Increase			
92567	Tympanometry (imped	Bundled Audiology Tests	April 2009	22		ASHA, AAO-HNS	0.20	work RVU and clinical sta	Codes Reported Together	February 2008	XXX	0.2	0.11	0.28	0.01	840849	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Decrease			
92568	Acoustic reflex testing,	Bundled Audiology Tests	April 2009	22		ASHA, AAO-HNS	0.29	work RVU and clinical sta	Codes Reported Together	February 2008	XXX	0.29	0.14	0.15	0.02	3376	FALSE			TRUE	Referred to the CI	February 2	54		Complete	TRUE	Decrease			
92569	Deleted from CPT	Bundled Audiology Tests	April 2009	22		ASHA, AAO-HNS	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	February 2	54		Code Deleted	TRUE	Deleted from CPT			
92570	Acoustic immittance te	Bundled Audiology Tests	October 2015	21		ASHA, AAO-HNS	0.55	Codes Reported Together	95% or More	XXX	0.55	0.29	0.39	0.02	29992	FALSE			FALSE							TRUE	Decrease			
92584	Electrocochleography	Auditory Evoked Potentials	April 2019	06		AAA, AAO-HNS,	1.00	CMS-Other - Utilization o	February 2019	XXX	1	NA	2.34	0.04	9643	FALSE			FALSE							TRUE	Increase			
92585	Auditory evoked poten	Auditory Evoked Potentials	April 2019	06		AAA, AAO-HNS,	Deleted from CPT	CMS-Other - Utilization o	October 2017							FALSE			TRUE	In October 2017, t	February 2	19		complete	TRUE	Deleted from CPT			
92586	Auditory evoked poten	Auditory Evoked Potentials	April 2019	06		AAA, AAO-HNS,	Deleted from CPT	CMS-Other - Utilization o	February 2019							FALSE			FALSE		February 2	19		complete	TRUE	Deleted from CPT			
92587	Distortion product evol	Otoacoustic Emissions Measure	April 2011	35		ASHA	0.45	CMS Fastest Growing	October 2008	XXX	0.35	NA	0.28	0.02	43146	FALSE			TRUE	The specialty note	October 2(	41		Complete	TRUE	Increase			
92588	Distortion product evol	Otoacoustic Emissions Measure	April 2011	35		ASHA	0.60	CMS Fastest Growing		XXX	0.55	NA	0.44	0.02	81054	FALSE			FALSE		February 2011					TRUE	Increase			
92597	Evaluation for use and/	Speech Language Pathology Ser	February 2009	30		ASHA	1.48 work RVU and clinical staf	CMS Request/Speech Lan	NA	XXX	1.26	NA	0.84	0.04	2051	FALSE			FALSE							TRUE	Decrease			
92605	Evaluation for prescript	Eval of Rx for Non-Speech Gene	April 2011	35		ASHA	1.75	CMS Request/Speech Language Pathology Re		XXX	1.75	0.68	0.85	0.11		FALSE			TRUE	The specialty soci	February 2	58		Complete	TRUE	Increase			
92606	Therapeutic service(s) f	Speech Language Pathology Ser	February 2010	28		ASHA	1.40 work RVU and clinical staf	CMS Request/Speech Language Pathology Re		XXX	1.4	0.54	0.88	0.08		FALSE			FALSE							TRUE	Decrease			
92607	Evaluation for prescript	Speech Language Pathology Ser	February 2010	28		ASHA	1.85 work RVU and clinical staf	CMS Request/Speech Language Pathology Re		XXX	1.85	NA	1.80	0.04	531	FALSE			FALSE							TRUE	Decrease			
92608	Evaluation for prescript	Speech Language Pathology Ser	February 2010	28		ASHA	0.70 work RVU and clinical staf	CMS Request/Speech Language Pathology Re		ZZZ	0.7	NA	0.73	0.02	347	FALSE			FALSE							TRUE	Decrease			
92609	Therapeutic services fo	Speech Language Pathology Ser	February 2010	28		ASHA	1.50 work RVU and clinical staf	CMS Request/Speech Language Pathology Re		XXX	1.5	NA	1.54	0.04	12752	FALSE			FALSE							TRUE	Decrease			
92610	Evaluation of oral and p	Speech Language Pathology Ser	October 2020	23		ASHA, AAO-HNS	Maintain	CMS Request/Speech Lan	NA	XXX	1.3	0.74	1.19	0.04	24492	FALSE			FALSE							TRUE	Decrease			
92611	Motion fluoroscopic ev	Speech Language Pathology Ser	April 2009	39		ASHA	1.34 work RVU and clinical staf	CMS Request/Speech Lan	NA	XXX	1.34	NA	1.31	0.08	9936	FALSE			FALSE							TRUE	Decrease			
92618	Evaluation for prescript	Eval of Rx for Non-Speech Gene	April 2011	35		ASHA	0.65	CMS Request/Speech Language Pathology Re		ZZZ	0.65	0.25	0.26	0.04		FALSE			FALSE		February 2	58			TRUE	Increase			
92620	Evaluation of central au	Audiology Services	October 2008	17		ASHA, AAO-HNS	1.50	CMS Request - Audiology	NA	XXX	1.5	0.79	1.08	0.06	1006	FALSE			FALSE							TRUE	Decrease			
92621	Evaluation of central au	Audiology Services	October 2008	17		ASHA, AAO-HNS	0.35	CMS Request - Audiology	NA	ZZZ	0.35	0.19	0.29	0.01	38	FALSE			FALSE							TRUE	Decrease			
92625	Assessment of tinnitus	Audiology Services	October 2008	17		ASHA, AAO-HNS	1.15	CMS Request - Audiology	NA	XXX	1.15	0.62	0.84	0.04	8388	FALSE			FALSE							TRUE	Decrease			
92626	Evaluation of auditory f	Audiology Services	October 2018	30		AAA, ASHA	1.40	CMS Request - Audiology	NA	XXX	1.4	0.77	1.15	0.04	19748	TRUE	July 2014	Yes	TRUE	In October 2016, t	May 2018	34		Yes	TRUE	Decrease			
92627	Evaluation of auditory f	Audiology Services	October 2018	30		ASHA, AAO-HNS	0.33	CMS Request - Audiology	NA	ZZZ	0.33	0.18	0.27	0.01	5166	FALSE			FALSE							TRUE	Decrease			
92640	Diagnostic analysis with	Audiology Services	October 2008	17		ASHA, AAO-HNS	1.76	CMS Request - Audiology	NA	XXX	1.76	0.97	1.47	0.04	18	FALSE			FALSE							TRUE	Decrease			
92650	Auditory evoked poten	Auditory Evoked Potentials	April 2019	06		AAA, AAO-HNS,	0.25	CMS-Other - Utilization o	February 2019	XXX	0.25	NA	0.56	0.02		FALSE			FALSE		February 2	19		complete	TRUE	Decrease			
92651	Auditory evoked poten	Auditory Evoked Potentials	April 2019	06		AAA, AAO-HNS,	1.00	CMS-Other - Utilization o	February 2019	XXX	1	NA	1.49	0.04	1107	FALSE			FALSE		February 2	19		complete	TRUE	Increase			
92652	Auditory evoked poten	Auditory Evoked Potentials	April 2019	06		AAA, AAO-HNS,	1.50	CMS-Other - Utilization o	February 2019	XXX	1.5	NA	1.80	0.08	5603	FALSE			FALSE		February 2	19		complete	TRUE	Increase			
92653	Auditory evoked poten	Auditory Evoked Potentials	April 2019	06		AAA, AAN, AAO	1.05	CMS-Other - Utilization o	February 2019	XXX	1.05	NA	1.41	0.06	22364	FALSE			FALSE		February 2	19		complete	TRUE	Increase			
92920	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	9.00	MPC List	October 2010	000	9.85	3.38	NA	2.16	20592	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92921	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	4.00	MPC List	October 2010	ZZZ	0	0.00	0.00	0.00		FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92924	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	11.00	MPC List	October 2010	000	11.74	4.03	NA	2.62	1959	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92925	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	5.00	MPC List	October 2010	ZZZ	0	0.00	0.00	0.00		FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92928	Percutaneous transcatl	Percutaneous Coronary Interve	January 2012	10		ACC	10.49	MPC List	October 2010	000	10.96	3.76	NA	2.44	207572	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92929	Percutaneous transcatl	Percutaneous Coronary Interve	January 2012	10		ACC	4.44	MPC List	October 2010	ZZZ	0	0.00	0.00	0.00		FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92933	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	12.32	MPC List	October 2010	000	12.29	4.21	NA	2.73	17941	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92934	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	5.50	MPC List	October 2010	ZZZ	0	0.00	0.00	0.00		FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92937	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	10.49	MPC List	October 2010	000	10.95	3.75	NA	2.44	14099	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92938	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	6.00	MPC List	October 2010	ZZZ	0	0.00	0.00	0.00		FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92941	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	12.32	MPC List	October 2010	000	12.31	4.23	NA	2.71	33927	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92943	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	12.32	MPC List	October 2010	000	12.31	4.22	NA	2.74	8050	FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92944	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	6.00	MPC List	October 2010	ZZZ	0	0.00	0.00	0.00		FALSE			TRUE		October 2(	21		Complete	TRUE	Decrease			
92960	Cardioversion, elective,	Cardioversion	October 2010	19		ACC	2.25	Harvard Valued - Utilizatic	October 2009	000	2	1.02	2.45	0.17	191225	FALSE			FALSE							TRUE	Maintain			
92973	Percutaneous translum	RAW	October 2017	19			Remove from screen	High Volume Growth2	April 2013	ZZZ	3.28	1.12	NA	0.72	2331	FALSE			FALSE							TRUE	Maintain			
92980	Transcatheter placeme	Percutaneous Coronary Interve	January 2012	10		ACC	Deleted from CPT	MPC List	October 2010							FALSE			TRUE	Specialty society i	October 2(	21		Deleted from (	TRUE	Deleted from CPT			
92981	Transcatheter placeme	Percutaneous Coronary Interve	January 2012	10		ACC	Deleted from CPT	MPC List	October 2010							FALSE			TRUE	Specialty society i	October 2(	21		Deleted from (	TRUE	Deleted from CPT			
92982	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	Deleted from CPT	MPC List / Harvard-Value	October 2010							FALSE			TRUE	Specialty society i	October 2(	21		Deleted from (	TRUE	Deleted from CPT			
92984	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	Deleted from CPT	MPC List	October 2010							FALSE			TRUE	Specialty society i	October 2(	21		Deleted from (	TRUE	Deleted from CPT			
92986	Percutaneous balloon v	Valvuloplasty	October 2008	26		ACC	Deleted from CPT	CMS Fastest Growing	October 2008	090	22.6	11.07	NA	4.99	2322	FALSE			FALSE							TRUE	Remove from Screen			
92992	Atrial septectomy or se	Atrial Septostomy	January 2020	13			Deleted from CPT	CMS Request - Final Rule	October 2018							FALSE			TRUE	In January 2019, t	Septembe	16		yes	TRUE	Deleted from CPT			
92993	Atrial septectomy or se	Atrial Septostomy	January 2020	13			Deleted from CPT	CMS Request - Final Rule	October 2018							FALSE			TRUE	In January 2019, t	Septembe	16		yes	TRUE	Deleted from CPT			
92995	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	Deleted from CPT	MPC List	October 2010							FALSE			TRUE	Specialty society i	October 2(	21		Deleted from (	TRUE	Deleted from CPT			
92996	Percutaneous translum	Percutaneous Coronary Interve	January 2012	10		ACC	Deleted from CPT	MPC List	October 2010							FALSE			TRUE	Specialty society i	October 2(	21		Deleted from (	TRUE	Deleted from CPT			
93000	Electrocardiogram, rou	Complete Electrocardiogram	April 2019	20		ACC	0.17	CMS High Expenditure Pr	September 2011	XXX	0.17	NA	0.24	0.02	10271235	FALSE			FALSE							TRUE	Maintain			
93005	Electrocardiogram, rou	Complete Electrocardiogram	April 2019	20		ACC	0.00	High Volume Growth1 / C	February 2008	XXX	0	NA	0.18	0.01	416453	FALSE			FALSE							TRUE	PE Only			
93010	Electrocardiogram, rou	Complete Electrocardiogram	April 2019	20		ACC	0.17	MPC List / CMS High Expe	October 2010	XXX	0.17	0.06	0.06	0.01	16114629	FALSE			FALSE							TRUE	Maintain			
93012	Deleted from CPT	External Cardiovascular Device	April 2010	25		ACC	Deleted from CPT	Harvard Valued - Utilizatic	October 2009							FALSE			FALSE		February 2	57			TRUE	Deleted from CPT			
93014	Deleted from CPT	External Cardiovascular Device	April 2010	25		ACC	Deleted from CPT	Harvard Valued - Utilizatic	October 2009							FALSE			FALSE		February 2	57			TRUE	Deleted from CPT			
93015	Cardiovascular stress te	Cardiovascular Stress Tests	April 2012	47		ACC	0.75. CPT Assistant published.	Codes Reported Together	February 2010	XXX	0.75	NA	1.31	0.04	851302	TRUE	Jan 2010	Yes	TRUE	The RUC acceptec	October 2(	42		Complete	TRUE	Maintain			
93016	Cardiovascular stress te	Cardiovascular Stress Tests	April 2012	47		ACC	0.45	Codes Reported Together	February 2010	XXX	0.45	0.16	0.16	0.01	827798	FALSE			FALSE							TRUE	Maintain			
93017	Cardiovascular stress te	Cardiovascular Stress Tests	April 2010	45		ACC	New PE inputs	High Volume Growth1 / C	February 2008	XXX	0	NA	1.05	0.02	78787	FALSE			FALSE							TRUE	PE Only			
93018	Cardiovascular stress te	Cardiovascular Stress Tests and	April 2012	47		ACC	0.30	Codes Reported Together	February 2010	XXX	0.3	0.10	0.10	0.01	988540	TRUE	Jan 2010	Yes	TRUE	The RUC acceptec	October 2(	42		Complete	TRUE	Maintain			
93025	Microvolt t-wave altern	Microvolt T-Wave Assessment	October 2008	18		ACC	New PE Inputs	CMS Request - Practice E>	NA	XXX	0.75	NA	2.83	0.04	124	FALSE			FALSE							TRUE	PE Only			
93040	Rhythm ecg, 1-3 leads;	Rhythm EKG	October 2009	34		ACC	0.15	Havard Valued - Utilizatio	February 2009	XXX	0.15	NA	0.21	0.02	80784	FALSE			FALSE							TRUE	Decrease			
93041	Rhythm ecg, 1-3 leads;	Rhythm EKG	October 2009	34		ACC	0.00 (PE only)	Havard Valued - Utilizatio	February 2009	XXX	0	NA	0.17	0.01	13114	FALSE			FALSE							TRUE	Maintain			
93042	Rhythm ecg, 1-3 leads;	Rhythm EKG	October 2009	34		ACC, ACEP	0.15	Havard Valued - Utilizatio	October 2008	XXX	0.15	0.04	0.04	0.01	310510	FALSE			FALSE							TRUE	Decrease			
93224	External electrocardiog	External Cardiovascular Device	April 2010	25		ACC	0.52	Harvard Valued - Utilizatic	October 2009	XXX	0.39	NA	1.75	0.03	192428	FALSE			TRUE	The ACC and the I	February 2	57		Revised	TRUE	Maintain			
93225	External electrocardiog	External Cardiovascular Device	April 2010	25		ACC	N/A no physician work	Harvard Valued - Utilizatic	October 2009	XXX	0	NA	0.54	0.01	77725	FALSE			FALSE		February 2	57			TRUE	Maintain			
93226	External electrocardiog	External Cardiovascular Device	April 2010	25		ACC	N/A no physician work	Harvard Valued - Utilizatic	October 2009	XXX	0	NA	1.07	0.01	126782	FALSE			FALSE		February 2	57			TRUE	Maintain			
93227	External electrocardiog	External Cardiovascular Device	April 2010	25		ACC	0.52	Harvard Valued - Utilizatic	October 2009	XXX	0.39	0.14	0.14	0.01	248956	FALSE			TRUE	The ACC and the I	Feburary 2	57		Revised	TRUE	Maintain			
93228	External mobile cardiov	External Cardiovascular Device	October 2020	20		ACC, HRS	0.52	Harvard Valued - Utilizatic	October 2009	XXX	0.48	0.23	0.23	0.04	222551	FALSE			FALSE							TRUE	Maintain			
93229	External mobile cardiov	External Cardiovascular Device	October 2020	20		ACC, HRS	PE Only	Harvard Valued - Utilizatic	October 2009	XXX	0	NA	24.97	0.10	320448	FALSE			FALSE							TRUE	PE Only			
93230	Deleted from CPT	Cardiac Device Monitoring	April 2009	31		ACC	Deleted from CPT	CMS Request - 2009 Final	NA							FALSE			TRUE	CMS stated that 9	February 2	57		Deleted	TRUE	Deleted from CPT			
93231	Deleted from CPT	External Cardiovascular Device	April 2010	25			Deleted from CPT	Harvard Valued - Utilizatic	October 2009							FALSE			FALSE		February 2	57			TRUE	Deleted from CPT			
93232	Deleted from CPT	External Cardiovascular Device	April 2010	25			Deleted from CPT	Harvard Valued - Utilizatic	October 2009							FALSE			FALSE		February 2	57			TRUE	Deleted from CPT			
93233	Deleted from CPT	Cardiac Device Monitoring	April 2009	31		ACC	Deleted from CPT	CMS Request - 2009 Final	NA							FALSE			TRUE	CMS stated that 9	February 2	57		Deleted	TRUE	Deleted from CPT			
93235	Deleted from CPT	External Cardiovascular Device	April 2010	25			Deleted from CPT	Harvard Valued - Utilizatic	October 2009							FALSE			FALSE		February 2	57			TRUE	Deleted from CPT			
93236	Deleted from CPT	Cardiovascular Stress Test	April 2009	38		ACC	Deleted from CPT	Harvard Valued - Utilizatic	February 2008							FALSE			TRUE	In February 2008 I	February 2	57		Deleted	TRUE	Deleted from CPT			
93237	Deleted from CPT	Wearable Cardiac Device Monit	February 2010	31		ACC	Deleted from CPT	Harvard Valued - Utilizatic	October 2009							FALSE			TRUE	The ACC and the I	February 2	57		Complete	TRUE	Deleted from CPT			

93268	External patient and, w	External Cardiovascular Device	April 2010	25			ACC	0.52	Harvard Valued - Utilizatic	October 2009	XXX	0.52	NA	4.77	0.04	10933	FALSE			FALSE		February 2	57				TRUE	Maintain
93270	External patient and, w	External Cardiovascular Device	April 2010	25			ACC	New PE inputs	Harvard Valued - Utilizatic	October 2009	XXX	0	NA	0.24	0.01	32455	FALSE			FALSE		February 2	57				TRUE	PE Only
93271	External patient and, w	External Cardiovascular Device	April 2010	25			ACC	New PE inputs	Harvard Valued - Utilizatic	October 2009	XXX	0	NA	4.36	0.01	42065	FALSE			FALSE		February 2	57				TRUE	PE Only
93272	External patient and, w	External Cardiovascular Device	April 2010	25			ACC	0.52	Harvard Valued - Utilizatic	October 2009	XXX	0.52	0.17	0.17	0.02	92623	FALSE			FALSE		February 2	57				TRUE	Maintain
93279	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.65	CMS High Expenditure Pr	July 2015	XXX	0.65	NA	1.35	0.03	111766	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93280	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.77	CMS High Expenditure Pr	July 2015	XXX	0.77	NA	1.58	0.03	776133	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93281	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.85	CMS High Expenditure Pr	July 2015	XXX	0.85	NA	1.64	0.05	66325	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Decrease
93282	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.85	CMS High Expenditure Pr	July 2015	XXX	0.85	NA	1.52	0.05	79997	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93283	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	1.15	CMS High Expenditure Pr	July 2015	XXX	1.15	NA	1.75	0.05	158873	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93284	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	1.25	CMS High Expenditure Pr	July 2015	XXX	1.25	NA	1.88	0.05	191788	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93285	Programming device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.52	CMS High Expenditure Pr	July 2015	XXX	0.52	NA	1.27	0.03	35450	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93286	Peri-procedural device	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.30	CMS High Expenditure Pr	July 2015	XXX	0.3	NA	1.06	0.02	26384	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93287	Peri-procedural device	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.45	CMS High Expenditure Pr	July 2015	XXX	0.45	NA	1.13	0.02	13517	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93288	Interrogation device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.43	CMS High Expenditure Pr	July 2015	XXX	0.43	NA	1.24	0.02	179111	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93289	Interrogation device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.75	CMS High Expenditure Pr	July 2015	XXX	0.75	NA	1.38	0.05	69223	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Decrease
93290	Interrogation device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.43	CMS High Expenditure Pr	July 2015	XXX	0.43	NA	1.15	0.03	83336	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93291	Interrogation device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.37	CMS High Expenditure Pr	July 2015	XXX	0.37	NA	1.10	0.02	58066	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Decrease
93292	Interrogation device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	0.43	CMS High Expenditure Pr	July 2015	XXX	0.43	NA	1.07	0.03	1082	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Maintain
93293	Transtelephonic rhythn	Cardiac Electrophysiology Devic	January 2017	23			ACC, HRS	0.31	CMS High Expenditure Pr	July 2015	XXX	0.31	NA	1.03	0.02	20156	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	Decrease
93294	Interrogation device ev	Cardiac Electrophysiology Devic	January 2017	23			ACC, HRS	0.60	CMS High Expenditure Pr	July 2015	XXX	0.6	0.24	0.24	0.04	1531037	FALSE			FALSE							TRUE	Decrease
93295	Interrogation device ev	Cardiac Electrophysiology Devic	January 2017	23			ACC, HRS	0.74	CMS High Expenditure Pr	July 2015	XXX	0.74	0.30	0.30	0.04	704136	FALSE			FALSE							TRUE	Decrease
93296	Interrogation device ev	Cardiac Electrophysiology Devic	October 2016	25			ACC, HRS	New PE inputs and Refer to CP	CMS High Expenditure Pr	July 2015	XXX	0	NA	0.66	0.01	1614139	FALSE			TRUE	In the NPRM for 2	February 2	Advisory C	yes			TRUE	PE Only
93297	Interrogation device ev	Remote Interrogation Devic	January 2023	20			ACC, HRS	0.52 and PE Inputs	CMS High Expenditure Pr	July 2015	XXX	0.52	0.20	0.20	0.04	542980	FALSE			FALSE							TRUE	Maintain
93298	Interrogation device ev	Remote Interrogation Devic	January 2023	20			ACC, HRS	0.52 and PE Inputs	CMS High Expenditure Pr	July 2015	XXX	0.52	0.21	0.21	0.04	957280	FALSE			FALSE							TRUE	Maintain
93299	Interrogation device ev	Cardiac Electrophysiology Devic	October 2018	22			ACC, HRS	Deleted from CPT	CMS High Expenditure Pr	July 2015							FALSE			TRUE	In October 2018,	February 2	20	complete		TRUE	Deleted from CPT
93306	Echocardiography, tran	Complete Transthoracic Echoca	April 2019	21			ACC, ASE	1.46	CMS High Expenditure Pr	July 2015	XXX	1.46	NA	4.32	0.08	6696461	FALSE			FALSE							TRUE	Decrease
93307	Echocardiography, tran	Transthoracic Echocardiograph	April 2016	42			ACC	0.92	CMS Request - Practice E	NA	XXX	0.92	NA	3.11	0.06	23830	FALSE			FALSE							TRUE	Maintain
93308	Echocardiography, tran	Transthoracic Echocardiograph	April 2016	42			ACC	0.53	CMS Fastest Growing, Ha	October 2008	XXX	0.53	NA	2.37	0.04	490174	FALSE			FALSE							TRUE	Maintain
93320	Doppler echocardiogra	Doppler Echocardiography	January 2014	30			ACC	0.38	CMS Request - Practice E	February 2009	ZZZ	0.38	NA	1.11	0.02	316852	FALSE			FALSE							TRUE	Maintain
93321	Doppler echocardiogra	Doppler Echocardiography	January 2014	30			ACC	0.15	CMS-Other - Utilization o	October 2013	ZZZ	0.15	NA	0.59	0.01	271170	FALSE			FALSE							TRUE	Maintain
93325	Doppler echocardiogra	Doppler Echocardiography	January 2014	30			ACC	0.07	CMS Request - Practice E	February 2009	ZZZ	0.07	NA	0.63	0.00	591854	FALSE			FALSE							TRUE	Maintain
93350	Echocardiography, tran	Stress Transthoracic Echocardic	October 2016	26	RUC		ACC, ASE	1.46; CPT Assistant article publ	Other - Identified by RUC	April 2008	XXX	1.46	NA	4.02	0.06	73875	TRUE	Jan 2010	Yes	TRUE	The RUC acceptec	October 2(	42	Complete			TRUE	Decrease
93351	Echocardiography, tran	Stress Transthoracic Echocardic	October 2016	26	RUC		ACC, ASE	1.75	CMS High Expenditure Pr	July 2015	XXX	1.75	NA	5.08	0.10	188627	FALSE			FALSE							TRUE	Maintain
93451	Right heart catheterizat	Diagnostic Cardiac Catheterizat	April 2018	33			ACC	Remove from Modifier -51 exe	Codes Reported Together	95% or More / Mc	000	2.47	NA	23.06	0.47	42360	FALSE			FALSE		October 2(	13				TRUE	Decrease
93452	Left heart catheterizati	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	4.32	Codes Reported Together	95% or More	000	4.5	NA	21.66	0.84	3145	FALSE			FALSE		October 2(	13				TRUE	Decrease
93453	Combined right and left	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	5.98	Codes Reported Together	95% or More	000	5.99	NA	27.20	1.15	2028	FALSE			FALSE		October 2(	13				TRUE	Decrease
93454	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	4.95	Codes Reported Together	95% or More	000	4.54	NA	21.70	0.87	106945	FALSE			FALSE		October 2(	13				TRUE	Decrease
93455	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	6.15	Codes Reported Together	95% or More	000	5.29	NA	23.90	1.01	21092	FALSE			FALSE		October 2(	13				TRUE	Decrease
93456	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2018	33			ACC	Remove from Modifier -51 Exe	Codes Reported Together	95% or More / Mc	000	5.9	NA	26.71	1.12	20308	FALSE			FALSE		October 2(	13				TRUE	Decrease
93457	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	7.66	Codes Reported Together	95% or More	000	6.64	NA	28.86	1.25	3563	FALSE			FALSE		October 2(	13				TRUE	Decrease
93458	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	6.51	Codes Reported Together	95% or More	000	5.6	NA	24.48	1.07	415368	FALSE			FALSE		October 2(	13				TRUE	Decrease
93459	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	7.34	Codes Reported Together	95% or More	000	6.35	NA	25.95	1.21	67014	FALSE			FALSE		October 2(	13				TRUE	Decrease
93460	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	7.88	Codes Reported Together	95% or More	000	7.1	NA	28.77	1.35	79581	FALSE			FALSE		October 2(	13				TRUE	Decrease
93461	Catheter placement in (	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	9.00	Codes Reported Together	95% or More	000	7.85	NA	31.69	1.51	11803	FALSE			FALSE		October 2(	13				TRUE	Decrease
93462	Left heart catheterizati	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	3.73	Codes Reported Together	95% or More	ZZZ	3.73	1.56	1.56	0.82	7044	FALSE			FALSE		October 2(	13				TRUE	Decrease
93463	Pharmacologic agent ac	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	2.00	Codes Reported Together	95% or More	ZZZ	2	0.70	0.70	0.17	5368	FALSE			FALSE		October 2(	13				TRUE	Decrease
93464	Physiologic exercise stu	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	1.80	Codes Reported Together	95% or More	ZZZ	1.8	NA	4.62	0.12	1274	FALSE			FALSE		October 2(	13				TRUE	Decrease
93501	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93503	Insertion and placemen	Insertion of Catheter	April 2018	33			ACR, ASA	2.00	CMS High Expenditure Pr	July 2015	000	2	0.40	NA	0.18	54329	FALSE			FALSE							TRUE	Decrease
93508	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93510	Deleted from CPT	Cardiac Catheterization	February 2009	31			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93511	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93514	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93524	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93526	Deleted from CPT	Cardiac Catheterization	February 2008	S			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93527	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93528	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93529	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93539	Deleted from CPT	Cardiac Catheterization	February 2008	S			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93540	Deleted from CPT	Cardiac Catheterization	February 2008	S			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93541	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93542	Deleted from CPT	Cardiac Catheterization	April 2010	26			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93543	Deleted from CPT	Cardiac Catheterization	February 2009	31			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93544	Deleted from CPT	Cardiac Catheterization	February 2008	S			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93545	Deleted from CPT	Cardiac Catheterization	February 2009	31			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93555	Deleted from CPT	Cardiac Catheterization	February 2009	31			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93556	Deleted from CPT	Cardiac Catheterization	February 2009	31			ACC	Deleted from CPT	Codes Reported Together	February 2008							FALSE			TRUE	Referred to the CI	October 2(	13	Deleted		TRUE	Deleted from CPT
93561	Indicator dilution studie	Cardiac Output Measurement	January 2018	27				0.77	Negative IWPUT	October 2017	ZZZ					12	FALSE			FALSE							TRUE	Increase
93562	Indicator dilution studie	Cardiac Output Measurement	January 2018	27				0.95	Negative IWPUT	October 2017	ZZZ					3	FALSE			FALSE							TRUE	Increase
93563	Injection procedure dui	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	2.00	Codes Reported Together	95% or More	ZZZ	1	0.35	0.35	0.17	146	FALSE			FALSE		October 2(	13				TRUE	Decrease
93564	Injection procedure dui	Pulmonary Angiography	October 2021	08	October 2(	RAW	ACC, SCAI	Review action plan	Codes Reported Together	October 2021	ZZZ	1.03	0.35	0.35	0.23	11	FALSE			FALSE		October 2(	13				FALSE	Decrease
93565	Injection procedure dui	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	1.90	Codes Reported Together	95% or More	ZZZ	0.5	0.17	0.17	0.12	72	FALSE			FALSE		October 2(	13				TRUE	Decrease
93566	Injection procedure dui	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	0.96	Codes Reported Together	95% or More	ZZZ	0.5	0.18	0.18	0.10	303	FALSE			FALSE		October 2(	13				TRUE	Decrease
93567	Injection procedure dui	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	0.97	Codes Reported Together	95% or More	ZZZ	0.7	0.24	0.24	0.17	20363	FALSE			FALSE		October 2(	13				TRUE	Decrease
93568	Injection procedure dui	Diagnostic Cardiac Catheterizat	April 2011	28			ACC	0.98	Codes Reported Together	95% or More	ZZZ	0.88	0.31	0.31	0.19	1197	FALSE			TRUE		October 2(	13	Complete			TRUE	Decrease
93571	Intravascular doppler ve	Coronary Flow Reserve Measur	October 2017	13			ACC, SCAI	1.50	High Volume Growth	4 October 2016	ZZZ	0	NA	NA	0.00	67025	FALSE			FALSE							TRUE	Decrease
93572	Intravascular doppler ve	Coronary Flow Reserve Measur	October 2017	13			ACC, SCAI	1.00	High Volume Growth	4 October 2017	ZZZ	0	NA	NA	0.00	12923	FALSE			FALSE							TRUE	Decrease
93613	Intracardiac electrophy	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	5.23	CMS Fastest Growing / Hi	October 2008	ZZZ	5.23	2.22	NA	1.15	86612	FALSE			FALSE							TRUE	Decrease
93620	Comprehensive electro	Intracardiac Catheter Ablation	April 2010	45			ACC	11.57	Codes Reported Together	February 2010	000	0	NA	0.00	0.00	6937	FALSE			TRUE	The Workgroup re	October 2(	22	Complete			TRUE	Maintain
93621	Comprehensive electro	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	1.75	High Volume Growth	6 October 2019	ZZZ	0	NA	0.00	0.00	25997	FALSE			FALSE							TRUE	Decrease
93623	Programmed stimulatic	Pacing Heart Stimulation	April 2019	22			ACC, HRS	Referral to CPT for parenthetic	CMS-Other - Utilization o	October 2018	ZZZ	0	NA	0.00	0.00	38723	FALSE			TRUE	In April 2019, the	May 2019	EC-N	Complete			TRUE	Decrease
93641	Electrophysiologic evalu	Insertion/Removal of Pacemake	September 2014	21			ACC	Maintain work RVU and adjust	Codes Reported Together	February 2010	000	0	NA	0.00	0.00	9237	FALSE			TRUE	33213 - This code	February 2	13	Complete			TRUE	Maintain
93651	Intracardiac catheter at	Bundling EPS with Transcathete	January 2012	11			ACC, HRS	Deleted from CPT	Codes Reported Together	February 2010							FALSE			TRUE	The Workgroup re	October 2(	22	Complete		TRUE	Deleted from CPT
93652	Intracardiac catheter at	Bundling EPS with Transcathete	January 2012	11			ACC, HRS	Deleted from CPT	CMS Fastest Growing/Co	October 2008							FALSE			TRUE	The Workgroup re	October 2(	22	Complete		TRUE	Deleted from CPT
93653	Comprehensive electro	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	15.00	Codes Reported Together	October 2011	000	15	6.37	NA	3.33	27745	FALSE			TRUE	The Workgroup re	October 2(	22	Complete			TRUE	Decrease
93654	Comprehensive electro	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	18.10	Codes Reported Together	October 2011	000	18.1	7.65	NA	4.02	7824	FALSE			TRUE	The Workgroup re	October 2(	22	Complete			TRUE	Decrease
93655	Intracardiac catheter at	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	7.00	Codes Reported Together	October 2011	ZZZ	5.5	2.35	NA	1.21	40338	FALSE			TRUE	The Workgroup re	October 2(	22	Complete			TRUE	Decrease
93656	Comprehensive electro	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	17.00	Codes Reported Together	October 2011	000	17	7.23	NA	3.78	61319	FALSE			TRUE	The Workgroup re	October 2(	61	complete			TRUE	Decrease
93657	Additional linear or foc	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	7.00	Codes Reported Together	October 2011	ZZZ	5.5	2.35	NA	1.21	30645	FALSE			TRUE	The Workgroup re	October 2(	22	Complete			TRUE	Decrease
93662	Intracardiac echocardio	Cardiac Ablation Services Bundl	April 2021	07			ACC, HRS	2.53	High Volume Growth	1 / H February 2008	ZZZ	0	NA	0.00	0.00	74158	FALSE			FALSE							TRUE	Decrease
93668	Peripheral arterial disea	Peripheral Artery Disease (PAD)	January 2018	28				New PE Inputs	CMS Request - Final Rule	July 2017	XXX	0	NA	0.42	0.01	1383	FALSE			FALSE							TRUE	PE Only
93701	Bioimpedance-derived	physiologic cardiovascular analy	February 2011	41				Remove from screen	Low Value-High Volume	October 2010	XXX	0	NA	0.78	0.01	4590	FALSE			FALSE							TRUE	Remove from Screen
93731	Deleted from CPT	Cardiology Services	October 2008	26			ACC	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE			FALSE							TRUE	Deleted from CPT
93732	Deleted from CPT	Cardiology Services	October 2008	26			ACC	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE			FALSE							TRUE	Deleted from CPT
93733	Deleted from CPT	Cardiology Services	October 2008	26			ACC	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE			FALSE							TRUE	Deleted from CPT
93743	Deleted from CPT	Cardiology Services	October 2008	26			ACC	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE			FALSE							TRUE	Deleted from CPT
93744	Deleted from CPT	Cardiology Services	October 2008	26			ACC	Deleted from CPT	CMS Fastest Growing	October 2008							FALSE			FALSE							TRUE	Deleted from CPT
93750	Interrogation of ventric	Ventricular Assist Device (VAD)	April 2019	24			AATS, ACC, STS	0.85	High Volume Growth	5 October 2018	XXX	0.75	0.31	0.63	0.12	84303	FALSE			FALSE							TRUE	Decrease
93792	Patient/caregiver traini	Home INR Monitoring	January 2022	20	January 20	RAW		Review in 3 years. 0.00 PE Only	High Volume Growth	3 / V September 2016	XXX	0	NA	2.06	0.04	1208	FALSE			FALSE		Septembe	08	yes			TRUE	PE Only
93793	Anticoagulant manager	Home INR Monitoring	January 2022	20	January 20	RAW		Review in 3 years. 0.18	High Volume Growth	3 / \ September 2016	XXX	0.18	NA	0.15	0.01	1643960	FALSE			FALSE		Septembe	08	yes			TRUE	Maintain
93875	Deleted from CPT	Noninvasive Vascular Diagnosti	April 2010	45			AAN, ACC, ACR,	Deleted from CPT	Codes Reported Together	February 2010							TRUE	SS in proce	Yes	TRUE	The Workgroup re	October 2(	43	Complete		TRUE	Deleted from CPT
93880	Duplex scan of extracra	Duplex Scans	April 2014	33			ACR, ACC, SVS	0.80	Codes Reported Together	February 2010	XXX	0.8	NA	4.82	0.11	1780271	TRUE	Addressed	Yes	TRUE	The Workgroup re	October 2(	43	Complete		TRUE	Increase

93882	Duplex scan of extracra	Duplex Scans	April 2014	33			ACC, ACR, SVS	0.50		CMS High Expenditure Pr	January 2012	XXX	0.5	NA	3.13	0.09	25981	FALSE			FALSE						TRUE	Increase
93886	Transcranial doppler st	Duplex Scans	September 2022	13	September	RUC	AAN, ACC, ACR,	Refer to CPT for code bundling		Codes Reported Together	February 2010	XXX	0.91	NA	7.10	0.08	88929	FALSE			TRUE	In April 2022, the	May 2023				FALSE	Increase
93888	Transcranial doppler st	Duplex Scans	April 2014	33			AAN, ACC, ACR,	0.70		Codes Reported Together	February 2010	XXX	0.5	NA	4.21	0.06	8637	FALSE			TRUE	The Workgroup re	October 2(	CCI edits	Complete	TRUE	Increase
93890	Transcranial doppler study of the intracranial arteries;		September 2022	13	September	RUC	AAN, ACR, ASNF	Refer to CPT for code bundling		High Volume Growth	6 / C	October 2019	XXX	1	NA	7.24	0.08	45280	FALSE			TRUE	In April 2022, the	May 2023				FALSE	
93892	Transcranial doppler study of the intracranial arteries;		September 2022	13	September	RUC	AAN, ACR, ASNF	Refer to CPT for code bundling		High Volume Growth	6 / C	October 2019	XXX	1.15	NA	8.29	0.10	47422	FALSE			TRUE	In April 2022, the	May 2023				FALSE	
93895	Quantitative carotid int	Carotid Intima-Media Thickness	April 2015	37			No Interest	Rescind April 2014 recommen		New Code in CPT 2015	April 2014	XXX	0	NA	0.00	0.00		FALSE			FALSE						TRUE	Not Part of RAW
93922	Limited bilateral noninv	Extremity Non-Invasive Arterial	April 2010	27			SVS, ACR, ACC	0.25		CMS Fastest Growing	October 2008	XXX	0.25	NA	2.15	0.06	600988	FALSE			TRUE	The Workgroup ar	February 2	58	Revised	TRUE	Maintain
93923	Complete bilateral noni	Extremity Non-Invasive Arterial	April 2010	27			SVS, ACR, ACC	0.45		CMS Fastest Growing	February 2009	XXX	0.45	NA	3.31	0.08	349633	FALSE			TRUE	The Workgroup ar	February 2	58	Revised	TRUE	Maintain
93924	Noninvasive physiologic	Extremity Non-Invasive Arterial	April 2010	27			SVS, ACR, ACC	0.50		CMS Fastest Growing	February 2009	XXX	0.5	NA	4.12	0.10	44407	FALSE			TRUE	The Workgroup ar	February 2	58	Revised	TRUE	Maintain
93925	Duplex scan of lower ex	Duplex Scans	April 2014	33			ACC, ACR, SVS	0.80		CMS-Other - Utilization o	April 2011	XXX	0.8	NA	6.30	0.10	610883	FALSE			FALSE						TRUE	Maintain
93926	Duplex scan of lower ex	Duplex Scans	April 2014	33			ACC, ACR, SVS	0.60		CMS-Other - Utilization o	April 2011	XXX	0.5	NA	3.72	0.06	230525	FALSE			FALSE						TRUE	Increase
93930	Duplex scan of upper ex	Duplex Scans	April 2014	33			AAN, ACC, ACR,	0.80		CMS Request - Final Rule	November 2013	XXX	0.8	NA	4.95	0.12	20894	FALSE			FALSE						TRUE	Increase
93931	Duplex scan of upper ex	Duplex Scans	April 2014	33			AAN, ACC, ACR,	0.50		Codes Reported Together	February 2010	XXX	0.5	NA	3.14	0.06	43637	FALSE			TRUE	The Workgroup re	October 2(	CCI edits	Complete	TRUE	Increase
93965	Noninvasive physiologic	Non-invasive Physiologic Studie	January 2016	47			ACC, ACR, SCAI,	Deleted from CPT		CMS High Expenditure Pr	July 2015							FALSE			TRUE	In January 2016, t	May 2016	28	Complete	TRUE	Deleted from CPT
93970	Duplex scan of extremit	Duplex Scans	April 2014	33			ACC, ACR, SVS	0.70		CMS-Other - Utilization o	April 2011	XXX	0.7	NA	4.85	0.10	1534961	FALSE			FALSE						TRUE	Maintain
93971	Duplex scan of extremit	Duplex Scans	April 2014	33			ACR, SVS, ACC	0.45		Low Value-High Volume /	October 2010	XXX	0.45	NA	3.07	0.06	1546507	FALSE			FALSE						TRUE	Maintain
93975	Duplex scan of arterial i	Duplex Scans	April 2014	33			ACR, SVS, ACC	1.30		CMS Request - Final Rule	November 2013	XXX	1.16	NA	6.68	0.14	203708	FALSE			FALSE						TRUE	Decrease
93976	Duplex scan of arterial i	Duplex Scans	April 2014	33			ACR	1.00		CMS Fastest Growing / CM	October 2008	XXX	0.8	NA	3.89	0.06	153116	FALSE			FALSE						TRUE	Decrease
93978	Duplex scan of aorta, in	Duplex Scans	April 2014	33				0.97		CMS-Other - Utilization o	April 2013	XXX	0.8	NA	4.47	0.14	249599	FALSE			FALSE						TRUE	Increase
93979	Duplex scan of aorta, in	Duplex Scans	April 2014	33				0.70		CMS-Other - Utilization o	October 2013	XXX	0.5	NA	2.95	0.06	57275	FALSE			FALSE						TRUE	Increase
93982	Noninvasive physiologic	Endovascular Repair Procedure	January 2017	10			SVS, SIR, STS, A/	Deleted from CPT		Codes Reported Together	January 2017							FALSE			FALSE						TRUE	Deleted from CPT
93985	Duplex scan of arterial i	Duplex Scan Arterial Inflow-Ver	January 2019	17				0.80		CMS-Other - Utilization o	October 2018	XXX	0.8	NA	6.48	0.16	19354	FALSE			FALSE		Septembe	36		TRUE	Increase
93986	Duplex scan of arterial i	Duplex Scan Arterial Inflow-Ver	January 2019	17				0.50		CMS-Other - Utilization o	October 2018	XXX	0.5	NA	3.84	0.09	6364	FALSE			FALSE		Septembe	36		TRUE	Increase
93990	Duplex scan of hemodi	Doppler Flow Testing	April 2014	40			ACR, SVS	0.60		CMS Fastest Growing / Hi	October 2008	XXX	0.5	NA	3.79	0.10	106664	FALSE			FALSE						TRUE	Increase
94010	Spirometry, including g	Spirometry	October 2019	12			ATS, CHEST	0.17		Low Value-High Volume	October 2010	XXX	0.17	NA	0.61	0.02	776623	FALSE			FALSE						TRUE	Maintain
94014	Patient-initiated spiron	Pulmonary Tests	February 2009	38			ACCP/ATS	Remove from screen - RUC arti		High Volume Growth	1	February 2008	XXX	0.52	NA	1.09	0.03	201	FALSE			FALSE						TRUE	Remove from Screen
94015	Patient-initiated spiron	Pulmonary Tests	February 2009	38			ACCP/ATS	Remove from screen - RUC arti		High Volume Growth	1	February 2008	XXX	0	NA	0.91	0.01	56	FALSE			FALSE						TRUE	Remove from Screen
94016	Patient-initiated spiron	Pulmonary Tests	February 2009	38			ACCP/ATS	Remove from screen - RUC arti		High Volume Growth	1	April 2008	XXX	0.52	0.18	0.18	0.02	6642	FALSE			FALSE						TRUE	Remove from Screen
94060	Bronchodilation respon	Spirometry	October 2019	12			ATS, CHEST	0.22		MPC List / CPT Assistant A	October 2010	XXX	0.22	NA	0.91	0.02	767711	TRUE	Mar 2014	Yes	FALSE						TRUE	Decrease
94200	Maximum breathing ca	Lung Function Test	April 2018	28			ATS, CHEST	0.05		CMS-Other - Utilization o	October 2017	XXX	0.05	NA	0.37	0.02	49931	FALSE			FALSE						TRUE	Decrease
94240	Deleted from CPT	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94250	Expired gas collection,	RAW	October 2019	17				Deleted from CPT		CMS-Other - Utilization o	January 2019							FALSE			FALSE						TRUE	Deleted from CPT
94260	Deleted from CPT	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94350	Deleted from CPT	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94360	Deleted from CPT	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94370	Determination of airwa	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94400	Breathing response to C	Evaluation of Wheezing	April 2019	25			ATS, CHEST	Deleted from CPT		Codes Reported Together	75% or More-Part	2 / CPT Assistant Analysis 2018						TRUE	Mar 2014	Yes	TRUE	In January 2019, t	Septembe	49	yes	TRUE	Deleted from CPT
94450	Breathing response to h	Pulmonary Tests	February 2009	38			ACCP/ATS	Remove from screen - RUC arti		High Volume Growth	1	February 2008	XXX	0.4	NA	2.01	0.04	474	FALSE			FALSE						TRUE	Remove from Screen
94617	Exercise test for bronch	Pulmonary Diagnostic Tests	October 2016	05			ATS, CHEST	0.70		CMS High Expenditure Pr	February 2016	XXX	0.7	NA	1.87	0.03	9576	FALSE			FALSE		February 2	39	Complete	TRUE	Decrease
94618	Pulmonary stress testin	Pulmonary Diagnostic Tests	October 2016	05			ATS, CHEST	0.48		CMS High Expenditure Pr	February 2016	XXX	0.48	NA	0.49	0.03	243917	FALSE			FALSE		February 2	39	Complete	TRUE	Decrease
94620	Pulmonary stress testin	Pulmonary Diagnostic Tests	October 2016	05			ATS, CHEST	Deleted from CPT		CMS High Expenditure Pr	July 2015							FALSE			TRUE	In January 2016, t	February 2	39	Complete	TRUE	Deleted from CPT
94621	Cardiopulmonary exerc	Pulmonary Diagnostic Tests	October 2016	05			ATS, CHEST	1.42		CMS High Expenditure Pr	January 2016	XXX	1.42	NA	3.02	0.12	16432	FALSE			TRUE	In January 2016, t	February 2	39	Complete	TRUE	Maintain
94640	Pressurized or nonpres	Evaluation of Wheezing	April 2019	25			AAFP, ATS, CHE	New PE Inputs		Codes Reported Together	75% or More-Part	XXX	0	NA	0.26	0.01	126227	TRUE	Mar 2014	Yes	FALSE						TRUE	PE Only
94667	Manipulation chest wal	Evaluation of Wheezing	April 2019	25			ATS, CHEST	New PE Inputs		CPT Assistant Analysis 20	April 2019	XXX	0	NA	0.68	0.02	3342	FALSE			FALSE						TRUE	PE Only
94668	Manipulation chest wal	Evaluation of Wheezing	April 2019	25			AAFP, ATS, CHE	New PE Inputs CPT Assistant a		Codes Reported Together	75% or More-Part	XXX	0	NA	1.07	0.02	5926	TRUE	Mar 2014	Yes	FALSE						TRUE	PE Only
94669	Mechanical chest wall c	Evaluation of Wheezing	April 2019	25			ATS, CHEST	New PE Inputs		CPT Assistant Analysis 20	April 2019	XXX	0	NA	0.56	0.02	180	FALSE			FALSE						TRUE	PE Only
94681	Oxygen uptake, expired	Pulmonary Tests	September 2011	51			AACE, TES, ACCI	Remove from screen		High Volume Growth	1 / C	February 2008	XXX	0.2	NA	1.17	0.03	4466	FALSE			FALSE						TRUE	Remove from Screen
94720	Carbon monoxide diffu	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94725	Membrane diffusion ca	Pulmonary Tests	April 2010	45			ACCP, ATS	Deleted from CPT		Codes Reported Together	February 2010							FALSE			TRUE	The RUC accepte	October 2(	44	Complete	TRUE	Deleted from CPT
94726	Plethysmography for de	Pulmonary Function Testing	April 2011	19			ACCP, ATS	0.31		Codes Reported Together	February 2010	XXX	0.26	NA	1.33	0.03	572303	FALSE			FALSE		February 2011			TRUE	Decrease
94727	Gas dilution or washou	Pulmonary Function Testing	April 2011	19			ACCP, ATS	0.31		Codes Reported Together	February 2010	XXX	0.26	NA	1.02	0.02	270002	FALSE			FALSE		February 2011			TRUE	Decrease
94728	Airway resistance by os	Pulmonary Function Testing	April 2011	19			ACCP, ATS	0.31		Codes Reported Together	February 2010	XXX	0.26	NA	0.90	0.02	4406	FALSE			FALSE		February 2011			TRUE	Decrease
94729	Diffusing capacity (eg, c	Pulmonary Function Testing	April 2011	19			ACCP, ATS	0.19		Codes Reported Together	February 2010	ZZZ	0.19	NA	1.48	0.02	917478	FALSE			FALSE		February 2011			TRUE	Decrease
94750	Pulmonary compliance	RAW	October 2019	17				Deleted from CPT		CMS-Other - Utilization o	January 2019							FALSE			FALSE						TRUE	Deleted from CPT
94760	Noninvasive ear or puls	Measure Blood Oxygen Level	February 2009	32			ACCP, ATS	New PE inputs		CMS Request - Practice E	NA	XXX	0	NA	0.06	0.01	14911	FALSE			FALSE						TRUE	PE Only
94761	Noninvasive ear or puls	Measure Blood Oxygen Level	February 2009	32			ACCP, ATS	New PE inputs		CMS Request - Practice E	NA	XXX	0	NA	0.10	0.01	9556	FALSE			FALSE						TRUE	PE Only
94762	Noninvasive ear or puls	Measure Blood Oxygen Level	February 2009	32			ACCP, ATS	New PE inputs		CMS Fastest Growing, CM	October 2008	XXX	0	NA	0.75	0.01	122272	FALSE			FALSE						TRUE	PE Only
94770	Carbon dioxide, expirec	Evaluation of Wheezing	April 2019	25			ATS, CHEST	Deleted from CPT		High Volume Growth	1 / C	February 2008						TRUE	Mar 2014	Yes	TRUE	In April 2019, whe	Septembe	49	yes	TRUE	Deleted from CPT
95004	Percutaneous tests (scr	Percutaneous Allergy Tests	October 2016	27		RUC	AAAAI, AAOA, A	0.01		Low Value-Billed in Multi	October 2010	XXX	0.01	NA	0.10	0.01	8361486	FALSE			FALSE						TRUE	Maintain
95010	Percutaneous tests (scr	Percutaneous Allergy Tests	April 2011	31			JCAAI, ACAAI, A	Deleted from CPT		Low Value-Billed in Multi	October 2010							FALSE			TRUE	The specialty soci	February 2	15	Complete	TRUE	Deleted from CPT
95012	Nitric oxide expired gas	Exhaled Nitric Oxide Measurem	April 2019	26			AAAAI, ACAAI, A	New PE Inputs		High Volume Growth	5	October 2018	XXX	0	NA	0.55	0.01	76958	FALSE			FALSE						TRUE	PE Only
95015	Intracutaneous (intrade	Intracutaneous Allgery Tests	April 2011	31			JCAAI, ACAAI, A	Deleted from CPT		Low Value-Billed in Multi	October 2010							FALSE			TRUE	The specialty soci	February 2	15	Complete	TRUE	Deleted from CPT
95017	Allergy testing, any con	Percutaneous Allergy Testing	April 2012	29			JCAAI	0.07		Low Value-Billed in Multi	October 2010	XXX	0.07	0.03	0.18	0.01	25904	FALSE			TRUE	Deleted codes 95(	February 2	15	Complete	TRUE	Decrease
95018	Allergy testing, any con	Percutaneous Allergy Testing	April 2012	29			JCAAI	0.14		Low Value-Billed in Multi	October 2010	XXX	0.14	0.06	0.45	0.01	113122	FALSE			TRUE	Deleted codes 95(	February 2	15	Complete	TRUE	Decrease
95024	Intracutaneous (intrade	Intracutaneous Allgery Tests	October 2017	19			JCAAI, ACAAI, A	New PE Inputs.		Low Value-Billed in Multi	October 2010	XXX	0.01	0.01	0.22	0.01	1449502	FALSE			FALSE						TRUE	PE Only
95027	Intracutaneous (intrade	Intracutaneous Allgery Tests	February 2011	41			JCAAI, ACAAI, A	0.01		Low Value-Billed in Multi	October 2010	XXX	0.01	NA	0.13	0.01	126261	FALSE			FALSE						TRUE	Maintain
95115	Professional services fo	Immunotherapy Injections	April 2012	48			JCAAI, AAOA	New PE Inputs		CMS High Expenditure Pr	January 2012	XXX	0	NA	0.29	0.01	820003	FALSE			FALSE						TRUE	PE Only
95117	Professional services fo	Immunotherapy Injections	April 2012	48			JCAAI, AAOA	New PE Inputs		CMS High Expenditure Pr	September 2011	XXX	0	NA	0.34	0.01	2467399	FALSE			FALSE						TRUE	PE Only
95144	Professional services fo	Antigen Therapy Services	January 2016	49			AAOHNS, AAOA	0.06		Low Value-Billed in Multi	October 2010	XXX	0.06	0.03	0.43	0.01	155366	FALSE			FALSE						TRUE	Maintain
95148	Professional services fo	the supervision of preparation	October 2010	73				0.06		Low Value-Billed in Multi	October 2010	XXX	0.06	0.02	2.53	0.01	18727	FALSE			FALSE						TRUE	Maintain
95165	Professional services fo	Antigen Therapy Services	January 2016	49			AAOHNS, AAOA	0.06		MPC List / CMS High Expe	October 2010	XXX	0.06	0.03	0.38	0.01	6638389	FALSE			FALSE						TRUE	Maintain
95249	Ambulatory continuous	Continuous Glucose Monitoring	January 2023	24			AACE, ES, ACP	PE Only		High Volume Growth	2		XXX	0	NA	1.78	0.04	14677	TRUE	June 2018	yes	TRUE	The RUC recomm	June 2017	EC	yes	TRUE	PE Only
95250	Ambulatory continuous	Continuous Glucose Monitoring	January 2023	24			AACE, ES	New PE inputs		High Volume Growth	2 / V	October 2013	XXX	0	NA	4.30	0.04	45743	FALSE			TRUE	In May 2014, the (	October 2(	38	yes	TRUE	PE Only
95251	Ambulatory continuous	Continuous Glucose Monitoring	January 2023	24			AACE, ES	0.70.		High Volume Growth / Wa	April 2013	XXX	0.7	0.28	0.28	0.04	440819	FALSE			TRUE	In October 2016, a	February 2	38	yes	TRUE	Decrease
95700	Electroencephalogram	Long-Term EEG Monitoring	September 2022	13	April 2024	RAW	AAN, ACNS	Review action plan. PE Only		High Volume Growth	4 / C	May 2018	XXX	0	0.00	0.00	0.00	14757	FALSE			FALSE						TRUE	PE Only
95705	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	749	FALSE			FALSE						TRUE	PE Only
95706	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	257	FALSE			FALSE						TRUE	PE Only
95707	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	128	FALSE			FALSE						TRUE	PE Only
95708	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	8123	FALSE			FALSE						TRUE	PE Only
95709	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	1311	FALSE			FALSE						TRUE	PE Only
95710	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	170	FALSE			FALSE						TRUE	PE Only
95711	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	142	FALSE			FALSE						TRUE	PE Only
95712	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	1156	FALSE			FALSE						TRUE	PE Only
95713	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	1764	FALSE			FALSE						TRUE	PE Only
95714	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	4351	FALSE			FALSE						TRUE	PE Only
95715	Electroencephalogram	Long-Term EEG Monitoring	September 2022	13	April 2024	RAW	AAN, ACNS	Review action plan. PE Only		High Volume Growth	4 / C	May 2018	XXX	0	0.00	0.00	0.00	16469	FALSE			FALSE						TRUE	PE Only
95716	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	PE Only		High Volume Growth	4	May 2018	XXX	0	0.00	0.00	0.00	2289	FALSE			FALSE						TRUE	PE Only
95717	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	2.00		High Volume Growth	4	May 2018	XXX	2	0.85	0.88	0.12	2674	FALSE			FALSE						TRUE	Decrease
95718	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	2.50		High Volume Growth	4	May 2018	XXX	2.5	1.21	1.28	0.19	31495	FALSE			FALSE						TRUE	Decrease
95719	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	3.00		High Volume Growth	4	May 2018	XXX	3	1.38	1.44	0.22	5951	FALSE			FALSE						TRUE	Decrease
95720	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	3.86		High Volume Growth	4	May 2018	XXX	3.86	1.87	1.98	0.30	129650	FALSE			FALSE						TRUE	Decrease
95721	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	3.86		High Volume Growth	4	May 2018	XXX	3.86	1.85	1.97	0.29	2560	FALSE			FALSE						TRUE	Decrease
95722	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	4.70		High Volume Growth	4	May 2018	XXX	4.7	2.24	2.38	0.37	1997	FALSE			FALSE						TRUE	Decrease
95723	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	4.75		High Volume Growth	4	May 2018	XXX	4.75	2.24	2.38	0.35	2590	FALSE			FALSE						TRUE	Decrease
95724	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	6.00		High Volume Growth	4	May 2018	XXX	6	2.82	2.98	0.44	4054	FALSE			FALSE						TRUE	Decrease
95725	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	5.40		High Volume Growth	4	May 2018	XXX	5.4	2.57	2.75	0.41	229	FALSE			FALSE						TRUE	Decrease
95726	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	7.58		High Volume Growth	4	May 2018	XXX	7.58	3.60	3.82	0.58	624	FALSE			FALSE						TRUE	Decrease
95800	Sleep study, unattende	Sleep Testing	April 2010	28			ACNS, AAN, ACC	1.05		CMS Fastest Growing	October 2009	XXX	0.85	NA	3.54	0.06	50031	FALSE			FALSE		October 2009			TRUE	Decrease
95801	Sleep study, unattende	Sleep Testing	April 2010	28			ACNS, AAN, ACC	1.00		CMS Fastest Growing	October 2009	XXX	0.85	NA	1.86	0.06	237	FALSE			FALSE		October 2009			TRUE	Decrease
95803	Actigraphy testing, recc	Sleep Testing	April 2010	28			ACNS, AAN, ACC	0.90 and New PE inputs		CMS Request - Practice E	NA	XXX	0.9	NA	3.22	0.03	181	FALSE			FALSE						TRUE	Decrease
95805	Multiple sleep latency s	Sleep Testing	April 2010	28			ACNS, AAN, ACC	1.20		CMS Fastest Growing	October 2009	XXX	1.2	NA	11.14	0.15	1910	FALSE			FALSE		October 2009			TRUE	Decrease
95806	Sleep study, unattende	Sleep Testing	April 2010	28			ACNS, AAN, ACC	1.28		CMS Fastest Growing	October 2009	XXX	0.93	NA	1.75	0.06	93817	FALSE			FALSE		October 2009			TRUE	Decrease

95807	Sleep study, simultaneo	Sleep Testing	April 2010	28			ACNS, AAN, ACC	1.25		CMS Fastest Growing	October 2009	XXX	1.28	NA	10.13	0.14	1205	FALSE			FALSE		October 2009			TRUE	Decrease					
95808	Polysomnography; any	Sleep Testing	April 2010	28			ACNS, AAN, ACC	1.74		CMS Fastest Growing	October 2009	XXX	1.74	NA	14.49	0.18	1007	FALSE			FALSE		October 2009			TRUE	Decrease					
95810	Polysomnography; age	Sleep Testing	April 2010	28			ACNS, AAN, ACC	2.50		CMS Fastest Growing / M	February 2010	XXX	2.5	NA	15.41	0.24	179842	FALSE			FALSE		October 2009			TRUE	Decrease					
95811	Polysomnography; age	Sleep Testing	April 2010	28			ACNS, AAN, ACC	2.60		CMS Fastest Growing	October 2009	XXX	2.6	NA	16.12	0.27	195976	FALSE			FALSE		October 2009			TRUE	Decrease					
95812	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	1.08		CMS Request - Final Rule	July 2015	XXX	1.08	NA	9.16	0.08	21275	FALSE			FALSE					TRUE	Maintain					
95813	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	1.63		CMS Request - Final Rule	July 2015	XXX	1.63	NA	11.08	0.11	23070	FALSE			FALSE					TRUE	Decrease					
95816	Electroencephalogram	Electroencephalogram	October 2012	22				1.08		CMS High Expenditure Pr	January 2012	XXX	1.08	NA	10.28	0.08	236062	FALSE			FALSE					TRUE	Maintain					
95819	Electroencephalogram	Electroencephalogram	October 2012	22			AAN, ACNS	1.08		CMS High Expenditure Pr	September 2011	XXX	1.08	NA	12.11	0.08	161385	FALSE			FALSE					TRUE	Maintain					
95822	Electroencephalogram	Electroencephalogram	October 2012	22			AAN, ACNS	1.08		CMS High Expenditure Pr	January 2012	XXX	1.08	NA	11.27	0.08	23857	FALSE			FALSE					TRUE	Maintain					
95827	Electroencephalogram	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	Deleted from CPT		High Volume Growth4	May 2018								FALSE			FALSE					TRUE	Deleted from CPT					
95831	Muscle testing, manual	Muscle Testing	April 2018	33			AAN, AANEM, A	Deleted from CPT		High Volume Growth3 / C	October 2015								FALSE			TRUE	In April 2018, AAN	September	39	complete	TRUE	Deleted from CPT					
95832	Muscle testing, manual	Muscle Testing	April 2018	33			AAN, AANEM, A	Deleted from CPT		High Volume Growth3 / C	October 2017								FALSE			TRUE	In April 2018, AAN	September	39	complete	TRUE	Deleted from CPT					
95833	Muscle testing, manual	Muscle Testing	April 2018	33			AAN, AANEM, A	Deleted from CPT		High Volume Growth3 / C	October 2017								FALSE			TRUE	In April 2018, AAN	September	39	complete	TRUE	Deleted from CPT					
95834	Muscle testing, manual	Muscle Testing	April 2018	33			AAN, AANEM, A	Deleted from CPT		High Volume Growth3 / C	October 2017								FALSE			TRUE	In April 2018, AAN	September	39	complete	TRUE	Deleted from CPT					
95851	Range of motion measu	RAW	September 2022	13			APTA	Maintain		CMS-Other - Utilization o	April 2022	XXX	0.16	0.06	0.46	0.01	28905	FALSE			FALSE					TRUE	Maintain					
95860	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	0.96		Harvard Valued - Utilizatio	October 2009	XXX	0.96	NA	2.34	0.05	2639	FALSE			TRUE	The Workgroup, a	February 209		Complete	TRUE	Maintain					
95861	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.54		Codes Reported Together	February 2010	XXX	1.54	NA	3.17	0.08	45050	FALSE			TRUE	The Workgroup, a	February 209		Complete	TRUE	Maintain					
95863	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.87		Codes Reported Together	February 2010	XXX	1.87	NA	4.26	0.09	135	FALSE			TRUE	The Workgroup, a	February 209		Complete	TRUE	Maintain					
95864	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.99		Codes Reported Together	February 2010	XXX	1.99	NA	4.87	0.11	1488	FALSE			TRUE	The Workgroup, a	February 209		Complete	TRUE	Maintain					
95867	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	0.79		Codes Reported Together	75% or More-Part	XXX	0.79	NA	2.36	0.05	1320	FALSE			TRUE	Identified by CPT v	October 2(06		Complete	TRUE	Maintain					
95868	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.18		Codes Reported Together	75% or More-Part	XXX	1.18	NA	2.93	0.05	4055	FALSE			TRUE	Identified by CPT v	October 2(06		Complete	TRUE	Maintain					
95869	Needle electromyograp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	0.37		Codes Reported Together	October 2011	XXX	0.37	NA	2.47	0.03	450	FALSE			TRUE	Identified by CPT v	October 2(06		Complete	TRUE	Maintain					
95870	Needle electromyograp	EMG in Conjunction with Nerve	October 2017	19			AAN, AAPMR, A	0.37		Codes Reported Together	October 2011	XXX	0.37	NA	2.09	0.03	54575	FALSE			TRUE	Identified by CPT v	October 2(06		Complete	TRUE	Maintain					
95885	Needle electromyograp	EMG in Conjunction with Nerve	April 2011	20			AAN, AAPMR, A	0.35		Codes Reported Together	February 2010	ZZZ	0.35	NA	1.49	0.01	125139	FALSE			FALSE		February 209		Complete	TRUE	Decrease					
95886	Needle electromyograp	EMG in Conjunction with Nerve	April 2011	20			AAN, AAPMR, A	0.92		Codes Reported Together	February 2010	ZZZ	0.86	NA	2.01	0.04	855049	FALSE			FALSE		February 209		Complete	TRUE	Decrease					
95887	Needle electromyograp	EMG in Conjunction with Nerve	April 2011	20			AAN, AAPMR, A	0.73		Codes Reported Together	February 2010	ZZZ	0.71	NA	1.75	0.04	14550	FALSE			FALSE		February 209		Complete	TRUE	Decrease					
95900	Nerve conduction, amp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	Deleted from CPT		MPC List / Codes Reporte	October 2010								FALSE			TRUE	Identified as part	October 2(06 & 16		Complete	TRUE	Deleted from CPT					
95903	Nerve conduction, amp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	Deleted from CPT		CMS High Expenditure Pr	September 2011								FALSE			TRUE	Identified as part	October 2(06 & 16		Complete	TRUE	Deleted from CPT					
95904	Nerve conduction, amp	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	Deleted from CPT		Codes Reported Together	February 2010								FALSE			TRUE	The Workgroup, a	February 209 & 16		Complete	TRUE	Deleted from CPT					
95907	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.00		Codes Reported Together	75% or More-Part	XXX	1	NA	1.62	0.05	5830	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95908	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.37		Codes Reported Together	75% or More-Part	XXX	1.25	NA	2.02	0.05	48008	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95909	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	1.77		Codes Reported Together	75% or More-Part	XXX	1.5	NA	2.42	0.07	113947	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95910	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	2.80		Codes Reported Together	75% or More-Part	XXX	2	NA	3.13	0.09	133327	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95911	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	3.34		Codes Reported Together	75% or More-Part	XXX	2.5	NA	3.69	0.11	157280	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95912	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	4.00		Codes Reported Together	75% or More-Part	XXX	3	NA	4.23	0.14	69190	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95913	Nerve conduction studi	EMG in Conjunction with Nerve	April 2012	32			AAN, AAPMR, A	4.20		Codes Reported Together	75% or More-Part	XXX	3.56	NA	4.79	0.16	76286	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95921	Testing of autonomic n	Autonomic Function Testing	January 2020	37	September	RAW	AAFP, AAN, AAI	Refer to CPT Assistant.	0.90	Different Performing Spe	October 2009	XXX	0.9	NA	1.66	0.05	47812	TRUE	Sep 2020	complete	TRUE	For code pair 959:	February 217		Complete	TRUE	Maintain					
95922	Testing of autonomic n	Autonomic Function Testing	January 2020	37	September	RAW	AAFP, AAN, AAI	Refer to CPT Assistant.	0.96	High Volume Growth1 / C	February 2008	XXX	0.96	NA	1.87	0.06	1791	TRUE	Dec 2008;	complete	TRUE	For code pair 959:	February 217		Complete	TRUE	Maintain					
95923	Testing of autonomic n	Autonomic Function Testing	January 2020	37	September	RAW	AAFP, AAN, AAI	Refer to CPT Assistant.	0.90	Codes Reported Together	October 2019	XXX	0.9	NA	2.73	0.05	94672	TRUE	Sep 2020	complete	FALSE					FALSE	Maintain					
95924	Testing of autonomic n	Autonomic Function Testing	January 2020	37	September	RAW	AAFP, AAN, AAI	Refer to CPT Assistant.	1.73	Codes Reported Together	75% or More-Part	XXX	1.73	NA	2.68	0.12	14658	TRUE	Sep 2020	complete	TRUE	CPT Feb 2012 est	February 217		Complete	TRUE	Decrease					
95925	Short-latency somatose	Evoked Potentials and Reflex St	January 2013	34			AAN, AANEM, A	0.54	and New PE Inputs	Codes Reported Together	February 2010	XXX	0.54	NA	4.70	0.08	5126	FALSE			TRUE	The Workgroup re	October 2(48		Complete	TRUE	Maintain					
95926	Short-latency somatose	Evoked Potentials and Reflex St	January 2013	34			AAN, AANEM, A	0.54	and New PE Inputs	Codes Reported Together	February 2010	XXX	0.54	NA	4.04	0.06	4812	FALSE			TRUE	The Workgroup re	October 2(48		Complete	TRUE	Maintain					
95928	Central motor evoked p	Evoked Potentials and Reflex St	April 2013	36			AAN, AANEM, A	1.50		Codes Reported Together	February 2010	XXX	1.5	NA	5.45	0.09	419	FALSE			TRUE	The Workgroup re	October 2(48		Complete	TRUE	Maintain					
95929	Central motor evoked p	Evoked Potentials and Reflex St	April 2013	36			AAN, AANEM, A	1.50		Codes Reported Together	February 2010	XXX	1.5	NA	5.57	0.08	1373	FALSE			TRUE	The Workgroup re	October 2(48		Complete	TRUE	Maintain					
95930	Visual evoked potential	Visual Evoked Potential Testing	October 2016	11			AAO, AOA (optc	0.35		High Volume Growth3	October 2015	XXX	0.35	NA	1.61	0.02	39032	FALSE			TRUE	In January 2016, t	May 2016	29	Complete	TRUE	Maintain					
95934	H-reflex, amplitude and	EMG in Conjunction with Nerve	April 2012	32				Deleted from CPT		Codes Reported Together	75% or More-Part	1							FALSE			TRUE	Identified as part	October 2(06 & 16		Complete	TRUE	Deleted from CPT					
95936	H-reflex, amplitude and	EMG in Conjunction with Nerve	April 2012	32				Deleted from CPT		Codes Reported Together	75% or More-Part	1							FALSE			TRUE	Identified as part	October 2(06 & 16		Complete	TRUE	Deleted from CPT					
95938	Short-latency somatose	Evoked Potentials and Reflex St	January 2013	34			AAN, AANEM, A	0.86	and new PE inputs	Codes Reported Together	January 2013	XXX	0.86	NA	9.94	0.08	95684	FALSE			TRUE		October 2(48		Complete	TRUE	Decrease					
95939	Central motor evoked p	Evoked Potentials and Reflex St	January 2013	34			AAN, AANEM, A	2.25	and new PE inputs	Codes Reported Together	January 2013	XXX	2.25	NA	13.92	0.14	45557	FALSE			TRUE		October 2(48		Complete	TRUE	Decrease					
95940	Continuous intraoperat	Intraoperative Neurophysiolog	January 2012	12				0.60		Codes Reported Together	January 2012	XXX	0.6	0.31	NA	0.04	26130	FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95941	Continuous intraoperat	Intraoperative Neurophysiolog	January 2012	12				2.00		Codes Reported Together	January 2012	XXX	0	0.00	0.00	0.00		FALSE			TRUE	Deleted 6 electroi	February 216		Complete	TRUE	Decrease					
95943	Simultaneous, indepen	Autonomic Function Testing	January 2020	37			AAN, AANEM	Deleted from CPT		Codes Reported Together	January 2018	XXX					14326	FALSE			TRUE	CPT Feb 2012 est	October 2(65		complete	TRUE	Deleted from CPT					
95950	Monitoring for identific	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	Deleted from CPT		CMS Fastest Growing	February 2009								FALSE			FALSE					TRUE	Deleted from CPT					
95951	Monitoring for localizat	Long-Term EEG Monitoring	October 2018	13				Deleted from CPT		High Volume Growth4	October 2016								FALSE			TRUE	This service was ic	May 2018	35	Yes	TRUE	Deleted from CPT					
95953	Monitoring for localizat	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	Deleted from CPT		CMS Fastest Growing	February 2009								FALSE			FALSE					TRUE	Deleted from CPT					
95954	Pharmacological or phy	EEG Monitoring	February 2008	S			AAN, ACNS	Remove from screen		High Volume Growth1	February 2008	XXX	2.45	NA	9.43	0.18	461	FALSE			FALSE					TRUE	Remove from Screen					
95956	Monitoring for localizat	Long-Term EEG Monitoring	October 2018	13			AAN, ACNS	Deleted from CPT		CMS Fastest Growing	October 2008								TRUE	Dec 2009	Yes	FALSE					TRUE	Deleted from CPT					
95957	Digital analysis of electr	Electroencephalogram (EEG) Ex	January 2016	50			AAN	1.98		CMS High Expenditure Pr	July 2015	XXX	1.98	NA	6.12	0.12	35208	FALSE			FALSE					TRUE	Maintain					
95970	Electronic analysis of im	Neurostimulator Services	January 2019	37			AAN, AANS/CNS	0.45		Harvard Valued - Utilizatio	February 2010	XXX	0.35	0.16	0.17	0.04	27748	TRUE	Jul 2016	Yes	TRUE	In January 2016, t	June 2017	31	Complete	TRUE	Maintain					
95971	Electronic analysis of im	Neurostimulator Services	October 2017	07			AUA, ACOG, AA	0.78		Harvard Valued - Utilizatio	October 2009	XXX	0.78	0.30	0.57	0.07	18280	FALSE			TRUE	In January 2014, t	February 2	75, 31	Complete	TRUE	Maintain					
95972	Electronic analysis of im	Neurostimulator Services	October 2017	07			AUA, ACOG, AA	0.80		Harvard Valued - Utilizatio	February 2010	XXX	0.8	0.30	0.78	0.10	39855	FALSE			TRUE	In January 2014, t	May 2014	EC1	Complete	TRUE	Decrease					
95973	Electronic analysis of im	Implanted Neurostimulator Ele	April 2015	21			AANS/CNS, ACO	Deleted from CPT		Harvard Valued - Utilizatio	February 2010								FALSE			TRUE	In January 2014, t	February 2	75	Complete	TRUE	Deleted from CPT					
95974	Electronic analysis of im	Neurostimulator Services	October 2017	07			AAN, AANS/CNS	Deleted from CPT		CMS Request - Final Rule	July 2015								TRUE	Jul 2016	Yes	TRUE	In January 2016, t	June 2017	31	Complete	TRUE	Deleted from CPT					
95975	Electronic analysis of im	Neurostimulator Services	October 2017	07			AAN, AANS/CNS	Deleted from CPT		CMS Request - Final Rule	July 2015								TRUE	Jul 2016	Yes	TRUE	In January 2016, t	June 2017	31	Complete	TRUE	Deleted from CPT					
95976	Electronic analysis of im	Neurostimulator Services	September 2022	13			AAN, AANS/CNS	0.95		High Volume Growth2 / C	June 2017	XXX	0.73	0.35	0.38	0.07	6886	TRUE	February 2	complete	FALSE		June 2017	31		TRUE	Maintain					
95977	Electronic analysis of im	Neurostimulator Services	September 2022	13			AAN, AANS/CNS	1.19		High Volume Growth2 / C	June 2017	XXX	0.97	0.47	0.49	0.10	5089	TRUE	February 2	complete	FALSE		June 2017	31		TRUE	Maintain					
95978	Electronic analysis of im	Neurostimulator Services	October 2017	07			AAN, AANS/CNS	Deleted from CPT		CMS Request - Final Rule	July 2015								TRUE	Jul 2016	Yes	TRUE	In January 2016, t	June 2017	31	Complete	TRUE	Deleted from CPT					
95979	Electronic analysis of im	Neurostimulator Services	October 2017	07			AAN, AANS/CNS	Deleted from CPT		CMS Request - Final Rule	July 2015								TRUE	Jul 2016	Yes	TRUE	In January 2016, t	June 2017	31	Complete	TRUE	Deleted from CPT					
95980	Electronic analysis of im	Neurostimulator Services	October 2017	07			No Interest	Not part of family		CMS Request - Final Rule	July 2015	XXX	0.8	0.36	NA	0.19	416	FALSE			FALSE		June 2017	31	Complete	TRUE	Maintain					
95981	Electronic analysis of im	Neurostimulator Services	October 2017	07			No Interest	Not part of family		CMS Request - Final Rule	July 2015	XXX	0.3	0.17	0.79	0.06	624	FALSE			FALSE		June 2017	31	Complete	TRUE	Maintain					
95982	Electronic analysis of im	Neurostimulator Services	January 2016	07			No Interest	Not part of family		CMS Request - Final Rule	July 2015	XXX	0.65	0.31	0.98	0.12	982	FALSE			FALSE		June 2017	31	Complete	TRUE	Maintain					
95983	Electronic analysis of im	Neurostimulator Services	September 2022	13			AAN, AANS/CNS	1.25		High Volume Growth2 / C	June 2017	XXX	0.91	0.45	0.48	0.10	37366	TRUE	February 2	complete	FALSE		June 2017	31		TRUE	Maintain					
95984	Electronic analysis of im	Neurostimulator Services	September 2022	13			AAN, AANS/CNS	1.00		High Volume Growth2 / C	June 2017	ZZZ	0.8	0.40	0.41	0.08	50959	TRUE	February 2	complete	FALSE		June 2017	31		TRUE	Maintain					
95990	Refilling and maintenan	Electronic Analysis Implanted P	February 2011	07			ASA, AAPM, NA	0.00		Different Performing Spe	April 2010	XXX	0	NA	2.64	0.04	908	FALSE			TRUE	Identified through	October 2010		Complete	TRUE	Maintain					
95991	Refilling and maintenan	Electronic Analysis Implanted P	February 2011	07			ASA, AAPM	0.77		High Volume Growth1 / C	February 2008	XXX	0.77	0.32	2.43	0.10	6550	FALSE			TRUE		October 2010		Complete	TRUE	Maintain					
95992	Canalith repositioning	procedure(s) (eg, epley maneuv	April 2018	33				Remove from Modifier -51 Exe		Modifier -51 Exempt	January 2018	XXX	0.75	0.28	0.50	0.04	115801	FALSE			FALSE					TRUE	Maintain					
96101	Psychological testing (ir	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		CMS High Expenditure Pr	July 2015								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96102	Psychological testing (ir	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		CMS High Expenditure Pr	July 2015								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96103	Psychological testing (ir	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		High Volume Growth2 / D	April 2013								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96105	Assessment of aphasia	Psychological and Neuro-psych	October 2017	20			APA (psycholog	1.75		CMS Request/Speech Lan	January 2016	XXX	1.75	NA	1.05	0.10	3401	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96110	Developmental screeni	Psychological and Neuro-psych	October 2017	08			APA (psycholog	New PE Inputs		CMS High Expenditure Pr	January 2017	XXX	0	NA	0.31	0.01		FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	PE Only					
96111	Developmental testing,	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		CMS High Expenditure Pr	January 2017								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96112	Developmental test adr	Psychological and Neuro-psych	October 2017	08			APA (psycholog	2.50		CMS High Expenditure Pr	June 2017	XXX	2.56	1.00	1.04	0.14	4750	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96113	Developmental test adr	Psychological and Neuro-psych	October 2017	08			APA (psycholog	1.10		CMS High Expenditure Pr	June 2017	ZZZ	1.16	0.44	0.55	0.06	627	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96116	Neurobehavioral status	Psychological and Neuro-psych	October 2017	08			APA (psycholog	1.86		CMS High Expenditure Pr	July 2015	XXX	1.86	0.43	0.81	0.08	135507	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Maintain					
96118	Neuropsychological tes	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		CMS High Expenditure Pr	July 2015								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96119	Neuropsychological tes	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		CMS High Expenditure Pr	July 2015								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96120	Neuropsychological tes	Psychological and Neuro-psych	October 2017	08			APA (psycholog	Deleted from CPT		High Volume Growth2 / C	April 2013								FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Deleted from CPT					
96121	Neurobehavioral status	Psychological and Neuro-psych	October 2017	08			APA (psycholog	1.71		CMS High Expenditure Pr	June 2017	ZZZ	1.71	0.23	0.49	0.04	36763	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96125	Standardized cognitive	Psychological and Neuro-psych	October 2017	20			APA (psycholog	1.70		CMS High Expenditure Pr	January 2016	XXX	1.7	NA	1.29	0.06	5434	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Maintain					
96127	Brief emotional/behavi	Psychological and Neuro-psych	October 2017	08			APA (psycholog	New PE Inputs		CMS High Expenditure Pr	January 2016	XXX	0	NA	0.13	0.01	497436	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	PE Only					
96130	Psychological testing ev	Psychological and Neuro-psych	October 2017	20			APA (psycholog	2.50		CMS High Expenditure Pr	June 2017	XXX	2.56	0.55	0.89	0.10	104985	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96131	Psychological testing ev	Psychological and Neuro-psych	October 2017	20			APA (psycholog	1.90		CMS High Expenditure Pr	June 2017	ZZZ	1.96	0.26	0.56	0.04	71902	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96132	Neuropsychological tes	Psychological and Neuro-psych	October 2017	08			APA (psycholog	2.50		CMS High Expenditure Pr	June 2017	XXX	2.56	0.47	1.18	0.10	204387	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96133	Neuropsychological tes	Psychological and Neuro-psych	October 2017	08			APA (psycholog	1.90		CMS High Expenditure Pr	June 2017	ZZZ	1.96	0.26	0.92	0.04	332219	FALSE			TRUE	In the July 2015 Pi	June 2017	32	complete	TRUE	Decrease					
96136	Psychological or neuro	Psychological and Neuro-psych	October 2017	20			APA (psycholog	0.55		CMS High Expenditure Pr	June 2017	XXX	0.55	0.12	0.69	0.02	175704	FALSE			FALSE		June 2017	32		TRUE	Decrease					
96137	Psychological or neuro	Psychological and Neuro-psych	October 2017	20			APA (psycholog	0.46		CMS High Expenditure Pr	June 2017	ZZZ	0.46	0.06	0.69	0.01	328424	FALSE			FALSE		June 2017	32		TRUE	Decrease					
96138	Psychological or neuro	Psychological and Neuro-psych	October 2017	20			APA (psycholog	New PE Inputs		CMS High Expenditure Pr	June 2017	XXX	0	NA	1.00	0.01	182454	FALSE			FALSE		June 2017	32		TRUE	PE Only					
96139	Psychological or neuro	Psychological and Neuro-psych	October 2017	20			APA (psycholog	New PE Inputs		CMS High Expenditure Pr	June 2017	ZZZ	0	NA	1.03	0.01	344259	FALSE			FALSE		June 2017	32		TRUE	PE Only					
96146	Psychological or neuro	Psychological and Neuro-psych	October 2017	20			APA (psycholog	New PE Inputs		CMS High Expenditure Pr	June 2017	XXX	0	NA	0.06	0.01	8281	FALSE			FALSE		June 2017	32		TRUE	PE Only					
96150	Health and behavior as	Health and Behavior Assessmer	January 2019	41				Deleted from CPT		Negative IWPUT	September 2018								FALSE			FALSE		Septembe	40	Complete	TRUE	Deleted from CPT					
96151	Health and behavior as	Health and Behavior Assessmer	January 2019	41				Deleted from CPT		Negative IWPUT	September 2018								FALSE			FALSE		Septembe	40	Complete	TRUE	Deleted from CPT					

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G0249	Provision of test materi	Home INR Monitoring	January 2017	19			ACC	Created Category I code, recon	CMS Fastest Growing / Hi	February 2008	XXX	0	NA	2.00	0.01	1046142	FALSE			TRUE	In October 2015, , Septembe	08	yes		TRUE	Deleted from CPT				
G0250	Physician review, interp	Home INR Monitoring	January 2017	19			ACC	Created Category I code, recon	CMS Fastest Growing / Hi	February 2008	XXX	0.18	NA	0.07	0.01	146366	FALSE			TRUE	In October 2015, , Septembe	08	yes		TRUE	Deleted from CPT				
G0268	Removal of impacted ce	Removal of Impacted Cerumen	April 2017	35			AAO-HNS	0.61	CMS Fastest Growing / Ch	October 2008	000	0.61	0.29	0.87	0.10	157400	FALSE			FALSE					TRUE	Maintain				
G0270	Medical nutrition thera	Medical Nutrition Therapy	January 2019	37			ADA	Maintain/Remove from screen	CMS Fastest Growing	February 2008	XXX	0.45	0.35	0.49	0.01	76830	FALSE			FALSE					TRUE	Maintain				
G0277	Hyperbaric oxygen und	Hyperbaric Oxygen Under Press	January 2023	16	January 2024		AAFP, UHMS	Refer to CPT. PE Inputs	High Volume Growth8	April 2022	XXX	0	NA	5.06	0.02	139997	FALSE			TRUE	In January 2023, t September 2023				FALSE	PE Only				
G0279	Diagnostic digital breas	RAW	January 2018	31				Recommend CMS delete	CMS-Other - Utilization or	October 2017	ZZZ	0.6	NA	0.94	0.04	899600	FALSE			FALSE					TRUE	Remove from Screen				
G0283	Electrical stimulation (u	Physical Medicine and Rehabilit	January 2017	29			APTA	0.18	Low Value-High Volume /	October 2010	XXX	0.18	NA	0.17	0.01	5967264	FALSE			FALSE					TRUE	Maintain				
G0296	Counseling visit to disc	Counseling Visit for Lung Cance	January 2022	20				Maintain	CMS-Other - Utilization or	January 2019	XXX	0.52	0.20	0.28	0.04	48793	FALSE			FALSE					TRUE	Maintain				
G0297	Low dose ct scan (ldct)	Screening CT of Thorax	October 2019	07				CMS Deleted for 2021. Recomr	CMS-Other - Utilization or	October 2018							FALSE			TRUE	In October 2018, , May 2019	12	Complete		TRUE	Deleted from CPT				
G0364	Bone marrow aspiratior	RAW	January 2018	31				Deleted from CPT	CMS-Other - Utilization or	October 2017							FALSE			FALSE					TRUE	Deleted from CPT				
G0365	Vessel mapping of vess	Duplex Scan Arterial Inflow-Ver	January 2019	17			ACR, SIR, SVS	Deleted from CPT	CMS-Other - Utilization or	October 2017							FALSE			TRUE	In October 2017, !Septembe	36	complete		TRUE	Deleted from CPT				
G0389	Ultrasound b-scan and/	Abdominal Aorta Ultrasound Sc	October 2015	12			ACC, ACP, ACR,	CPT Assistant article published	Final Rule for 2015 / High	July 2014							TRUE	Jan 2017	yes	TRUE	When Medicare b	May 2015	23	Complete	TRUE	Deleted from CPT				
G0396	Alcohol and/or substance (other than tobacco) misuse		January 2018	31			AAFP, ASA, ASA	Refer to CPT	CMS-Other - Utilization or	October 2017	XXX	0.65	0.24	0.34	0.04	58365	FALSE			TRUE	In October 2017, !Time Uncertain				FALSE					
G0399	Home sleep test (hst) w	RAW	September 2022	13			AASM, ATS, CHE	Requested CMS delete	High Volume Growth5 / C	October 2018	XXX	0	NA	0.00	0.00	106535	FALSE			FALSE					TRUE	Deleted from CPT				
G0402	Initial preventive physic	Initial Preventive Exam	October 2016	35			No Specialty Soc	RUC recommended to survey t	CMS-Other - Utilization or	April 2016	XXX	2.6	1.10	2.14	0.18	501570	FALSE			FALSE					TRUE	Maintain				
G0403	Electrocardiogram, rou	EKG for Initial Preventive Exam	October 2016	35			No Specialty Soc	RUC recommended to survey t	CMS-Other - Utilization or	April 2016	XXX	0.17	NA	0.24	0.02	111713	FALSE			FALSE					TRUE	Maintain				
G0407	Follow-up inpatient consultation, intermediate, physici		April 2021	24	April 2025	RAW	AAN, ANA, APA	Review in April 2025 or April 2(	CMS-Other - Utilization or	October 2020	XXX	1.39	0.63	NA	0.12	36642	FALSE			FALSE					FALSE					
G0408	Follow-up inpatient consultation, complex, physicians t		April 2021	24	April 2025	RAW	AAN, ANA, APA	Review in April 2025 or April 2(	CMS-Other - Utilization or	October 2020	XXX	2	0.94	NA	0.18	25924	FALSE			FALSE					FALSE					
G0416	Surgical pathology, gros	Prostate Biopsy - Pathology	October 2015	16		RUC	ASC, CAP	4.00	Final Rule for 2015	July 2014	XXX	3.6	NA	7.02	0.10	126159	FALSE			FALSE					TRUE	Increase				
G0422	Intensive cardiac rehabilitation; with or without contin		January 2021	29				Maintain	CMS-Other - Utilization or	October 2020	XXX	1.81	1.67	1.67	0.07	31047	FALSE			FALSE					TRUE	Remove from Screen				
G0423	Intensive cardiac rehabilitation; with or without contin		January 2021	29				Maintain	CMS-Other - Utilization or	October 2020	XXX	1.81	1.87	1.67	0.07	40257	FALSE			FALSE					TRUE	Remove from Screen				
G0425	Telehealth consultation	Telehealth Consultations -ED or	January 2023	17	April 2025	RAW		No recommendation. Review ir	CMS-Other - Utilization or	April 2022	XXX	1.92	0.65	NA	0.18	29684	FALSE			FALSE					FALSE					
G0426	Telehealth consultation	Telehealth Consultations -ED or	January 2023	17	April 2025	RAW		No recommendation. Review ir	CMS-Other - Utilization or	September 2022	XXX	2.61	1.03	NA	0.22	27990	FALSE			FALSE					FALSE					
G0427	Telehealth consultation	Telehealth Consultations -ED or	January 2023	17	April 2025	RAW		No recommendation. Review ir	CMS-Other - Utilization or	September 2022	XXX	3.86	1.37	NA	0.26	18231	FALSE			FALSE					FALSE					
G0436	Smoking and tobacco c	RAW	October 2016	35		RUC		Deleted from CPT	CMS-Other - Utilization or	April 2016							FALSE			FALSE					TRUE	Deleted from CPT				
G0438	Annual wellness visit; ir	RAW	April 2016	47			No Interest	RUC recommended to survey t	CMS-Other - Utilization or	April 2013	XXX	2.6	NA	2.13	0.18	818777	FALSE			FALSE					TRUE	Remove from Screen				
G0439	Annual wellness visit, ir	RAW	April 2016	47			No Interest	RUC recommended to survey t	CMS-Other - Utilization or	April 2013	XXX	1.92	NA	1.80	0.12	8977883	FALSE			FALSE					TRUE	Remove from Screen				
G0442	Annual alcohol misuse s	Annual Alcohol Screening	September 2022	13	April 2023	RUC	No Specialty Soc	Survey April 2023.	CMS-Other - Utilization or	April 2016	XXX	0.18	0.08	0.36	0.01	815675	FALSE			FALSE					FALSE	Maintain				
G0444	Annual depression scre	Annual Depression Screening	September 2022	13	April 2023	RUC	No Specialty Soc	Survey April 2023.	CMS-Other - Utilization or	April 2016	XXX	0.18	0.08	0.36	0.01	2142759	FALSE			FALSE					FALSE	Maintain				
G0446	Annual, face-to-face int	Intensive Behavioral Therapy fo	September 2022	13	April 2023	RUC	No Specialty Soc	Survey April 2023.	CMS-Other - Utilization or	October 2017	XXX	0.45	0.19	0.28	0.04	290059	FALSE			FALSE					FALSE	Maintain				
G0447	Face-to-face behavioral	Behavioral Counseling for Obes	October 2016	35			No Specialty Soc	RUC recommended to survey t	CMS-Other - Utilization or	April 2016	XXX	0.45	0.19	0.27	0.04	289558	FALSE			FALSE					TRUE	Maintain				
G0452	Molecular pathology pr	Molecular Pathology Interpreta	October 2019	13				0.93	CMS-Other - Utilization or	October 2018	XXX	0.93	NA	0.51	0.03	166431	FALSE			FALSE					TRUE	Increase				
G0453	Continuous intraoperat	RAW	October 2016	35				Remove from screen	CMS-Other - Utilization or	April 2016	XXX	0.6	0.30	NA	0.04	373272	FALSE			FALSE					TRUE	Remove from Screen				
G0456	Negative pressure wou	Negative Pressure Wound Ther	January 2014	17				RUC recommended to survey t	CMS Request - Final Rule	November 2012							FALSE			TRUE	In January 2013, t May 2013	28	Complete		TRUE	Deleted from CPT				
G0457	Negative pressure wou	Negative Pressure Wound Ther	January 2014	17				RUC recommended to survey t	CMS Request - Final Rule	November 2012							FALSE			TRUE	In January 2013, t May 2013	28	complete		TRUE	Deleted from CPT				
G0500	Moderate sedation services provided by the same phys		January 2021	29				Maintain	CMS-Other - Utilization or	October 2020	XXX	0.1	0.04	1.55	0.02	325088	FALSE			FALSE					TRUE	Remove from Screen				
G0506	Comprehensive assessment of and care planning for pa		October 2021	20				Request CMS Delete	CMS-Other - Utilization or	October 2020	ZZZ	0.87	0.37	0.90	0.06	94929	FALSE			FALSE					TRUE	Request CMS Delete				
G2010	Remote evaluation of re	RAW	September 2022	13	April 2023	RUC	AADA, AAFP, AC	Refer to CPT to review by the C	CMS-Other - Utilization or	April 2022	XXX	0.18	0.08	0.17	0.01	7599	FALSE			TRUE	In April 2022, the	February 2023			FALSE					
G2012	Brief communication te	RAW	September 2022	13	April 2023	RUC	AAFP, ACP, ANA	Refer to CPT to review by the C	CMS-Other - Utilization or	April 2022	XXX	0.25	0.10	0.15	0.02	198513	FALSE			TRUE	In April 2022, the	February 2023			FALSE					
G2066	Interrogation device ev	Remote Interrogation Device Ev	January 2023	20			ACC, HRS	PE Inputs	Contractor Priced High Vc	April 2022	XXX	0	0.00	0.00	0.00	1090278	FALSE			FALSE					TRUE	PE Only				
G6001	Ultrasonic guidance for placement of radiation therapy		April 2022	16	April 2024	RAW	AADA, ASTRO	Review in 2 years	CMS-Other - Utilization or	October 2020	XXX	0.58	NA	4.78	0.03	151321	FALSE			FALSE	The RUC identified G6001 via the CMS/Other Source U				FALSE					
G6002	Stereoscopic x-ray guidance for localization of target vc		January 2018	31				Remove from screen	CMS-Other - Utilization or	October 2017	XXX	0.39	NA	1.81	0.03	968239	FALSE			FALSE					TRUE	Remove from Screen				
G6012	Radiation treatment delivery,3 or more separate treatn		January 2021	29	Septembe	RAW		Review action plan	CMS-Other - Utilization or	October 2020	XXX	0	NA	7.01	0.02	306208	FALSE			FALSE					FALSE					
G6013	Radiation treatment delivery,3 or more separate treatn		January 2021	29	Septembe	RAW		Review action plan	CMS-Other - Utilization or	October 2020	XXX	0	NA	7.03	0.02	162847	FALSE			FALSE					FALSE					
G6014	Radiation treatment de	RAW	October 2019	17				Remove from screen	CMS-Other - Utilization or	January 2019	XXX	0	NA	6.99	0.02	11600	FALSE			FALSE					TRUE	Remove from screen				
G6015	Intensity modulated treatment delivery, single or multi		January 2021	29	Septembe	RAW		Review action plan	CMS-Other - Utilization or	October 2020	XXX	0	NA	10.73	0.04	1129279	FALSE			FALSE					FALSE					
G6017	Intra-fraction localizatic	RAW	September 2022	13			ASTRO	Removed from screen	Contractor Priced High Vc	April 2022	YYY	0	0.00	0.00	0.00	90376	FALSE			FALSE					TRUE	Remove from Screen				
GPCX1	Visit complexity inherer	Visit Complexity E/M Add-On	January 2020	34				No recommendation on physic	CMS Request - Final Rule	November 2019							FALSE			FALSE					TRUE	N/A				
P3001	Screening papanicolaou	Cytopathology Cervical/Vaginal	April 2018	26			CAP	0.42	CMS-Other - Utilization or	October 2017	XXX	0.26	0.41	0.41	0.01	1217	FALSE			FALSE					TRUE	Maintain				
Q0091	Screening papanicolaou	RAW	January 2019	37			No Specialty Soc	RUC recommended to survey t	CMS-Other - Utilization or	October 2018	XXX	0.37	0.15	0.90	0.02	463178	FALSE			FALSE					TRUE	Maintain				

RUC Referrals to CPT Editoral Panel - Outstanding Issues

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
0042T	**Cerebral perfusion analysis using computed tomography with contrast administration, including post-processing of parametric maps with determination of cerebral blood flow, cerebral blood volume, and mean transit time**	High Volume Category III Codes 2022	September 2022	ACR, ASNR	May 2023

Background: In April 2022, the Relativity Assessment Workgroup identified this Category III code with 2020 Medicare utilization over 1,000. The Workgroup requested an action plan for September 2022. In September 2022, the specialty societies indicated and the RUC supports a submission of a coding application for CPT May 2023.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
25447	**Arthroplasty, interposition, intercarpal or carpometacarpal joints**	Codes Reported Together 75% or More-Part5	September 2022	AAOS, ASSH	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for the following 26480 and 25447. In September 2022, the RUC referred codes 25480 and 25447 to the CPT Editorial Panel for a code bundling solution in CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
26480	**Transfer or transplant of tendon, carpometacarpal area or dorsum of hand; without free graft, each tendon**	CMS Fastest Growing / Codes Reported Together 75% or More-Part5	September 2022	AAOS, ASSH	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for the following 26480 and 25447. In September 2022, the RUC referred codes 25480 and 25447 to the CPT Editorial Panel for a code bundling solution in CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37220	**Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37221	**Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37222	**Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty (list separately in addition to code for primary procedure)**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37223	**Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37224	**Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal angioplasty**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37225	**Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with atherectomy, includes angioplasty within the same vessel, when performed**	High Volume Growth1 / PE Screen - High Cost Supplies	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37226	**Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37227	**Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed**	High Volume Growth1 / PE Screen - High Cost Supplies	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37228	**Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal angioplasty**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37229	**Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed**	High Volume Growth1 / PE Screen - High Cost Supplies / High Volume Growth5	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37230	**Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37231	**Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37232	**Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal angioplasty (list separately in addition to code for primary procedure)**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37233	**Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37234	**Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
37235	**Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed (list separately in addition to code for primary procedure)**	High Volume Growth1	April 2022	SVS, ACS, SIR, ACR, ACC	February 2024

Background: In October 2018, 37225, 37227 and 37229 services were identified by the PE High Cost Supplies screen for services with non-facility Medicare utilization over 10,000, not reviewed in the last five years and include a supply item greater than $500. The RUC requested an action plan for the January 2019 on how to address these services. The Workgroup reviewed the action plan for these services, noting that CMS repriced these supply items for 2019. The specialty societies indicated that they agreed these supply items were essential to perform CPT codes 37225, 37227 and 37229 and that the current repricing was appropriate. The Workgroup noted that CPT code 37229 was identified on the High Volume Growth screen at this meeting and the Workgroup agreed with the specialty societies to refer this entire family of services to CPT for revision to accommodate new technologies. The specialty societies worked with the CPT Editorial Panel and have submitted multiple coding change proposals. In September 2021, CPT Editorial Panel did not approve of the proposed coding changes suggested unbundling previous bundling efforts. Since this issue were not be addressed via edits at CPT, it was placed back on the Relativity Assessment Workgroup agenda to review. In April 2022, the Relativity Assessment Workgroup discussed the complexity of this issue and determined that coding clarification is still necessary. The Workgroup recommended that a joint CPT/RUC Workgroup be created to develop coding solutions for the endovascular revascularization (37220-37235) code family.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
55700	**Biopsy, prostate; needle or punch, single or multiple, any approach**	CMS High Expenditure Procedural Codes2 / Codes Reported Together 75% or More-Part5	September 2022	ACR, AUA	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 55700 and 76872. In September 2022, the Workgroup referred this issue to CPT for revision of code descriptors and/or introductory language to clarify when to and when not to report CPT code 76872 (ultrasound, transrectal) as a diagnostic procedure when performed at the same time as CPT code 55700 (prostate biopsy).

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
61624	**Transcatheter permanent occlusion or embolization (eg, for tumor destruction, to achieve hemostasis, to occlude a vascular malformation), percutaneous, any method; central nervous system (intracranial, spinal cord)**	Codes Reported Together 75% or More-Part5	September 2022	AANS, ACR, CNS	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 61624/75894 snd 61624/75898. In September 2022, the Workgroup referred this issue to CPT for a code bundling solution in CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
70496	**Computed tomographic angiography, head, with contrast material(s), including noncontrast images, if performed, and image postprocessing**	High Volume Growth1 / CMS Fastest Growing / High Volume Growth2 / High Volume Growth5 / Codes Reported Together 75% or More-Part5	September 2022	ACR, ASNR	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 70496 and 70498. In September 2022, the Workgroup recommended to refer this 70496 and 70498 to the CPT Editorial Panel to create a code bundling solution for CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
70498	**Computed tomographic angiography, neck, with contrast material(s), including noncontrast images, if performed, and image postprocessing**	High Volume Growth1 / CMS Fastest Growing / High Volume Growth5 / Codes Reported Together 75% or More-Part5	September 2022	ACR, ASNR	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 70496 and 70498. In September 2022, the Workgroup recommended to refer this 70496 and 70498 to the CPT Editorial Panel to create a code bundling solution for CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
75894	**Transcatheter therapy, embolization, any method, radiological supervision and interpretation**	Codes Reported Together 75% or More-Part1	September 2022	AANS, ACR, CNS	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 61624/75894 snd 61624/75898. In September 2022, the Workgroup referred this issue to CPT for a code bundling solution in CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
75898	**Angiography through existing catheter for follow-up study for transcatheter therapy, embolization or infusion, other than for thrombolysis**	Codes Reported Together 75% or More-Part1 / CPT Assistant Analysis / Code Reported Together 75% or More-Part5	September 2022	AANS, ACR, CNS	May 2023 February 2014 February 2015

Background: In April 2022, the Workgroup identified codes 61624 and 75898 as performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The specialties recommended and the RUC agreed that a code bundling solution be created for CPT 2025. The RUC noted that CPT code 75898 has been bundled previously with other services but has not ever been surveyed itself.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
76872	**Ultrasound, transrectal;**	CMS High Expenditure Procedural Codes1 / Codes Reported Together 75% or More-Part5	September 2022	ACOG, ACR, AUA	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 55700 and 76872. In September 2022, the Workgroup referred this issue to CPT for revision of code descriptors and/or introductory language to clarify when to and when not to report CPT code 76872 (ultrasound, transrectal) as a diagnostic procedure when performed at the same time as CPT code 55700 (prostate biopsy).

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
93886	**Transcranial doppler study of the intracranial arteries; complete study**	Codes Reported Together 75% or More-Part1 / CMS Request - Final Rule for 2014 / Codes Reported Together 75% or More-Part5	September 2022	AAN, ACC, ACR, SVS	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 93890/93886, 93890/93892, 93892/93886, and 93892/93890. In September 2022, the Workgroup referred this issue to the CPT Editorial Panel to create a code bundling solution for CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
93890	**Transcranial doppler study of the intracranial arteries; vasoreactivity study**	High Volume Growth6 / Codes Reported Together 75% or More-Part5	September 2022	AAN, ACR, ASNR	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 93890/93886, 93890/93892, 93892/93886, and 93892/93890. In September 2022, the Workgroup referred this issue to the CPT Editorial Panel to create a code bundling solution for CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
93892	**Transcranial doppler study of the intracranial arteries; emboli detection without intravenous microbubble injection**	High Volume Growth6 / Codes Reported Together 75% or More-Part5	September 2022	AAN, ACR, ASNR	May 2023

Background: In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 93890/93886, 93890/93892, 93892/93886, and 93892/93890. In September 2022, the Workgroup referred this issue to the CPT Editorial Panel to create a code bundling solution for CPT 2025.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
96920	**Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq cm**	CMS Fastest Growing / CPT Assistant Analysis / High Volume Growth3	April 2022	AADA	February 2023

Background: In October 2015, CPT codes 96920, 96921 and 96922 were identified via the high-volume growth screen with Medicare utilization of 10,000 or more that increased by at least 100% from 2008 through 2013. At that time, the RUC recommended that the specialty societies develop a CPT Assistant article to ensure the codes were being used correctly. The Relativity Assessment Workgroup reviews all issues referred to CPT Assistant to determine if the article addressed the RUC's concerns. In January 2022, the Workgroup reviewed these services, noting that their utilization continues to steadily increase, specifically CPT code 96920. The specialty societies indicated that they believed the growth is appropriate due to changes in treatment and medication for psoriasis. However, due to the continued growth, the Workgroup recommended, and the RUC agreed, that CPT codes 96920, 96921 and 96922 be surveyed for work and practice expense at the April 2022 RUC meeting.

In April 2022, the specialty societies indicated, and the RUC agreed, that CPT codes 96920-96922 be referred to the CPT Editorial Panel for revision. Since their definition was established by CPT in 2002, the approved indications and uses for this treatment modality have expanded beyond what is currently noted in the code descriptors. Indications for this treatment have expanded substantially beyond psoriasis to include laser treatment for other inflammatory skin disorders such as vitiligo, atopic dermatitis, alopecia areata, etc. Based on the expanded indications, the current code descriptors do not capture current practice. These procedures are performed based on the amount of active inflammation and thickness of some of the lesions themselves. Different inflammatory conditions have different clinical appearances and different depths of inflammation associated with them. Therefore, the work is different, based on the types of conditions. The RUC recommends that CPT codes 96920-96922 be referred to the CPT Editorial Panel for review at the September 2022 CPT meeting.

96921 **Laser treatment for inflammatory skin disease (psoriasis); 250 sq cm to 500 sq cm**

Screen	RUC Meeting	Specialty Society:	CPT Meeting
High Volume Growth1 / CMS Fastest Growing / CPT Assistant Analysis / High Volume Growth3	April 2022	AADA	February 2023

Background: In October 2015, CPT codes 96920, 96921 and 96922 were identified via the high-volume growth screen with Medicare utilization of 10,000 or more that increased by at least 100% from 2008 through 2013. At that time, the RUC recommended that the specialty societies develop a CPT Assistant article to ensure the codes were being used correctly. The Relativity Assessment Workgroup reviews all issues referred to CPT Assistant to determine if the article addressed the RUC's concerns. In January 2022, the Workgroup reviewed these services, noting that their utilization continues to steadily increase, specifically CPT code 96920. The specialty societies indicated that they believed the growth is appropriate due to changes in treatment and medication for psoriasis. However, due to the continued growth, the Workgroup recommended, and the RUC agreed, that CPT codes 96920, 96921 and 96922 be surveyed for work and practice expense at the April 2022 RUC meeting.

In April 2022, the specialty societies indicated, and the RUC agreed, that CPT codes 96920-96922 be referred to the CPT Editorial Panel for revision. Since their definition was established by CPT in 2002, the approved indications and uses for this treatment modality have expanded beyond what is currently noted in the code descriptors. Indications for this treatment have expanded substantially beyond psoriasis to include laser treatment for other inflammatory skin disorders such as vitiligo, atopic dermatitis, alopecia areata, etc. Based on the expanded indications, the current code descriptors do not capture current practice. These procedures are performed based on the amount of active inflammation and thickness of some of the lesions themselves. Different inflammatory conditions have different clinical appearances and different depths of inflammation associated with them. Therefore, the work is different, based on the types of conditions. The RUC recommends that CPT codes 96920-96922 be referred to the CPT Editorial Panel for review at the September 2022 CPT meeting.

96922 **Laser treatment for inflammatory skin disease (psoriasis); over 500 sq cm**

Screen	RUC Meeting	Specialty Society:	CPT Meeting
High Volume Growth1 / CMS Fastest Growing / CPT Assistant Analysis	April 2022	AADA	February 2023

Background: In October 2015, CPT codes 96920, 96921 and 96922 were identified via the high-volume growth screen with Medicare utilization of 10,000 or more that increased by at least 100% from 2008 through 2013. At that time, the RUC recommended that the specialty societies develop a CPT Assistant article to ensure the codes were being used correctly. The Relativity Assessment Workgroup reviews all issues referred to CPT Assistant to determine if the article addressed the RUC's concerns. In January 2022, the Workgroup reviewed these services, noting that their utilization continues to steadily increase, specifically CPT code 96920. The specialty societies indicated that they believed the growth is appropriate due to changes in treatment and medication for psoriasis. However, due to the continued growth, the Workgroup recommended, and the RUC agreed, that CPT codes 96920, 96921 and 96922 be surveyed for work and practice expense at the April 2022 RUC meeting.

In April 2022, the specialty societies indicated, and the RUC agreed, that CPT codes 96920-96922 be referred to the CPT Editorial Panel for revision. Since their definition was established by CPT in 2002, the approved indications and uses for this treatment modality have expanded beyond what is currently noted in the code descriptors. Indications for this treatment have expanded substantially beyond psoriasis to include laser treatment for other inflammatory skin disorders such as vitiligo, atopic dermatitis, alopecia areata, etc. Based on the expanded indications, the current code descriptors do not capture current practice. These procedures are performed based on the amount of active inflammation and thickness of some of the lesions themselves. Different inflammatory conditions have different clinical appearances and different depths of inflammation associated with them. Therefore, the work is different, based on the types of conditions. The RUC recommends that CPT codes 96920-96922 be referred to the CPT Editorial Panel for review at the September 2022 CPT meeting.

99183 **Physician or other qualified health care professional attendance and supervision of hyperbaric oxygen therapy, per session**

Screen	RUC Meeting	Specialty Society:	CPT Meeting
CMS-Other - Utilization over 250,000	January 2023	AAFP, UHMS	September 2023

Background: In January 2023, the RUC noted that CMS created G0277 in 2015 to describe the direct practice expense inputs associated with CPT code 99183. In the Final Rule for 2015, CMS commented that CPT code 99183 is used for both professional attendance and supervision and the actual treatment delivery. Stakeholders pointed out that although CMS included the PE inputs for treatment delivery in CPT code 99183, the descriptor describes only attendance and supervision. CMS noted that under the Outpatient Prospective Payment System (OPPS), the treatment is reported using separate treatment code C1300 Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval. Therefore, CMS created code G0277 to report the treatment delivery and to maintain consistency with the OPPS coding. CMS used a timed 30-minute code, which can be used across settings. To value G0277, CMS used the RUC recommended direct PE inputs for 99183 and adjusted them to align with the 30-minute treatment interval. The RUC recommends that CPT code 99183 be referred to CPT by the June 2023 deadline for the September 2023 CPT meeting, for revision to be time-based as well as modified to appropriately describe the treatment delivery, attendance and supervision. Then, subsequently, allow for the deletion of G0277.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
G0277	**Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval**	High Volume Growth8	January 2023	AAFP, UHMS	September 2023

Background: In January 2023, the RUC noted that CMS created G0277 in 2015 to describe the direct practice expense inputs associated with CPT code 99183. In the Final Rule for 2015, CMS commented that CPT code 99183 is used for both professional attendance and supervision and the actual treatment delivery. Stakeholders pointed out that although CMS included the PE inputs for treatment delivery in CPT code 99183, the descriptor describes only attendance and supervision. CMS noted that under the Outpatient Prospective Payment System (OPPS), the treatment is reported using separate treatment code C1300 Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval. Therefore, CMS created code G0277 to report the treatment delivery and to maintain consistency with the OPPS coding. CMS used a timed 30-minute code, which can be used across settings. To value G0277, CMS used the RUC recommended direct PE inputs for 99183 and adjusted them to align with the 30-minute treatment interval. The RUC recommends that CPT code 99183 be referred to CPT by the June 2023 deadline for the September 2023 CPT meeting, for revision to be time-based as well as modified to appropriately describe the treatment delivery, attendance and supervision. Then, subsequently, allow for the deletion of G0277.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
G0396	**Alcohol and/or substance (other than tobacco) misuse structured assessment (e.g., audit, dast), and brief intervention 15 to 30 minutes**	CMS-Other - Utilization over 30,000	January 2018	AAFP, ASA, ASAM	Time Uncertain

Background: In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. This list resulted in 34 services and the RAW requested action plans to be reviewed at the January 2018 meeting. In January 2018, the RUC recommended to maintain the physician work and refer to CPT to editorially remove "screening" from 99408 and 99409 to "assessment" to mirror G0396. At the February 2018 CPT meeting, the Panel postponed until time uncertain this request to revise codes 99408-99409 to identify assessment of alcohol and/or substance abuse. As a rationale for postponement, the Panel said that the service described in this application did not meet the General Criteria for Category I because the proposed service is not unique or well defined, and does not describe a service that is clearly identified and distinguished from existing services already described in CPT by other codes. The Panel's additional rationale for postponement of this item was to allow the relevant specialty societies an opportunity to submit a new code change application to address the differences between assessment and screening services.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
G2010	**Remote evaluation of recorded video and/or images submitted by an established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment**	CMS-Other - Utilization over 20,000-Part3	September 2022	AADA, AAFP, ACP	February 2023

Background: In April 2022, the Relativity Assessment Workgroup identified this CMS/Other source service with 2020 Medicare utilization data over 20,000. The Workgroup requested that action plans be reviewed for these services at the September 2022 meeting to determine if current CPT codes exist to report these services, new CPT codes should be created, or the G code should be surveyed. In September 2022, the RUC referred this issue to CPT to review by the CPT/RUC Telemedicine Office Visits Workgroup.

		Screen	RUC Meeting	Specialty Society:	CPT Meeting
G2012	**Brief communication technology-based service, e.g. virtual check-in, by a physician or other qualified health care professional who can report evaluation and management services, provided to an established patient, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion**	CMS-Other - Utilization over 20,000-Part3	September 2022	AAFP, ACP, ANA	February 2023

Background: In April 2022, the Relativity Assessment Workgroup identified this CMS/Other source service with 2020 Medicare utilization data over 20,000. The Workgroup requested that action plans be reviewed for these services at the September 2022 meeting to determine if current CPT codes exist to report these services, new CPT codes should be created, or the G code should be surveyed. In September 2022, the RUC referred this issue to CPT to review by the CPT/RUC Telemedicine Office Visits Workgroup.

RUC Recommendations to Develop CPT Assistant Articles - Outstanding Issues

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
15769	**Grafting of autologous soft tissue, other, harvested by direct excision (eg, fat, dermis, fascia)**	Site of Service Anomaly - 2017	September 2022	Refer to CPT Assistant. 6.68.	AAOHNS, ASPS	

Background: CPT code 20926 was identified in 2017 as a site of service anomaly, in which the Medicare data from 2013-2016e indicated that it was performed less than 50% of the time in the inpatient setting yet included inpatient hospital Evaluation and Management services within the global period. In May 2018, the CPT Editorial Panel deleted 20926 and created five codes in the Integumentary section to better describe tissue grafting procedures. In October 2018, the RUC flagged CPT code 15769 to be reviewed the after the first year of utilization data is available by the Relativity Assessment Workgroup to evaluate whether the new code is being coded with other codes (ie, closure of donor site) and whether it is being used in non-facility settings. The 2020 Medicare utilization data showed that CPT code 15769 is performed in the inpatient hospital setting 39% of the time, yet includes one hospital discharge visit 99238. The Workgroup noted hat that 20% of these services are being reporting in the office setting by only four individuals. The RUC recommended that a CPT Assistant article be created to clarify that CPT code 15769 should be reported in the facility setting.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
22554	**Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); cervical below c2**	Codes Reported Together 95% or More / Codes Reported Together 75% or More-Part5	September 2022	Refer to CPT Assistant. 17.69	AANS, AAOS, CNS, ISASS, NASS	

Background: In February 2008, this issue was referred to the CPT Editorial Panel for development of coding change proposals to condense pairs into a single code and create new coding structures as part of the codes reported together 95% or more. In Oct 2009, CPT added two codes to report arthrodesis including disk space preparation, discectomy, osteophytectomy and decompression of spinal cord below C2 and each additional interspace. In April 2022, the Workgroup identified code pairs for services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for codes 22554 and 63081. In September 2022, the RUC recommends that this issue be referred to CPT Assistant to educate correct coding for 22554 with 63081 versus bundled codes 22551 and 22552.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
30117	**Excision or destruction (eg, laser), intranasal lesion; internal approach**	RUC recommendation process, not part of RAW	January 2023	Refer to CPT Assistant		

Background: At the September 2022 CPT Editorial Panel meeting, the Panel accepted addition of codes 31242, 31243 to report endoscopic destruction of the posterior nasal nerve with radiofrequency ablation (31242) and with cryoablation (31243). The RUC adopted the report of its Practice Expense Subcommittee in which the RUC recommends a CPT Assistant article be created for CPT code 30117 to address the number of typical units of service performed on the same date which should be one moving forward (not two), and to address possible inappropriate coding.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
51728	**Complex cystometrogram (ie, calibrated electronic equipment); with voiding pressure studies (ie, bladder voiding pressure), any technique**	Codes Reported Together 95% or More / Codes Reported Together 75% or More-Part5	September 2022	Refer to CPT Assistant. 2.11	AUA, ACOG	

Background: Deleted 51772, and 51795 and added three new codes to combine the services. Revised at the February 2009 CPT Meeting. In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 51728/51741 and 51728/51784. In September 2022, the Workgroup recommended that this issue be referred to CPT Assistant to educate providers about the coding and use of complex uroflowmetry. Some providers may believe that 51741 is part of the “pressure-flow” study of 51728 or 51729, but it is not. CPT code 51741 should only be reported if done separately from urodynamic studies, on a separate machine and only when medically necessary/indicated. Additionally, to refer to CPT Assistant (51728/51784) to educate how EMG studies should only be used selectively and when medically necessary.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
51729	**Complex cystometrogram (ie, calibrated electronic equipment); with voiding pressure studies (ie, bladder voiding pressure) and urethral pressure profile studies (ie, urethral closure pressure profile), any technique**	Codes Reported Together 95% or More / Codes Reported Together 75% or More-Part5	September 2022	Refer to CPT Assistant. 2.51	AUA, ACOG	

Background: This service was identified via the codes reported together 95% or more. In February 2009, the CPT Editorial Panel deleted 51772 and 51795, and added three new codes to combine the services. In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 51729/51741 and 51729/51784. In September 2022, the Workgroup referred this issue to CPT Assistant to educate how EMG studies should only be used selectively and when medically necessary.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
51741	**Complex uroflowmetry (eg, calibrated electronic equipment)**	Harvard Valued - Utilization over 100,000 / Codes Reported Together 75% or More-Part5	September 2022	Refer to CPT Assistant. 0.17	AUA	

Background: April 2010, the RUC recommended that the PE Subcommittee reivew the direct practice expense inputs for these service at the October 2010 meeting as the technology has changed. Oct 2010 reviewed PE. In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 51728/51741. In September 2022, the Workgroup recommended that this issue be referred to CPT Assistant to educate providers about the coding and use of complex uroflowmetry. Some providers may believe that 51741 is part of the “pressure-flow” study of 51728 or 51729, but it is not. CPT code 51741 should only be reported if done separately from urodynamic studies, on a separate machine and only when medically necessary/indicated.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
51784	**Electromyography studies (emg) of anal or urethral sphincter, other than needle, any technique**	Codes Reported Together 75% or More-Part2 / CMS High Expenditure Procedural Codes2 / CPT Assistant Analysis 2018 / Codes Reported Together 75% or More-Part5	September 2022	Refer to CPT Assistant. 0.75.	AUA	Feb 2014

Background: In October 2018, the RUC referred to CPT Editorial Panel to add parenthetical and develop CPT assistant article indicating that 51792 and 51784 should not be reported together. In Feb 2014, the CPT Editorial Panel revised the parenthetical notes that follow CPT codes 51784 and 51792 to clarify that these services may not be reported together (editorial only). In the NPRM for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. In October 2018, the Workgroup reviewed a list of RUC referrals for CPT Assistant articles from 2013-2016, Seventeen (17) codes were identified. The Workgroup requested action plans for January 2019. The Workgroup specifically requests that the specialty societies address the following in their action plans: 1.Explain the issue and background of the code and why a CPT Assistant article was create. 2.What was the expected result 3.Did the article address the issues identified with this service4.Is a re-review in a couple years or further action necessary? In January 2019, the RUC recommended to remove this issue from the CPT Assistant analysis as the article address the issues identified. In April 2022, the Workgroup identified services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for 51728/51784 and 51729/51784. In September 2022, the Workgroup referred this issue to CPT Assistant to educate how EMG studies should only be used selectively and when medically necessary.

		Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
63081	**Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, single segment**	Codes Reported Together 75% or More-Part5	September 2022	Refer to CPT Assistant	AANS, AAOS, CNS, ISASS, NASS	

Background: In April 2022, the Workgroup identified code pairs for services performed by the same physician on the same date of service 75% of the time or more. Only groups that totaled allowed charges of $5 million or more were included. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in 2020 Medicare claims data and/or contained at least one ZZZ global service were removed. The Workgroup requested action plans for September 2022 to determine if specific codes bundling solutions should occur for codes 22554 and 63081. In September 2022, the RUC recommends that this issue be referred to CPT Assistant to educate correct coding for 22554 with 63081 versus bundled codes 22551 and 22552.

64590 **Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct or inductive coupling**

Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
Harvard-Valued Annual Allowed Charges Greater than $10 million / Different Performing Specialty from Survey/ RUC recommendation process, not part of RAW screens	April 2022	CPT Assistant Article	ACOG, AUA	

Background: CMS identified this service but it did not meet the screen criteria, allowed charges are ~$1 million. In October 2017, this service was identified as being performed by a different specialty than who originally surveyed this service. The RAW requests an action plan to review at the January 2018 meeting. In January 2018, the RUC recommeded to refer to CPT for revision to properly describe the service as performed by urology. The specialty societies indicated that they do not intend on submitting a coding change application to somehow change the descriptor to describe implantation of a generator by urologists as different from implantation of a generator by gynecologists or general surgeons. It is the same work - make an incision, create a subcutaneous pocket, insert (an almost identical) medtronic generator, and close. Addititionally noting, this service was never surveyed (previous 2006 change was editorial) and should not have been on this screen. Removed from screen. In February 2022, the CPT Editorial Panel created several new integrated neurostimulator Category I and Category III codes, the descriptors, guidelines and parentheticals for codes 64590 and 64595 were concurrently revised to clarify that 64590 and 64595 are only to be used for neurostimulator pulse generators or receivers that require pocket creation and include a detachable connection to a separate electrode array (non-integrated systems). In April 2022, the PE Subcommittee discussion culminated in a request for a CPT Assistant article to clarify several issues involving the use of the EQ209 programmer, neurostimulator (w-printer) and to provide clear and consistent instruction to all users of the programming and insertion codes. The stimulator is used to check the impedance of the device once placed for the initial code 64590 and is present for the entire procedure. To the extent there is additional stimulation and programming, then an additional code would be reported. An article is needed to ensure that individuals are appropriately reporting the stimulation and programming with code 95972 and not just merely checking the impedance. The RUC recommends that a CPT Assistant article be developed to clarify the appropriate use of CPT codes 64590 and 64595 as reported with other codes.

64595 **Revision or removal of peripheral or gastric neurostimulator pulse generator or receiver**

Screen:	RUC Meeting:	RUC Rec:	Specialty Society:	CPT Asst Status:
RUC recommendation process, not part of RAW screens	April 2022	CPT Assistant Article	ACOG, AUA	

Background: In February 2022, the CPT Editorial Panel created several new integrated neurostimulator Category I and Category III codes, the descriptors, guidelines and parentheticals for codes 64590 and 64595 were concurrently revised to clarify that 64590 and 64595 are only to be used for neurostimulator pulse generators or receivers that require pocket creation and include a detachable connection to a separate electrode array (non-integrated systems). In April 2022, the PE Subcommittee discussion culminated in a request for a CPT Assistant article to clarify several issues involving the use of the EQ209 programmer, neurostimulator (w-printer) and to provide clear and consistent instruction to all users of the programming and insertion codes. The stimulator is used to check the impedance of the device once placed for the initial code 64590 and is present for the entire procedure. To the extent there is additional stimulation and programming, then an additional code would be reported. An article is needed to ensure that individuals are appropriately reporting the stimulation and programming with code 95972 and not just merely checking the impedance. The RUC recommends that a CPT Assistant article be developed to clarify the appropriate use of CPT codes 64590 and 64595 as reported with other codes.

Physician Time from RUC Meeting:
January 2023 (CPT 2024)

CPT Code	Pre-Service Evaluation	Pre-Service Positioning	Pre-Service Scrub Dress & Wait	Intra-Service	Immediate Post Service	99211	99212	99213	99214	99215	99231	99232	99233	99238	99239	99291	99292	Total Time
30117	20	3	5	30	10			2						0.5				133
30118	30	3	10	60	20			3						0.5				211
65778	17	1	5	5	5													33
65779	13	1	5	20	7													46
65780	13	1	6	35	10		1	4						0.5				192
93297	5			6	5													16
93298	5			7	5													17
93593	40	3	15	45	45													148
93594	46	3	15	60	48													172
93595	46	3	15	48	46													158
93596	50	3	15	60	53													181
93597	55	3	15	83	60													216
93598				20														20
27278	33	10	11	46	20			2						0.5				185
22836	60	30	15	210	45			2	1		1	1	1	1				599
22837	60	30	15	260	45			2	1		1	1	1	1				649
22838	60	30	15	260	45			2	1		1	1	1	1				649
33276	40	3	6	120	25				1					0.5				253
33277				120														120
33278	40	3	6	120	28			1						0.5				239
33279	40	3	6	120	28			1						0.5				239
33280	18	1	6	60	28			1						0.5				155
33281	40	3	6	110	28				1					0.5				246
33287	18	1	6	70	23				1					0.5				177
33288	40	3	6	120	28				1					0.5				256
31242	17	1	5	18	10													51
31243	17	1	5	20	10													53
52284	25	5	6	20	15													71
58580	33	8	10	45	15			1						0.5				153
67516	17	1	5	5	5													33
75580	5			11	6													22
93584				10														10
93585				10														10
93586				12														12
93587				16														16
93588				17														17
93150	10			20	8													38
93151	10			20	6													36
93152	10			25	10													45
93153	7			13	5													25
92972				30														30

Detailed Description of Pre-Service Time Packages (Minutes)

		FACILITY				NON-FAC	
		1	2	3	4	5**	6
	Total Pre-Service Time	**20**	**25**	**51**	**63**	**8**	**23**
	CATEGORY SUBTOTALS						
A	Pre-Service Evaluation (IWPUT =0.0224)	13	18	33	40	7	17
B	Pre-Service Positioning (IWPUT = 0.0224)	1	1	3	3	0	1
C	Pre-Service Scrub, Dress and Wait (IWPUT =0.0081)	6	6	15	20	1	5
	DETAILS						
A	History and Exam (Performance and review of appropriate Pre-Tests)	5	10	10	15	4	9
A	Prepare for Procedure (Check labs, plan, assess risks, review procedure)	2	2	2	4	1	1
A	Communicate with patient and/or family (Discuss procedure/ obtain consent)	3	3	5	5	2	3
A	Communicate with other professionals	0	0	5	5	0	2
A	Check/set-up room, supplies and equipment	1	1	5	5	0	1
A	Check/ prepare patient readiness (Gown, drape, prep, mark)	1	1	5	5	0	1
A	Prepare/ review/ confirm procedure	1	1	1	1	0	0
B	Perform/ supervise patient positioning	1	1	3	3	0	1
C	Administer local/topical anesthesia	1	1	0	0	1	5
C	Observe (wait anesthesia care)	0	0	10	15	0	0
C	Dress and scrub for procedure	5	5	5	5	0	0

**If the procedure does not require local anesthesia, 1 minute should be removed from pre-service time

1 Straightforward Patient/Straightforward Procedure (No anesthesia care)
2 Difficult Patient/Straightforward Procedure (No anesthesia care)
3 Straightforward Patient/Difficult Procedure
4 Difficult Patient/Difficult Procedure
5 Procedure with minimal anesthesia care (If no anesthesia care deduct 1 minute)
6 Procedure with local/topical anesthesia care requiring wait time for anesthesia to take effect

Additional Positioning Times for Spinal Surgical Procedures

SS1	Anterior Neck Surgery (Supine) (eg ACDF)	15 Minutes
SS2	Posterior Neck Surgery (Prone) (eg laminectomy)	25 Minutes
SS3	Posterior Thoracic/Lumbar (Prone) (eg laminectomy)	15 Minutes
SS4	Lateral Thoracic/Lumbar (Lateral) (eg corpectomy)	25 Minutes
SS5	Anterior Lumbar (Supine) (eg ALIF)	15 Minutes

Additional Positioning Times for Spinal Injection Procedures

SI1	Anterior Neck Injection (Supine) (eg discogram)	7 Minutes
SI2	Posterior Neck Injection (Prone) (eg facet)	5 Minutes
SI3	Posterior Thoracic/Lumbar (Prone) (eg epidural)	5 Minutes
SI4	Lateral Thoracic/Lumbar (Lateral) (eg discogram)	7 Minutes

Additional Positioning Times for Urological Procedures

U1	Dorsal Lithotomy	5 Minutes

Notes:

- Roll-over cells for additional detail where available
- Straightforward procedure: Integumentary, Non-incisional endoscopy, natural orifice

Detailed Description of Facility Based Post-Service Time Packages (Minutes)						
	7A Local Anesthesia/ Straightforward Procedure	**7B Local Anesthesia/ Complex Procedure**	**8A IV Sedation/ Straightforward Procedure**	**8B IV Sedation/ Complex Procedure**	**9A General Anesthesia or Complex Regional Block/ Straightforward Procedure**	**9B General Anesthesia or Complex Regional Block/Complex Procedure**
Total Post-Service Time	**18**	**21**	**25**	**28**	**30**	**33**
Details:						
Application of Dressing[1]	2	2	2	2	2	2
Transfer of supine patient off table	1	1	1	1	1	1
Operative Note	5	5	5	5	5	5
Monitor patient recovery/stabilization	1	1	5	5	10	10
Communication with patient and/or family	5	5	5	5	5	5
Written post-operative note	2	5	2	5	2	5
Post-Operative Orders and Order Entry	2	2	5	5	5	5

Advisors may request additional time for circumstances that require additional work beyond the type of work described

1 This represents a simple dressing

CPT	RUC Recommended PLI Crosswalk
30117	30117
30118	30118
65778	65778
65779	65779
65780	65780
27278	27096
22836	22802
22837	22802
22838	22802
33276	33270
33277	33270
33278	33235
33279	33234
33280	33223
33281	33215
33287	33223
33288	33235
31242	69706
31243	69706
52284	52276
58580	57022
67516	67028
75580	78451
93584	93597
93585	93597
93586	93597
93587	93597
93588	93597
93150	93281
93151	93280
93152	95810
93153	93280
92972	92928
99459	58301
93593	93593
93594	93594
93595	93595
93596	93596
93597	93597
93598	93598
G0277	G0277
76881	76881
76882	76882
76883	76883
G2066	G2066
93297	93297
93298	93298

CPT Code	RBCS_ID (exluding 6th digit major/minor procedure indicator)	RBCS_Cat	RBCS_Cat_Desc	RBCS_Cat_Subcat	RBCS_SubCat_Desc	RBCS_FamNumb	RBCS_Family_Desc
30117	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
30118	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
65778	PPE0	P	Procedure	PE	Eye	0	No RBCS Family
65779	PPE0	P	Procedure	PE	Eye	0	No RBCS Family
65780	PPE0	P	Procedure	PE	Eye	0	No RBCS Family
76881	IIU0	I	Imaging	IU	Ultrasound	0	No RBCS Family
76882	IIU0	I	Imaging	IU	Ultrasound	0	No RBCS Family
76883	IIU0	I	Imaging	IU	Ultrasound	0	No RBCS Family
93297	TTC0	T	Test	TC	Cardiography	0	No RBCS Family
93298	TTC0	T	Test	TC	Cardiography	0	No RBCS Family
93593	PPC2	P	Procedure	PC	Cardiovascular	2	Percutaneous Transcatheterization
93594	PPC2	P	Procedure	PC	Cardiovascular	2	Percutaneous Transcatheterization
93595	PPC2	P	Procedure	PC	Cardiovascular	2	Percutaneous Transcatheterization
93596	PPC2	P	Procedure	PC	Cardiovascular	2	Percutaneous Transcatheterization
93597	PPC2	P	Procedure	PC	Cardiovascular	2	Percutaneous Transcatheterization
93598	PPC2	P	Procedure	PC	Cardiovascular	2	Percutaneous Transcatheterization
27278	PPM20	P	Procedure	PM	Musculoskeletal	20	Arthrodesis - Spine
22836	PPM0	P	Procedure	PM	Musculoskeletal	0	No RBCS Family
22837	PPM0	P	Procedure	PM	Musculoskeletal	0	No RBCS Family
22838	PPM0	P	Procedure	PM	Musculoskeletal	0	No RBCS Family
33276	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33277	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33278	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33279	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33280	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33281	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33287	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
33288	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
31242	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
31243	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
52284	PPO10	P	Procedure	PO	Other organ systems	10	Cystourethroscopy
58580	PPO0	P	Procedure	PO	Other organ systems	0	No RBCS Family
67516	PPE0	P	Procedure	PE	Eye	0	No RBCS Family
75580	IIC7	I	Imaging	IC	CT Scan	7	CT/CTA - Chest
93584	PPC0	P	Procedure	PC	Cardiovascular	0	No RBCS Family
93585	PPC1	P	Procedure	PC	Cardiovascular	1	No RBCS Family
93586	PPC2	P	Procedure	PC	Cardiovascular	2	No RBCS Family
93587	PPC3	P	Procedure	PC	Cardiovascular	3	No RBCS Family
93588	PPC4	P	Procedure	PC	Cardiovascular	4	No RBCS Family
99459	EEV0	E	E & M	EV	Office/outpatient services	0	No RBCS Family
93150	TTX0	T	Test	TX	Test - Miscellaneous	0	No RBCS Family
93151	TTX0	T	Test	TX	Test - Miscellaneous	0	No RBCS Family
93152	TTX0	T	Test	TX	Test - Miscellaneous	0	No RBCS Family
93153	TTX0	T	Test	TX	Test - Miscellaneous	0	No RBCS Family
92972	PPC31	P	Procedure	PC	Cardiovascular	31	Percutaneous Coronary Artery Angioplasty and Stenting
G0277	RRX34	R	Treatment	RX	Treatment - Miscellaneous	34	Hyperbaric Oxygen
G2066	TTC0	T	Test	TC	Cardiography	0	No RBCS Family

CPT Source	Deleted	Source 2021 Utilization	New/ Revised Code	New/Revised Code Utilization (reference 2020)	Percent	Source RVU	RUC Rec RVU	RUC Tab	New/ Revised Total RVUs	Total Source RVUs
0775T	D	0	27278	0	1.000	0.00	7.86	04 Dorsal Sacroiliac Joint Arthrodesis	0	0
0656T	R	0	22836	0	0.700	0.00	32.00	05 Vertebral Body Tethering	0	0
0657T	R	0	22837	0	0.700	0.00	35.50	05 Vertebral Body Tethering	0	0
22899		1,046	22838	0	0.000	0.00	36.00	05 Vertebral Body Tethering	0	0
0656T	R	0	0790T	0	0.300	0.00	0.00	05 Vertebral Body Tethering	0	0
0657T	R	0	0790T	0	0.300	0.00	0.00	05 Vertebral Body Tethering	0	0
0424T	D	51	33276	51	1.000	0.00	9.50	06 Phrenic Nerve Stimulation System	485	0
0425T	D	1	33277	1	1.000	0.00	5.43	06 Phrenic Nerve Stimulation System	5	0
0428T	D	1	33278	1	1.000	0.00	9.55	06 Phrenic Nerve Stimulation System	10	0
0429T	D	0	Bundled into 33278	0	0.000	0.00	0.00	06 Phrenic Nerve Stimulation System	0	0
0430T	D	1	Bundled into 33278	0	0.000	0.00	0.00	06 Phrenic Nerve Stimulation System	0	0
0429T	D	0	33279	0	1.000	0.00	5.42	06 Phrenic Nerve Stimulation System	0	0
0430T	D	1	33279	1	1.000	0.00	5.42	06 Phrenic Nerve Stimulation System	5	0
0428T	D	1	33280	0	0.000	0.00	3.04	06 Phrenic Nerve Stimulation System	0	0
0432T	D	2	33281	1	0.500	0.00	6.00	06 Phrenic Nerve Stimulation System	6	0
0433T	D	0	33281	0	0.500	0.00	6.00	06 Phrenic Nerve Stimulation System	0	0
0431T	D	2	33287	2	1.000	0.00	6.05	06 Phrenic Nerve Stimulation System	12	0
0432T	D	2	33288	1	0.500	0.00	8.51	06 Phrenic Nerve Stimulation System	9	0
0433T	D	0	33288	0	0.500	0.00	8.51	06 Phrenic Nerve Stimulation System	0	0
0435T	D	105	93150	15	0.143	0.00	0.85	06 Phrenic Nerve Stimulation System	13	0
0435T	D	105	93151	90	0.857	0.00	0.80	06 Phrenic Nerve Stimulation System	72	0
0436T	D	0	93152	0	1.000	0.00	0.00	06 Phrenic Nerve Stimulation System	0	0
0434T	D	20	93153	20	1.000	0.00	0.43	06 Phrenic Nerve Stimulation System	9	0
0426T	D	0	Savings	0	1.000	0.00	0.00	06 Phrenic Nerve Stimulation System	0	0
0427T	D	0	Savings	0	1.000	0.00	0.00	06 Phrenic Nerve Stimulation System	0	0
30117		19,706	30117	4,877	0.247	3.26	3.91	07 Posterior Nasal Nerve Ablation	19,069	15,899
30118		67	30118	67	1.000	9.92	9.55	07 Posterior Nasal Nerve Ablation	640	665
30117		19,706	31242	4,926	0.250	3.26	2.70	07 Posterior Nasal Nerve Ablation	13,301	16,060
30117		19,706	31243	9,902	0.503	3.26	2.70	07 Posterior Nasal Nerve Ablation	26,736	32,281
30999		472	31242	100	0.212	0.00	2.70	07 Posterior Nasal Nerve Ablation	270	0
30999		472	31243	200	0.424	0.00	2.70	07 Posterior Nasal Nerve Ablation	540	0
30999		472	30999	172	0.364	0.00	0.00	07 Posterior Nasal Nerve Ablation	0	0
0499T		1	52284	1	1.000	0.00	3.10	08 Cystourethroscopy w Urethral Therapeutic Drug Delivery	3	0
0404T		0	58580	0	1.000	0.00	7.21	09 Transcervical RF Ablation of Uterine Fibroids	0	0
0465T	D	0	67516	0	1.000	0.00	1.53	10 Suprachoroidal Injection	0	0
0501T	D	729	75580	729	1.000	0.00	0.75	11 Fractional Flow Reserve with CT	547	0
0502T	D	228	75580	228	1.000	0.00	0.75	11 Fractional Flow Reserve with CT	171	0
0503T	D	280	75580	280	1.000	0.00	0.75	11 Fractional Flow Reserve with CT	210	0
0504T	D	6,034	75580	6,034	1.000	0.00	0.75	11 Fractional Flow Reserve with CT	4,526	0
93799		1,052	92972	50	0.048	0.00	2.97	12 Percutaneous Coronary Interventions	149	0
93799		1,052	93799	72	0.068	0.00	0.00	12 Percutaneous Coronary Interventions	0	0
Currently Bundled into E/M codes		0	99459	1,600,000	1.000	0.00	0.00	13 Pevlic Exam (PE Only)	0	0
93593		0	93593	0	1.000	3.99	3.99	14 Venography Services	0	0
93594		0	93594	0	1.000	6.10	6.10	14 Venography Services	0	0
93595		0	93595	0	1.000	5.50	6.00	14 Venography Services	0	0
93596		0	93596	0	1.000	6.84	7.91	14 Venography Services	0	0
93597		0	93597	0	1.000	8.88	9.99	14 Venography Services	0	0
93598		0	93598	0	1.000	1.44	1.75	14 Venography Services	0	0

CPT Source	Deleted	Source 2021 Utilization	New/ Revised Code	New/Revised Code Utilization (reference 2020)	Percent	Source RVU	RUC Rec RVU	RUC Tab	New/ Revised Total RVUs	Total Source RVUs
93799		1,052	93584	450	0.428	0.00	1.20	14 Venography Services	540	0
93799		1,052	93585	150	0.143	0.00	1.13	14 Venography Services	170	0
93799		1,052	93586	90	0.086	0.00	1.43	14 Venography Services	129	0
93799		1,052	93587	150	0.143	0.00	2.11	14 Venography Services	317	0
93799		1,052	93588	90	0.086	0.00	2.13	14 Venography Services	192	0
96549		243	96547	183	0.753	0.00	0.00	15 Hyperthermic Intraperitoneal Chemotherapy	0	0
96549		243	96548	50	0.206	0.00	0.00	15 Hyperthermic Intraperitoneal Chemotherapy	0	0
96549		243	96549	10	0.041	0.00	0.00	15 Hyperthermic Intraperitoneal Chemotherapy	0	0
G0277		139,997	G0277	139,997	1.000	0.00	0.00	16 Hyperbaric Oxygen Under Pressure (PE Only)	0	0
65778		44,738	65778	44,738	1.000	1.00	0.84	18 Ocular Surface Amniotic Membrane Placement/Reconstruction	37,580	44,738
65779		621	65779	621	1.000	2.50	1.75	18 Ocular Surface Amniotic Membrane Placement/Reconstruction	1,087	1,553
65780		1,500	65780	1,500	1.000	7.81	7.03	18 Ocular Surface Amniotic Membrane Placement/Reconstruction	10,545	11,715
76881		181,541	76881	181,541	1.000	0.90	0.90	19 Neuromuscular Ultrasound (PE Only)	163,387	163,387
76882		279,657	76882	279,657	1.000	0.69	0.69	19 Neuromuscular Ultrasound (PE Only)	192,963	192,963
76883		0	76883	0	1.000	1.21	1.21	19 Neuromuscular Ultrasound (PE Only)	0	0
93297		542,980	93297	542,980	1.000	0.52	0.52	20 Remote Interrogation Device Evaluation - Cardiovascular	282,350	282,350
93298		957,280	93298	957,280	1.000	0.52	0.52	20 Remote Interrogation Device Evaluation - Cardiovascular	497,786	497,786
G2066		1,090,278	G2066	1,090,278	1.000	0.00	0.00	20 Remote Interrogation Device Evaluation - Cardiovascular	0	0
									1,253,830	1,259,396

Total Source RVUs		1,259,396
Total New/Revised RVUs		1,253,830
RVU Difference		5,567
CF		33.8872
CF Redistribution	**$**	**188,634**

New Technology/New Services List

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0001A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, diluent reconstituted; first dose	Dec 2020	Pfizer-SARS-CoV-2-IA		CPT 2020	April 2025		☐
0002A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, diluent reconstituted; second dose	Dec 2020	Pfizer-SARS-CoV-2-IA		CPT 2020	April 2025		☐
0003A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, diluent reconstituted; third dose	Aug 2021	Pfizer-SARS-CoV-2-IA		CPT 2021	April 2025		☐
0004A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, diluent reconstituted; booster dose	Oct 2021	Pfizer-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0011A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 100 mcg/0.5 ml dosage; first dose	Dec 2020	Moderna-SARS-CoV-2-IA		CPT 2020	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0012A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 100 mcg/0.5 ml dosage; second dose	Dec 2020	Moderna-SARS-CoV-2-IA		CPT 2020	April 2025		☐
0013A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 100 mcg/0.5 ml dosage; third dose	Aug 2021	Moderna-SARS-CoV-2-IA		CPT 2021	April 2025		☐
0021A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, dna, spike protein, chimpanzee adenovirus oxford 1 (chadox1) vector, preservative free, 5x1010 viral particles/0.5 ml dosage; first dose	Jan 2021	AstraZeneca-SARS-CoV-2-IA	34	CPT 2021	April 2025		☐
0022A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, dna, spike protein, chimpanzee adenovirus oxford 1 (chadox1) vector, preservative free, 5x1010 viral particles/0.5 ml dosage; second dose	Jan 2021	AstraZeneca-SARS-CoV-2-IA	34	CPT 2021	April 2025		☐
0031A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, dna, spike protein, adenovirus type 26 (ad26) vector, preservative free, 5x1010 viral particles/0.5 ml dosage; single dose	Jan 2021	Janssen-SARS-CoV-2-IA	34	CPT 2021	April 2025		☐
0041A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, recombinant spike protein nanoparticle, saponin-based adjuvant, preservative free, 5 mcg/0.5 ml dosage; first dose	Apr 2021	Novavax-SARS-CoV-2-IA	27	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0042A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, recombinant spike protein nanoparticle, saponin-based adjuvant, preservative free, 5 mcg/0.5 ml dosage; second dose	Apr 2021	Novavax-SARS-CoV-2-IA	27	CPT 2021	April 2025		☐
0044A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, recombinant spike protein nanoparticle, saponin-based adjuvant, preservative free, 5 mcg/0.5 mL dosage; booster dose	Dec 2022	Novavax, Moderna Pfizer COVID IA	--	CPT 2022	April 2025		☐
0051A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, tris-sucrose formulation; first dose	Oct 2021	Pfizer Tris-Sucrose-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0052A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, tris-sucrose formulation; second dose	Oct 2021	Pfizer Tris-Sucrose-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0053A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, tris-sucrose formulation; third dose	Oct 2021	Pfizer Tris-Sucrose-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0054A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 30 mcg/0.3 ml dosage, tris-sucrose formulation; booster dose	Oct 2021	Pfizer Tris-Sucrose-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0064A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 50 mcg/0.25 ml dosage, booster dose	Oct 2021	Moderna Booster-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0071A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 10 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; first dose	Oct 2021	Pfizer Tris-Sucrose-Age5-11-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0072A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 10 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; second dose	Oct 2021	Pfizer Tris-Sucrose-Age5-11-SARS-CoV-2-IA	24	CPT 2021	April 2025		☐
0073A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 10 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; third dose	Feb 2022	Pfizer (5-11) and (6 mos-5 yrs) COVID IA	--	CPT 2022	April 2025		☐
0074A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 10 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; booster dose	Jun 2022	Pfizer-BioNTech Tris-Sucrose Age 5-11, Booster	--	CPT 2022	April 2025		☐
0081A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 3 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; first dose	Feb 2022	Pfizer (5-11) and (6 mos-5 yrs) COVID IA	--	CPT 2022	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0082A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 3 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; second dose	Feb 2022	Pfizer (5-11) and (6 mos-5 yrs) COVID IA	--	CPT 2022	April 2025		☐
0083A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 3 mcg/0.2 ml dosage, diluent reconstituted, tris-sucrose formulation; third dose	July 2022	Pfizer and Moderna Pediatric COVID IA	--	CPT 2022	April 2025		☐
0091A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, spike protein, preservative free, 50 mcg/0.5 mL dosage; first dose, when administered to individuals 6 through 11 years	July 2022	Pfizer and Moderna Pediatric COVID IA	--	CPT 2022	April 2025		☐
0092A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, spike protein, preservative free, 50 mcg/0.5 mL dosage; second dose, when administered to individuals 6 through 11 years	July 2022	Pfizer and Moderna Pediatric COVID IA	--	CPT 2022	April 2025		☐
0093A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, spike protein, preservative free, 50 mcg/0.5 mL dosage; third dose, when administered to individuals 6 through 11 years	July 2022	Pfizer and Moderna Pediatric COVID IA	--	CPT 2022	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0094A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 50 mcg/0.5 ml dosage, booster dose	Mar 2022	Moderna Booster-SARS-CoV-2-IA- Full Dose	--	CPT 2022	April 2025		☐
0104A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, monovalent, preservative free, 5 mcg/0.5 ml dosage, adjuvant as03 emulsion, booster dose	Jun 2022	Sanofi-GSK, Booster	--	CPT 2022	April 2025		☐
0111A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 25 mcg/0.25 ml dosage; first dose	Jun 2022	Moderna Age 6 months-5 years	--	CPT 2022	April 2025		☐
0112A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) vaccine, mrna-lnp, spike protein, preservative free, 25 mcg/0.25 ml dosage; second dose	Jun 2022	Moderna Age 6 months-5 years	--	CPT 2022	April 2025		☐
0113A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, spike protein, preservative free, 25 mcg/0.25 mL dosage; third dose	July 2022	Pfizer and Moderna Pediatric COVID IA	--	CPT 2022	April 2025April 20		☐
0124A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, bivalent spike protein, preservative free, 30 mcg/0.3 mL dosage, tris-sucrose formulation, booster dose	Sep 2022	Pfizer and Moderna Bivalent Boosters	--	CPT 2022	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
0134A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, spike protein, bivalent, preservative free, 50 mcg/0.5 mL dosage, booster dose	Sep 2022	Pfizer and Moderna Bivalent Boosters	--	CPT 2022	April 2025		☐
0144A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRN-LNP, spike protein, bivalent, preservative free, 25 mcg/0.25 mL dosage, booster dose	Sep 2022	Pfizer and Moderna Bivalent Boosters	--	CPT 2022	April 2025		☐
0154A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, bivalent spike protein, preservative free, 10 mcg/0.2 mL dosage, diluent reconstituted, tris-sucrose formulation, booster dose	Sep 2022	Pfizer and Moderna Bivalent Boosters	--	CPT 2022	April 2025		☐
0164A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, spike protein, bivalent, preservative free, 10 mcg/0.2 mL dosage, booster dose	Dec 2022	Novavax, Moderna Pfizer COVID IA	--	CPT 2022	April 2025		☐
0173A	Immunization administration by intramuscular injection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) vaccine, mRNA-LNP, bivalent spike protein, preservative free, 3 mcg/0.2 mL dosage, diluent reconstituted, tris-sucrose formulation, third dose	Dec 2022	Novavax, Moderna Pfizer COVID IA	--	CPT 2022	April 2025		☐
10011	Fine needle aspiration biopsy, including mr guidance; first lesion	Jan 2018	Fine Needle Aspiration	04	CPT 2019	April 2023		☐
10012	Fine needle aspiration biopsy, including mr guidance; each additional lesion (list separately in addition to code for primary procedure)	Jan 2018	Fine Needle Aspiration	04	CPT 2019	April 2023		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
14302	Adjacent tissue transfer or rearrangement, any area; each additional 30.0 sq cm, or part thereof (list separately in addition to code for primary procedure)	Apr 2009	Adjacent Tissue Transfer	4	CPT 2010	October 2015	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
15271	Application of skin substitute graft to trunk, arms, legs, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15272	Application of skin substitute graft to trunk, arms, legs, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (list separately in addition to code for primary procedure)	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15273	Application of skin substitute graft to trunk, arms, legs, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15274	Application of skin substitute graft to trunk, arms, legs, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (list separately in addition to code for primary procedure)	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15275	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
15276	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (list separately in addition to code for primary procedure)	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15277	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15278	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (list separately in addition to code for primary procedure)	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
15769	Grafting of autologous soft tissue, other, harvested by direct excision (eg, fat, dermis, fascia)	Oct 2018	Tissue Grafting Procedures	04	CPT 2020	April 2024		☐
15771	Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; 50 cc or less injectate	Oct 2018	Tissue Grafting Procedures	04	CPT 2020	April 2024		☐
15772	Grafting of autologous fat harvested by liposuction technique to trunk, breasts, scalp, arms, and/or legs; each additional 50 cc injectate, or part thereof (list separately in addition to code for primary procedure)	Oct 2018	Tissue Grafting Procedures	04	CPT 2020	April 2024		☐
15773	Grafting of autologous fat harvested by liposuction technique to face, eyelids, mouth, neck, ears, orbits, genitalia, hands, and/or feet; 25 cc or less injectate	Oct 2018	Tissue Grafting Procedures	04	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
15774	Grafting of autologous fat harvested by liposuction technique to face, eyelids, mouth, neck, ears, orbits, genitalia, hands, and/or feet; each additional 25 cc injectate, or part thereof (list separately in addition to code for primary procedure)	Oct 2018	Tissue Grafting Procedures	04	CPT 2020	April 2024		☐
15777	Implantation of biologic implant (eg, acellular dermal matrix) for soft tissue reinforcement (ie, breast, trunk) (list separately in addition to code for primary procedure)	Apr 2011	Chronic Wound Dermal Substitute	4	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
17106	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); less than 10 sq cm	Oct 2008	Destruction of Skin Lesions	11	CPT 2009	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
17107	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); 10.0 to 50.0 sq cm	Oct 2008	Destruction of Skin Lesions	11	CPT 2009	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
17108	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); over 50.0 sq cm	Oct 2008	Destruction of Skin Lesions	11	CPT 2009	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
19105	Ablation, cryosurgical, of fibroadenoma, including ultrasound guidance, each fibroadenoma	Apr 2006	Fibroadenoma Cryoablation	11	CPT 2007	September 2011	Remove, code does not need to be re-evaluated	☑
19294	Preparation of tumor cavity, with placement of a radiation therapy applicator for intraoperative radiation therapy (iort) concurrent with partial mastectomy (list separately in addition to code for primary procedure)	Oct 2016	Intraoperative Radiation Therapy Applicator Procedures	07	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
20560	Needle insertion(s) without injection(s); 1 or 2 muscle(s)	Jan 2019	Trigger Point Dry Needling	41	CPT 2020	April 2024		☐
20561	Needle insertion(s) without injection(s); 3 or more muscles	Jan 2019	Trigger Point Dry Needling	41	CPT 2020	April 2024		☐
20696	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation with stereotactic computer-assisted adjustment (eg, spatial frame), including imaging; initial and subsequent alignment(s), assessment(s), and computation(s) of adjustment schedule(s)	Apr 2008	Computer Dependent External Fixation	6	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
20697	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation with stereotactic computer-assisted adjustment (eg, spatial frame), including imaging; exchange (ie, removal and replacement) of strut, each	Apr 2008	Computer Dependent External Fixation	6	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
20700	Manual preparation and insertion of drug-delivery device(s), deep (eg, subfascial) (list separately in addition to code for primary procedure)	Oct 2018	Drug Delivery Implant Procedures	05	CPT 2020	April 2024		☐
20701	Removal of drug-delivery device(s), deep (eg, subfascial) (list separately in addition to code for primary procedure)	Oct 2018	Drug Delivery Implant Procedures	05	CPT 2020	April 2024		☐
20702	Manual preparation and insertion of drug-delivery device(s), intramedullary (list separately in addition to code for primary procedure)	Oct 2018	Drug Delivery Implant Procedures	05	CPT 2020	April 2024		☐
20703	Removal of drug-delivery device(s), intramedullary (list separately in addition to code for primary procedure)	Oct 2018	Drug Delivery Implant Procedures	05	CPT 2020	April 2024		☐
20704	Manual preparation and insertion of drug-delivery device(s), intra-articular (list separately in addition to code for primary procedure)	Oct 2018	Drug Delivery Implant Procedures	05	CPT 2020	April 2024		☐
20705	Removal of drug-delivery device(s), intra-articular (list separately in addition to code for primary procedure)	Oct 2018	Drug Delivery Implant Procedures	05	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
20983	Ablation therapy for reduction or eradication of 1 or more bone tumors (eg, metastasis) including adjacent soft tissue when involved by tumor extension, percutaneous, including imaging guidance when performed; cryoablation	Apr 2014	Cryoablation Treatment of the Bone Tumors	04	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
20985	Computer-assisted surgical navigational procedure for musculoskeletal procedures, image-less (list separately in addition to code for primary procedure)	Apr 2007	Computer Navigation	7	CPT 2008	September 2011	Resurvey for January 2012	☑
20986	Code Deleted CPT 2009	Apr 2007	Computer Navigation	7	CPT 2008	September 2011	Code Deleted CPT 2009	☑
20987	Code Deleted CPT 2009	Apr 2007	Computer Navigation	7	CPT 2008	September 2011	Code Deleted CPT 2009	☑
21011	Excision, tumor, soft tissue of face or scalp, subcutaneous; less than 2 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21012	Excision, tumor, soft tissue of face or scalp, subcutaneous; 2 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
21013	Excision, tumor, soft tissue of face and scalp, subfascial (eg, subgaleal, intramuscular); less than 2 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21014	Excision, tumor, soft tissue of face and scalp, subfascial (eg, subgaleal, intramuscular); 2 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21015	Radical resection of tumor (eg, sarcoma), soft tissue of face or scalp; less than 2 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
21016	Radical resection of tumor (eg, sarcoma), soft tissue of face or scalp; 2 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21552	Excision, tumor, soft tissue of neck or anterior thorax, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21554	Excision, tumor, soft tissue of neck or anterior thorax, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
21555	Excision, tumor, soft tissue of neck or anterior thorax, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21556	Excision, tumor, soft tissue of neck or anterior thorax, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21557	Radical resection of tumor (eg, sarcoma), soft tissue of neck or anterior thorax; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
21558	Radical resection of tumor (eg, sarcoma), soft tissue of neck or anterior thorax; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21811	Open treatment of rib fracture(s) with internal fixation, includes thoracoscopic visualization when performed, unilateral; 1-3 ribs	Apr 2014	Internal Fixation of Rib Fracture	05	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
21812	Open treatment of rib fracture(s) with internal fixation, includes thoracoscopic visualization when performed, unilateral; 4-6 ribs	Apr 2014	Internal Fixation of Rib Fracture	05	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
21813	Open treatment of rib fracture(s) with internal fixation, includes thoracoscopic visualization when performed, unilateral; 7 or more ribs	Apr 2014	Internal Fixation of Rib Fracture	05	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
21930	Excision, tumor, soft tissue of back or flank, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21931	Excision, tumor, soft tissue of back or flank, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21932	Excision, tumor, soft tissue of back or flank, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
21933	Excision, tumor, soft tissue of back or flank, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21935	Radical resection of tumor (eg, sarcoma), soft tissue of back or flank; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
21936	Radical resection of tumor (eg, sarcoma), soft tissue of back or flank; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
22526	Percutaneous intradiscal electrothermal annuloplasty, unilateral or bilateral including fluoroscopic guidance; single level	Apr 2006	Percutaneous Intradiscal Annuloplast	13	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
22527	Percutaneous intradiscal electrothermal annuloplasty, unilateral or bilateral including fluoroscopic guidance; 1 or more additional levels (list separately in addition to code for primary procedure)	Apr 2006	Percutaneous Intradiscal Annuloplast	13	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
22856	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); single interspace, cervical	Apr 2008	Cervical Arthroplasty	7	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
22857	Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression); single interspace, lumbar	Feb 2006	Lumbar Arthroplasty	8	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
22858	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); second level, cervical (list separately in addition to code for primary procedure)	Apr 2014	Total Disc Arthroplasty Additional Cervical Level Add-On Code	07	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
22861	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical	Apr 2008	Cervical Arthroplasty	7	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
22862	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar	Feb 2006	Lumbar Arthroplasty	8	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
22864	Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical	Apr 2008	Cervical Arthroplasty	7	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
22865	Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar	Feb 2006	Lumbar Arthroplasty	8	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
22867	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; single level	Jan 2016	Insertion of Spinal Stability Distractive Device	05	CPT 2017	October 2020	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
22868	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; second level (list separately in addition to code for primary procedure)	Jan 2016	Insertion of Spinal Stability Distractive Device	05	CPT 2017	October 2020	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
22869	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level	Jan 2016	Insertion of Spinal Stability Distractive Device	05	CPT 2017		Survey April 2021. Maintained.	☑
22870	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; second level (list separately in addition to code for primary procedure)	Jan 2016	Insertion of Spinal Stability Distractive Device	05	CPT 2017		Survey April 2021. Maintained.	☑
22860		Apr 2022	Total Disc Arthroplasty	04	CPT 2024	April 2028		☐
22900	Excision, tumor, soft tissue of abdominal wall, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
22901	Excision, tumor, soft tissue of abdominal wall, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
22902	Excision, tumor, soft tissue of abdominal wall, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
22903	Excision, tumor, soft tissue of abdominal wall, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
22904	Radical resection of tumor (eg, sarcoma), soft tissue of abdominal wall; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
22905	Radical resection of tumor (eg, sarcoma), soft tissue of abdominal wall; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
23071	Excision, tumor, soft tissue of shoulder area, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
23073	Excision, tumor, soft tissue of shoulder area, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
23075	Excision, tumor, soft tissue of shoulder area, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
23076	Excision, tumor, soft tissue of shoulder area, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
23077	Radical resection of tumor (eg, sarcoma), soft tissue of shoulder area; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
23078	Radical resection of tumor (eg, sarcoma), soft tissue of shoulder area; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
23200	Radical resection of tumor; clavicle	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
23210	Radical resection of tumor; scapula	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
23220	Radical resection of tumor, proximal humerus	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
24073	Excision, tumor, soft tissue of upper arm or elbow area, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
24075	Excision, tumor, soft tissue of upper arm or elbow area, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
24076	Excision, tumor, soft tissue of upper arm or elbow area, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
24077	Radical resection of tumor (eg, sarcoma), soft tissue of upper arm or elbow area; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
24079	Radical resection of tumor (eg, sarcoma), soft tissue of upper arm or elbow area; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
24150	Radical resection of tumor, shaft or distal humerus	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
24152	Radical resection of tumor, radial head or neck	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
25071	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
25073	Excision, tumor, soft tissue of forearm and/or wrist area, subfascial (eg, intramuscular); 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
25075	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
25076	Excision, tumor, soft tissue of forearm and/or wrist area, subfascial (eg, intramuscular); less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
25077	Radical resection of tumor (eg, sarcoma), soft tissue of forearm and/or wrist area; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
25078	Radical resection of tumor (eg, sarcoma), soft tissue of forearm and/or wrist area; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
25170	Radical resection of tumor, radius or ulna	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
26111	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; 1.5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
26113	Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); 1.5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
26115	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; less than 1.5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
26116	Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); less than 1.5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
26117	Radical resection of tumor (eg, sarcoma), soft tissue of hand or finger; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
26118	Radical resection of tumor (eg, sarcoma), soft tissue of hand or finger; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
26250	Radical resection of tumor, metacarpal	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
26260	Radical resection of tumor, proximal or middle phalanx of finger	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
26262	Radical resection of tumor, distal phalanx of finger	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27043	Excision, tumor, soft tissue of pelvis and hip area, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27045	Excision, tumor, soft tissue of pelvis and hip area, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27047	Excision, tumor, soft tissue of pelvis and hip area, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27048	Excision, tumor, soft tissue of pelvis and hip area, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27049	Radical resection of tumor (eg, sarcoma), soft tissue of pelvis and hip area; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27059	Radical resection of tumor (eg, sarcoma), soft tissue of pelvis and hip area; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27075	Radical resection of tumor; wing of ilium, 1 pubic or ischial ramus or symphysis pubis	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27076	Radical resection of tumor; ilium, including acetabulum, both pubic rami, or ischium and acetabulum	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27077	Radical resection of tumor; innominate bone, total	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27078	Radical resection of tumor; ischial tuberosity and greater trochanter of femur	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27279	Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device	Apr 2014	Sacroiliac Joint Fusion	08	CPT 2015	October 2018	Surveyed in April 2018 for a CMS Request in the Final Rule for 2018	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27280	Arthrodesis, sacroiliac joint, open, includes obtaining bone graft, including instrumentation, when performed	Sep 2014	Sacroiliac Joint Fusion	06	CPT 2016	October 2019	Remove form list, was only identified with 27279 and that code has been resurveyed April 2018.	☑
27327	Excision, tumor, soft tissue of thigh or knee area, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27328	Excision, tumor, soft tissue of thigh or knee area, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27329	Radical resection of tumor (eg, sarcoma), soft tissue of thigh or knee area; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27337	Excision, tumor, soft tissue of thigh or knee area, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27339	Excision, tumor, soft tissue of thigh or knee area, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27364	Radical resection of tumor (eg, sarcoma), soft tissue of thigh or knee area; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27365	Radical resection of tumor, femur or knee	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27615	Radical resection of tumor (eg, sarcoma), soft tissue of leg or ankle area; less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27616	Radical resection of tumor (eg, sarcoma), soft tissue of leg or ankle area; 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27618	Excision, tumor, soft tissue of leg or ankle area, subcutaneous; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27619	Excision, tumor, soft tissue of leg or ankle area, subfascial (eg, intramuscular); less than 5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27632	Excision, tumor, soft tissue of leg or ankle area, subcutaneous; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27634	Excision, tumor, soft tissue of leg or ankle area, subfascial (eg, intramuscular); 5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27645	Radical resection of tumor; tibia	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
27646	Radical resection of tumor; fibula	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
27647	Radical resection of tumor; talus or calcaneus	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28039	Excision, tumor, soft tissue of foot or toe, subcutaneous; 1.5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28041	Excision, tumor, soft tissue of foot or toe, subfascial (eg, intramuscular); 1.5 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
28043	Excision, tumor, soft tissue of foot or toe, subcutaneous; less than 1.5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28045	Excision, tumor, soft tissue of foot or toe, subfascial (eg, intramuscular); less than 1.5 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28046	Radical resection of tumor (eg, sarcoma), soft tissue of foot or toe; less than 3 cm	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
28047	Radical resection of tumor (eg, sarcoma), soft tissue of foot or toe; 3 cm or greater	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2017	Review the data for the melanoma diagnoses within these services and the site of service in 2 years (October 2017). In October 2017, recommended to remove from the list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28171	Radical resection of tumor; tarsal (except talus or calcaneus)	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28173	Radical resection of tumor; metatarsal	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
28175	Radical resection of tumor; phalanx of toe	Feb 2009	Excision of Soft Tissue and Bone Tumors		CPT 2010	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
29582	Code Deleted CPT 2018	Oct 2010	Multi-Layer Compression System-HCPAC	74	CPT 2012	October 2018	Specialty societies develop a CPT Assistant article to specify which bandage application should be reported based on what is being treated and review in 3 years (2018). Code Deleted for CPT 2018.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
29583	Code Deleted CPT 2018	Oct 2010	Multi-Layer Compression System-HCPAC	74	CPT 2012	October 2018	Specialty societies develop a CPT Assistant article to specify which bandage application should be reported based on what is being treated and review in 3 years (2018). Code Deleted for CPT 2018.	☑
29584	Application of multi-layer compression system; upper arm, forearm, hand, and fingers	Oct 2010	Multi-Layer Compression System-HCPAC	74	CPT 2012	January 2022	Specialty societies develop a CPT Assistant article to specify which bandage application should be reported based on what is being treated and review in 3 years (2018). In October 2018, RUC recommended to review again after 3 more years of data (2022). In January 2022, the Workgroup reviewed CPT code 29584 and agreed with the specialty society that the volume of this service is low and continues to decrease. The Workgroup recommends that CPT code 29584 be maintained and removed from the CPT Assistant Analysis screen and New Technology list.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
29828	Arthroscopy, shoulder, surgical; biceps tenodesis	Apr 2007	Arthroscopic Biceps Tenodesis	17	CPT 2008	September 2011	Resurvey for January 2012	☑
29914	Arthroscopy, hip, surgical; with femoroplasty (ie, treatment of cam lesion)	Apr 2010	Hip Arthroscopy	5	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
29915	Arthroscopy, hip, surgical; with acetabuloplasty (ie, treatment of pincer lesion)	Apr 2010	Hip Arthroscopy	5	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
29916	Arthroscopy, hip, surgical; with labral repair	Apr 2010	Hip Arthroscopy	5	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
27278		Jan 2023	Dorsal Sacroiliac Joint Arthrodesis	04	CPT 2024	April 2028		☐
22836		Jan 2023	Vertebral Body Tethering	05	CPT 2024	April 2028		☐
22837		Jan 2023	Vertebral Body Tethering	05	CPT 2024	April 2028		☐
22838		Jan 2023	Vertebral Body Tethering	05	CPT 2024	April 2028		☐
31295	Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa	Feb 2010	Nasal Sinus Endoscopy with Ballooon Dilation	6	CPT 2011	October 2016	Surveying for January 2017 as part of bundling	☑
31296	Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); frontal sinus ostium	Feb 2010	Nasal Sinus Endoscopy with Ballooon Dilation	6	CPT 2011	October 2016	Surveying for January 2017 as part of bundling	☑
31297	Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); sphenoid sinus ostium	Feb 2010	Nasal Sinus Endoscopy with Ballooon Dilation	6	CPT 2011	October 2016	Surveying for January 2017 as part of bundling	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
31626	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with placement of fiducial markers, single or multiple	Apr 2009	Fiducial Marker Placement	6	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
31627	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with computer-assisted, image-guided navigation (list separately in addition to code for primary procedure[s])	Feb 2009	Navigational Bronchoscopy	9	CPT 2010	October 2016	Review practice expense January 2014. Review data again in 3 years (Sept 2016).	☑
31634	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with balloon occlusion, with assessment of air leak, with administration of occlusive substance (eg, fibrin glue), if performed	Feb 2010	Bronchoscopy with Balloon Occlusion	7	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
31647	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with balloon occlusion, when performed, assessment of air leak, airway sizing, and insertion of bronchial valve(s), initial lobe	Apr 2012	Bronchial Valve Procedures	09	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
31648	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with removal of bronchial valve(s), initial lobe	Apr 2012	Bronchial Valve Procedures	09	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
31649	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with removal of bronchial valve(s), each additional lobe (list separately in addition to code for primary procedure)	Apr 2012	Bronchial Valve Procedures	09	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
31651	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with balloon occlusion, when performed, assessment of air leak, airway sizing, and insertion of bronchial valve(s), each additional lobe (list separately in addition to code for primary procedure[s])	Apr 2012	Bronchial Valve Procedures	09	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
31652	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with endobronchial ultrasound (ebus) guided transtracheal and/or transbronchial sampling (eg, aspiration[s]/biopsy[ies]), one or two mediastinal and/or hilar lymph node stations or structures	Jan 2015	Endobronchial Ultrasound (EBUS)	05	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
31653	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with endobronchial ultrasound (ebus) guided transtracheal and/or transbronchial sampling (eg, aspiration[s]/biopsy[ies]), 3 or more mediastinal and/or hilar lymph node stations or structures	Jan 2015	Endobronchial Ultrasound (EBUS)	05	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
31654	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transendoscopic endobronchial ultrasound (ebus) during bronchoscopic diagnostic or therapeutic intervention(s) for peripheral lesion(s) (list separately in addition to code for primary procedure[s])	Jan 2015	Endobronchial Ultrasound (EBUS)	05	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
32553	Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), percutaneous, intra-thoracic, single or multiple	Apr 2009	Fiducial Marker Placement	6	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
32701	Thoracic target(s) delineation for stereotactic body radiation therapy (srs/sbrt), (photon or particle beam), entire course of treatment	Jan 2012	Stereotactic Body Radiation	07	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
32994	Ablation therapy for reduction or eradication of 1 or more pulmonary tumor(s) including pleura or chest wall when involved by tumor extension, percutaneous, including imaging guidance when performed, unilateral; cryoablation	Jan 2017	Cryoablation of Pulmonary Tumors	08	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
32998	Ablation therapy for reduction or eradication of 1 or more pulmonary tumor(s) including pleura or chest wall when involved by tumor extension, percutaneous, including imaging guidance when performed, unilateral; radiofrequency	Apr 2006	Percutaneous RF Pulmonary Tumor Ablation	15	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
33254	Operative tissue ablation and reconstruction of atria, limited (eg, modified maze procedure)	Apr 2006	Atrial Tissue Ablation and Reconstruction	17	CPT 2007	September 2011	Remove, code does not need to be re-evaluated	☑
33255	Operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure); without cardiopulmonary bypass	Apr 2006	Atrial Tissue Ablation and Reconstruction	17	CPT 2007	September 2011	Remove, code does not need to be re-evaluated	☑
33256	Operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure); with cardiopulmonary bypass	Apr 2006	Atrial Tissue Ablation and Reconstruction	17	CPT 2007	September 2011	Remove, code does not need to be re-evaluated	☑
33257	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), limited (eg, modified maze procedure) (list separately in addition to code for primary procedure)	Apr 2007	Add-on Maze Procedures	23	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
33258	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (eg, maze procedure), without cardiopulmonary bypass (list separately in addition to code for primary procedure)	Apr 2007	Add-on Maze Procedures	23	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
33259	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (eg, maze procedure), with cardiopulmonary bypass (list separately in addition to code for primary procedure)	Apr 2007	Add-on Maze Procedures	23	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
33265	Endoscopy, surgical; operative tissue ablation and reconstruction of atria, limited (eg, modified maze procedure), without cardiopulmonary bypass	Apr 2006	Atrial Tissue Ablation and Reconstruction	17	CPT 2007	September 2011	Remove, code does not need to be re-evaluated	☑
33266	Endoscopy, surgical; operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure), without cardiopulmonary bypass	Apr 2006	Atrial Tissue Ablation and Reconstruction	17	CPT 2007	September 2011	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33267	Exclusion of left atrial appendage, open, any method (eg, excision, isolation via stapling, oversewing, ligation, plication, clip)	Oct 2020	Exclusion of Left Atrial Appendage	05	CPT 2022	April 2026		☐
33268	Exclusion of left atrial appendage, open, performed at the time of other sternotomy or thoracotomy procedure(s), any method (eg, excision, isolation via stapling, oversewing, ligation, plication, clip) (list separately in addition to code for primary procedure)	Oct 2020	Exclusion of Left Atrial Appendage	05	CPT 2022	April 2026		☐
33269	Exclusion of left atrial appendage, thoracoscopic, any method (eg, excision, isolation via stapling, oversewing, ligation, plication, clip)	Oct 2020	Exclusion of Left Atrial Appendage	05	CPT 2022	April 2026		☐
33270	Insertion or replacement of permanent subcutaneous implantable defibrillator system, with subcutaneous electrode, including defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters, when performed	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
33271	Insertion of subcutaneous implantable defibrillator electrode	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33272	Removal of subcutaneous implantable defibrillator electrode	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
33273	Repositioning of previously implanted subcutaneous implantable defibrillator electrode	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
33274	Transcatheter insertion or replacement of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed	Jan 2018	Leadless Pacemaker Procedures	07	CPT 2019	April 2023		☐
33275	Transcatheter removal of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography), when performed	Jan 2018	Leadless Pacemaker Procedures	07	CPT 2019	April 2023		☐
33285	Insertion, subcutaneous cardiac rhythm monitor, including programming	Apr 2017	Cardiac Event Recorder Procedures	07	CPT 2019	April 2023		☐
33286	Removal, subcutaneous cardiac rhythm monitor	Apr 2017	Cardiac Event Recorder Procedures	07	CPT 2019	April 2023		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33289	Transcatheter implantation of wireless pulmonary artery pressure sensor for long-term hemodynamic monitoring, including deployment and calibration of the sensor, right heart catheterization, selective pulmonary catheterization, radiological supervision and interpretation, and pulmonary artery angiography, when performed	Jan 2018	Pulmonary Wireless Pressure Sensor Services	08	CPT 2019	April 2023		☐
33340	Percutaneous transcatheter closure of the left atrial appendage with endocardial implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, when performed, and radiological supervision and interpretation	Jan 2016	Closure Left Atrial Appendage with Endocardial Implant	10	CPT 2017	April 2023	Review in two years (April 2023); new FDA indication recently released, suggesting this service is still changing.	☐
33361	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; percutaneous femoral artery approach	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	April 2024	Surveyed again in April 2018 and the RUC indicated that CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.	☐
33362	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; open femoral artery approach	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	April 2024	Surveyed again in April 2018 and the RUC indicated that CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33363	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; open axillary artery approach	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	April 2024	Surveyed again in April 2018 and the RUC indicated that CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.	☐
33364	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; open iliac artery approach	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	April 2024	Surveyed again in April 2018 and the RUC indicated that CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.	☐
33365	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; transaortic approach (eg, median sternotomy, mediastinotomy)	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	April 2024	Surveyed again in April 2018 and the RUC indicated that CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33366	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; transapical exposure (eg, left thoracotomy)	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	April 2024	Surveyed again in April 2018 and the RUC indicated that CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.	☐
33367	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; cardiopulmonary bypass support with percutaneous peripheral arterial and venous cannulation (eg, femoral vessels) (list separately in addition to code for primary procedure)	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	October 2016	The Workgroup did not believe there would be a change in physician work or practice expense for the add-on services and recommends that 33367, 33368 and 33369 be removed from the new technology list as there is no demonstrated diffusion.	☑
33368	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; cardiopulmonary bypass support with open peripheral arterial and venous cannulation (eg, femoral, iliac, axillary vessels) (list separately in addition to code for primary procedure)	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	October 2016	The Workgroup did not believe there would be a change in physician work or practice expense for the add-on services and recommends that 33367, 33368 and 33369 be removed from the new technology list as there is no demonstrated diffusion.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33369	Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; cardiopulmonary bypass support with central arterial and venous cannulation (eg, aorta, right atrium, pulmonary artery) (list separately in addition to code for primary procedure)	Apr 2012	Transcatheter Aortic Valve Replacement	12	CPT 2013	October 2016	The Workgroup did not believe there would be a change in physician work or practice expense for the add-on services and recommends that 33367, 33368 and 33369 be removed from the new technology list as there is no demonstrated diffusion.	☑
33370	Transcatheter placement and subsequent removal of cerebral embolic protection device(s), including arterial access, catheterization, imaging, and radiological supervision and interpretation, percutaneous (list separately in addition to code for primary procedure)	Jan 2021	Percutaneous Cerebral Embolic Protection	07	CPT 2022	April 2026		☐
33412	Replacement, aortic valve; with transventricular aortic annulus enlargement (konno procedure)	Jan 2018	Aortoventriculoplasty with Pulmonary Autograft	05	CPT 2019	April 2023	In the NPRM for 2019 CMS requested that codes 33412 and 33413 should be reviewed when the new code is reviewed for new technology.	☐
33413	Replacement, aortic valve; by translocation of autologous pulmonary valve with allograft replacement of pulmonary valve (ross procedure)	Jan 2018	Aortoventriculoplasty with Pulmonary Autograft	05	CPT 2019	April 2023	In the NPRM for 2019 CMS requested that codes 33412 and 33413 should be reviewed when the new code is reviewed for new technology.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33418	Transcatheter mitral valve repair, percutaneous approach, including transseptal puncture when performed; initial prosthesis	Apr 2014	Transcatheter Mitral Valve Repair	10	CPT 2015	April 2025	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, the Workgroup noted that these services are still evolving and should be reviewed in 3 years (April 2025).	☐
33419	Transcatheter mitral valve repair, percutaneous approach, including transseptal puncture when performed; additional prosthesis(es) during same session (list separately in addition to code for primary procedure)	Apr 2014	Transcatheter Mitral Valve Repair	10	CPT 2015	April 2025	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, the Workgroup noted that these services are still evolving and should be reviewed in 3 years (April 2025).	☐
33440	Replacement, aortic valve; by translocation of autologous pulmonary valve and transventricular aortic annulus enlargement of the left ventricular outflow tract with valved conduit replacement of pulmonary valve (ross-konno procedure)	Jan 2018	Aortoventriculoplasty with Pulmonary Autograft	05	CPT 2019	April 2023		☐
33477	Transcatheter pulmonary valve implantation, percutaneous approach, including pre-stenting of the valve delivery site, when performed	Jan 2015	Transcatheter Pulmonary Valve Implantation	06	CPT 2016	April 2023	Review in 3 years (April 2023); pediatric procedure with some CMS utilization.	☑
33509	Harvest of upper extremity artery, 1 segment, for coronary artery bypass procedure, endoscopic	Jan 2021	Harvest of Upper Extremity Artery, Endoscopic and Open	09	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33620	Application of right and left pulmonary artery bands (eg, hybrid approach stage 1)	Feb 2010	Cardiac Hybrid Procedures	8	CPT 2011	September 2014	Develop CPT Assitant article to clarify who should report these services. The STS noted and the RUC agreed that only pediatric cardiac surgeons perform 33620 and 33622.	☑
33621	Transthoracic insertion of catheter for stent placement with catheter removal and closure (eg, hybrid approach stage 1)	Feb 2010	Cardiac Hybrid Procedures	8	CPT 2011	September 2014	Develop CPT Assitant article to clarify who should report these services. The STS noted and the RUC agreed that only pediatric cardiac surgeons perform 33620 and 33622.	☑
33622	Reconstruction of complex cardiac anomaly (eg, single ventricle or hypoplastic left heart) with palliation of single ventricle with aortic outflow obstruction and aortic arch hypoplasia, creation of cavopulmonary anastomosis, and removal of right and left pulmonary bands (eg, hybrid approach stage 2, norwood, bidirectional glenn, pulmonary artery debanding)	Feb 2010	Cardiac Hybrid Procedures	8	CPT 2011	September 2014	Develop CPT Assitant article to clarify who should report these services. The STS noted and the RUC agreed that only pediatric cardiac surgeons perform 33620 and 33622.	☑
33864	Ascending aorta graft, with cardiopulmonary bypass with valve suspension, with coronary reconstruction and valve-sparing aortic root remodeling (eg, david procedure, yacoub procedure)	Apr 2007	Valve Sparing Aortic Annulus Reconstruction	24	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
33866	Aortic hemiarch graft including isolation and control of the arch vessels, beveled open distal aortic anastomosis extending under one or more of the arch vessels, and total circulatory arrest or isolated cerebral perfusion (list separately in addition to code for primary procedure)	Oct 2018	Aortic Graft Procedures	06	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33900	Percutaneous pulmonary artery revascularization by stent placement, initial; normal native connections, unilateral	Oct 2021	Endovascular Pulmonary Arterial Revascularization	04	CPT 2023	April 2027		☐
33901	Percutaneous pulmonary artery revascularization by stent placement, initial; normal native connections, bilateral	Oct 2021	Endovascular Pulmonary Arterial Revascularization	04	CPT 2023	April 2027		☐
33902	Percutaneous pulmonary artery revascularization by stent placement, initial; abnormal connections, unilateral	Oct 2021	Endovascular Pulmonary Arterial Revascularization	04	CPT 2023	April 2027		☐
33903	Percutaneous pulmonary artery revascularization by stent placement, initial; abnormal connections, bilateral	Oct 2021	Endovascular Pulmonary Arterial Revascularization	04	CPT 2023	April 2027		☐
33904	Percutaneous pulmonary artery revascularization by stent placement, each additional vessel or separate lesion, normal or abnormal connections (list separately in addition to code for primary procedure)	Oct 2021	Endovascular Pulmonary Arterial Revascularization	04	CPT 2023	April 2027		☐
33927	Implantation of a total replacement heart system (artificial heart) with recipient cardiectomy	Jan 2017	Artifical Heart System Procedure	09	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
33928	Removal and replacement of total replacement heart system (artificial heart)	Jan 2017	Artifical Heart System Procedure	09	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
33929	Removal of a total replacement heart system (artificial heart) for heart transplantation (list separately in addition to code for primary procedure)	Jan 2017	Artifical Heart System Procedure	09	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33946	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; initiation, veno-venous	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33947	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; initiation, veno-arterial	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33948	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; daily management, each day, veno-venous	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33949	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; daily management, each day, veno-arterial	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33951	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), percutaneous, birth through 5 years of age (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33952	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33953	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), open, birth through 5 years of age	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33954	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), open, 6 years and older	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33955	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of central cannula(e) by sternotomy or thoracotomy, birth through 5 years of age	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33956	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; insertion of central cannula(e) by sternotomy or thoracotomy, 6 years and older	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33957	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), percutaneous, birth through 5 years of age (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33958	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33959	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), open, birth through 5 years of age (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33962	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition peripheral (arterial and/or venous) cannula(e), open, 6 years and older (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33963	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition of central cannula(e) by sternotomy or thoracotomy, birth through 5 years of age (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33964	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; reposition central cannula(e) by sternotomy or thoracotomy, 6 years and older (includes fluoroscopic guidance, when performed)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33965	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), percutaneous, birth through 5 years of age	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33966	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33969	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), open, birth through 5 years of age	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33984	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of peripheral (arterial and/or venous) cannula(e), open, 6 years and older	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33985	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of central cannula(e) by sternotomy or thoracotomy, birth through 5 years of age	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33986	Extracorporeal membrane oxygenation (ecmo)/extracorporeal life support (ecls) provided by physician; removal of central cannula(e) by sternotomy or thoracotomy, 6 years and older	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33987	Arterial exposure with creation of graft conduit (eg, chimney graft) to facilitate arterial perfusion for ecmo/ecls (list separately in addition to code for primary procedure)	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33988	Insertion of left heart vent by thoracic incision (eg, sternotomy, thoracotomy) for ecmo/ecls	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
33989	Removal of left heart vent by thoracic incision (eg, sternotomy, thoracotomy) for ecmo/ecls	Apr 2014	ECMO-ECLS	11	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33995	Insertion of ventricular assist device, percutaneous, including radiological supervision and interpretation; right heart, venous access only	Oct 2019	Percutaneous Ventricular Assist Device Insertion	05	CPT 2021	April 2025		☐
33997	Removal of percutaneous right heart ventricular assist device, venous cannula, at separate and distinct session from insertion	Oct 2019	Percutaneous Ventricular Assist Device Insertion	05	CPT 2021	April 2025		☐
34806	Code Deleted CPT 2008	Apr 2007	Wireless Pressure Sensor Implantation	25	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
36465	Injection of non-compounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; single incompetent extremity truncal vein (eg, great saphenous vein, accessory saphenous vein)	Jan 2017	Treatment of Incompetent Veins	11	CPT 2018	April 2025	In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36466	Injection of non-compounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; multiple incompetent truncal veins (eg, great saphenous vein, accessory saphenous vein), same leg	Jan 2017	Treatment of Incompetent Veins	11	CPT 2018	April 2025	In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36473	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; first vein treated	Jan 2016	Mechanochemical (MOCA) Vein Ablation	13	CPT 2017	April 2025	Review in January 2022 with the other codes in this family identified via the 2022 new technology/new services screen (36475-36479). In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
36474	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; subsequent vein(s) treated in a single extremity, each through separate access sites (list separately in addition to code for primary procedure)	Jan 2016	Mechanochemical (MOCA) Vein Ablation	13	CPT 2017	April 2025	Review in January 2022 with the other codes in this family identified via the 2022 new technology/new services screen (36475-36479). In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36475	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; first vein treated	Apr 2014	Endovenous Ablation	38	CPT 2015	April 2025	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36476	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; subsequent vein(s) treated in a single extremity, each through separate access sites (list separately in addition to code for primary procedure)	Apr 2014	Endovenous Ablation	38	CPT 2015	April 2025	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36478	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; first vein treated	Apr 2014	Endovenous Ablation	38	CPT 2015	April 2025	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
36479	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; subsequent vein(s) treated in a single extremity, each through separate access sites (list separately in addition to code for primary procedure)	Apr 2014	Endovenous Ablation	38	CPT 2015	April 2025	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36482	Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; first vein treated	Jan 2017	Treatment of Incompetent Veins	11	CPT 2018	April 2025	In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36483	Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; subsequent vein(s) treated in a single extremity, each through separate access sites (list separately in addition to code for primary procedure)	Jan 2017	Treatment of Incompetent Veins	11	CPT 2018	April 2025	In April 2022, recommended to review in 3 years (April 2025); still fluctuation in utilization.	☐
36836	Percutaneous arteriovenous fistula creation, upper extremity, single access of both the peripheral artery and peripheral vein, including fistula maturation procedures (eg, transluminal balloon angioplasty, coil embolization) when performed, including all vascular access, imaging guidance and radiologic supervision and interpretation	Jan 2022	Percutaneous Arteriovenous Fistula Creation	06	CPT 2023	April 2027		☐
36837	Percutaneous arteriovenous fistula creation, upper extremity, separate access sites of the peripheral artery and peripheral vein, including fistula maturation procedures (eg, transluminal balloon angioplasty, coil embolization) when performed, including all vascular access, imaging guidance and radiologic supervision and interpretation	Jan 2022	Percutaneous Arteriovenous Fistula Creation	06	CPT 2023	April 2027		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
37192	Repositioning of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed	Apr 2011	IVC Transcatheter Procedure	12	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
37193	Retrieval (removal) of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed	Apr 2011	IVC Transcatheter Procedure	12	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
37218	Transcatheter placement of intravascular stent(s), intrathoracic common carotid artery or innominate artery, open or percutaneous antegrade approach, including angioplasty, when performed, and radiological supervision and interpretation	Apr 2014	Transcatheter Placement of Carotid Stents	12	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
38220	Diagnostic bone marrow; aspiration(s)	Apr 2016	Diagnostic Bone Marrow Aspiration and Bone Biopsy	06	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
38221	Diagnostic bone marrow; biopsy(ies)	Apr 2016	Diagnostic Bone Marrow Aspiration and Bone Biopsy	06	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
38222	Diagnostic bone marrow; biopsy(ies) and aspiration(s)	Apr 2016	Diagnostic Bone Marrow Aspiration and Bone Biopsy	06	CPT 2018	April 2022	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
38900	Intraoperative identification (eg, mapping) of sentinel lymph node(s) includes injection of non-radioactive dye, when performed (list separately in addition to code for primary procedure)	Apr 2010	Sentinel Lymph Node Mapping	8	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
33276		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
33277		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33278		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
33279		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33280		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
33281		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
33287		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
33288		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
31242		Jan 2023	Posterior Nasal Nerve Ablation	07	CPT 2024	April 2028		☐
31243		Jan 2023	Posterior Nasal Nerve Ablation	07	CPT 2024	April 2028		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
43180	Esophagoscopy, rigid, transoral with diverticulectomy of hypopharynx or cervical esophagus (eg, zenker's diverticulum), with cricopharyngeal myotomy, includes use of telescope or operating microscope and repair, when performed	Jan 2014	Endoscopic Hypopharyngeal Diverticulotomy	7	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
43210	Esophagogastroduodenoscopy, flexible, transoral; with esophagogastric fundoplasty, partial or complete, includes duodenoscopy when performed	Apr 2015	Esophagogatric Fundoplasty Trans-Oral Approach	05	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
43273	Endoscopic cannulation of papilla with direct visualization of pancreatic/common bile duct(s) (list separately in addition to code(s) for primary procedure)	Apr 2008	Cholangioscopy-Pancreatoscopy	13	CPT 2009	September 2012	Specialty to survey Feb 2013 with family of services	☑
43279	Laparoscopy, surgical, esophagomyotomy (heller type), with fundoplasty, when performed	Apr 2008	Laparoscopic Heller Myotomy	12	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
43281	Laparoscopy, surgical, repair of paraesophageal hernia, includes fundoplasty, when performed; without implantation of mesh	Apr 2009	Laparoscopic Paraesophageal Hernia Repair	12	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
43282	Laparoscopy, surgical, repair of paraesophageal hernia, includes fundoplasty, when performed; with implantation of mesh	Apr 2009	Laparoscopic Paraesophageal Hernia Repair	12	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
43284	Laparoscopy, surgical, esophageal sphincter augmentation procedure, placement of sphincter augmentation device (ie, magnetic band), including cruroplasty when performed	Jan 2016	Esophageal Sphincter Augmentation	17	CPT 2017	April 2024	Review in 3 years (April 2024). The initial RUC survey was insufficient in number of respondents and RUC recommended re-surveying when volume is sufficient. Even though the typical patient is below Medicare age, society believes volumes remain low. Utilization of the removal code 43285 is higher than expected suggesting the services may be reported inappropriately.	☐
43285	Removal of esophageal sphincter augmentation device	Jan 2016	Esophageal Sphincter Augmentation	17	CPT 2017	April 2024	Review in 3 years (April 2024). The initial RUC survey was insufficient in number of respondents and RUC recommended re-surveying when volume is sufficient. Even though the typical patient is below Medicare age, society believes volumes remain low. Utilization of the removal code 43285 is higher than expected suggesting the services may be reported inappropriately.	☐
43290	Esophagogastroduodenoscopy, flexible, transoral; with deployment of intragastric bariatric balloon	Apr 2021	Endoscopic Bariatric Device Procedures	08	CPT 2023	April 2027		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
43291	Esophagogastroduodenoscopy, flexible, transoral; with removal of intragastric bariatric balloon(s)	Apr 2021	Endoscopic Bariatric Device Procedures	08	CPT 2023	April 2027		☐
43497	Lower esophageal myotomy, transoral (ie, peroral endoscopic myotomy [poem])	Oct 2020	Per-Oral Endoscopic Myotomy (POEM)	07	CPT 2022	April 2026		☐
43647	Laparoscopy, surgical; implantation or replacement of gastric neurostimulator electrodes, antrum	Apr 2006	Gastric Antrum Neurostimulation	26	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
43648	Laparoscopy, surgical; revision or removal of gastric neurostimulator electrodes, antrum	Apr 2006	Gastric Antrum Neurostimulation	26	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
43775	Laparoscopy, surgical, gastric restrictive procedure; longitudinal gastrectomy (ie, sleeve gastrectomy)	Apr 2009	Laparoscopic Longitudinal Gastrectomy	14	CPT 2010	September 2013	Remove from list, carrier priced.	☑
43881	Implantation or replacement of gastric neurostimulator electrodes, antrum, open	Apr 2006	Gastric Antrum Neurostimulation	26	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
43882	Revision or removal of gastric neurostimulator electrodes, antrum, open	Apr 2006	Gastric Antrum Neurostimulation	26	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
44705	Preparation of fecal microbiota for instillation, including assessment of donor specimen	Apr 2012	Fecal Bacteriotherapy	18	CPT 2013	October 2018	The specialty societies indicated that they tried to develop a category I code to replace 44705 which is not currently covered by Medicare, but the CPT Editorial Panel did not accept the coding change proposal due to a lack in literature provided. The Workgroup recommended that these services be reviewed in 2 year after additional utilization data is available (October 2018). In Octobre 2018, the RUC recommended to remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
46601	Anoscopy; diagnostic, with high-resolution magnification (hra) (eg, colposcope, operating microscope) and chemical agent enhancement, including collection of specimen(s) by brushing or washing, when performed	Apr 2014	High Resolution Anoscopy	14	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data and to determine what specialties are performing this service (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
46607	Anoscopy; with high-resolution magnification (hra) (eg, colposcope, operating microscope) and chemical agent enhancement, with biopsy, single or multiple	Apr 2014	High Resolution Anoscopy	14	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data and to determine what specialties are performing this service (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
46707	Repair of anorectal fistula with plug (eg, porcine small intestine submucosa [sis])	Apr 2009	Fistula Plug	15	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
46948	Hemorrhoidectomy, internal, by transanal hemorrhoidal dearterialization, 2 or more hemorrhoid columns/groups, including ultrasound guidance, with mucopexy, when performed	Oct 2018	Transanal Hemorrhoidal Dearterialization	07	CPT 2020	April 2024		☐
47383	Ablation, 1 or more liver tumor(s), percutaneous, cryoablation	Apr 2014	Cryoablation of Liver Tumor	15	CPT 2015	October 2018	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
49327	Laparoscopy, surgical; with placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), intra-abdominal, intrapelvic, and/or retroperitoneum, including imaging guidance, if performed, single or multiple (list separately in addition to code for primary procedure)	Apr 2010	Fiducial Marker Placement	10	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
49411	Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), percutaneous, intra-abdominal, intra-pelvic (except prostate), and/or retroperitoneum, single or multiple	Apr 2009	Fiducial Marker Placement	6	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
49412	Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), open, intra-abdominal, intrapelvic, and/or retroperitoneum, including image guidance, if performed, single or multiple (list separately in addition to code for primary procedure)	Apr 2010	Fiducial Marker Placement	10	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
49652	Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); reducible	Feb 2011	Laparoscopic Hernia Repair	30	CPT 2009	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
49653	Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); incarcerated or strangulated	Feb 2011	Laparoscopic Hernia Repair	30	CPT 2009	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
49654	Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); reducible	Feb 2011	Laparoscopic Hernia Repair	30	CPT 2009	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
49655	Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); incarcerated or strangulated	Feb 2011	Laparoscopic Hernia Repair	30	CPT 2012	October 2015	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
50430	Injection procedure for antegrade nephrostogram and/or ureterogram, complete diagnostic procedure including imaging guidance (eg, ultrasound and fluoroscopy) and all associated radiological supervision and interpretation; new access	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50431	Injection procedure for antegrade nephrostogram and/or ureterogram, complete diagnostic procedure including imaging guidance (eg, ultrasound and fluoroscopy) and all associated radiological supervision and interpretation; existing access	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50432	Placement of nephrostomy catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50433	Placement of nephroureteral catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation, new access	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50434	Convert nephrostomy catheter to nephroureteral catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation, via pre-existing nephrostomy tract	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50435	Exchange nephrostomy catheter, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
50593	Ablation, renal tumor(s), unilateral, percutaneous, cryotherapy	Apr 2007	Percutaneous Renal Tumor Cryotherapy	A	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
50606	Endoluminal biopsy of ureter and/or renal pelvis, non-endoscopic, including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50693	Placement of ureteral stent, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; pre-existing nephrostomy tract	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50694	Placement of ureteral stent, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; new access, without separate nephrostomy catheter	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50695	Placement of ureteral stent, percutaneous, including diagnostic nephrostogram and/or ureterogram when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; new access, with separate nephrostomy catheter	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
50705	Ureteral embolization or occlusion, including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
50706	Balloon dilation, ureteral stricture, including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation (list separately in addition to code for primary procedure)	Apr 2015	Genitourinary Catheter Procedures	08	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
52441	Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant	Apr 2014	Cystourethroscopy Insertion Transprostatic Implant	16	CPT 2015	October 2018	Survey for January 2019	☑
52442	Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; each additional permanent adjustable transprostatic implant (list separately in addition to code for primary procedure)	Apr 2014	Cystourethroscopy Insertion Transprostatic Implant	16	CPT 2015	October 2018	Survey for January 2019	☑
53854	Transurethral destruction of prostate tissue; by radiofrequency generated water vapor thermotherapy	Jan 2018	Transurethral Destruction of Prostate Tissue	13	CPT 2019	April 2023		☐
53855	Insertion of a temporary prostatic urethral stent, including urethral measurement	Feb 2009	Temporary Prostatic Urethral Stent Insertion	12	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
53860	Transurethral radiofrequency micro-remodeling of the female bladder neck and proximal urethra for stress urinary incontinence	Apr 2010	Transurethral Radiofrequency Bladder Neck and Urethra	12	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
55706	Biopsies, prostate, needle, transperineal, stereotactic template guided saturation sampling, including imaging guidance	Apr 2008	Saturation Biopsies	15	CPT 2009	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
55866	Laparoscopy, surgical prostatectomy, retropubic radical, including nerve sparing, includes robotic assistance, when performed	Oct 2009	Laparoscopic Radical Prostatectomy	14	CPT 2011	September 2014	Survey for April 2015. Specialty society should consider surveying 55845 and 55866 at the same time.	☑
55874	Transperineal placement of biodegradable material, peri-prostatic, single or multiple injection(s), including image guidance, when performed	Jan 2017	Peri-Prostatic Implantation of Biodegradable Material	13	CPT 2018	April 2022	In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
55880	Ablation of malignant prostate tissue, transrectal, with high intensity-focused ultrasound (hifu), including ultrasound guidance	Oct 2019	Transrectal High Intesity Focused US Prostate Ablation	06	CPT 2021	April 2025		☐
57423	Paravaginal defect repair (including repair of cystocele, if performed), laparoscopic approach	Apr 2007	Laparoscopic Paravaginal Defect Repair	C	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
57425	Laparoscopy, surgical, colpopexy (suspension of vaginal apex)	Oct 2008	Laparoscopic Revision of Prosthetic Vaginal Graft	7	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
57426	Revision (including removal) of prosthetic vaginal graft, laparoscopic approach	Oct 2008	Laparoscopic Revision of Prosthetic Vaginal Graft	7	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
57465	Computer-aided mapping of cervix uteri during colposcopy, including optical dynamic spectral imaging and algorithmic quantification of the acetowhitening effect (list separately in addition to code for primary procedure)	Jan 2020	Computer-Aided Mapping of Cervix Uteri	14	CPT 2021	April 2025		☐
58541	Laparoscopy, surgical, supracervical hysterectomy, for uterus 250 g or less;	Feb 2006	Laparoscopic Supracervical Hysterectomy	13	CPT 2007	September 2013	Survey April 2014	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
58542	Laparoscopy, surgical, supracervical hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)	Feb 2006	Laparoscopic Supracervical Hysterectomy	13	CPT 2007	September 2013	Survey April 2014	☑
58543	Laparoscopy, surgical, supracervical hysterectomy, for uterus greater than 250 g;	Feb 2006	Laparoscopic Supracervical Hysterectomy	13	CPT 2007	September 2013	Survey April 2014	☑
58544	Laparoscopy, surgical, supracervical hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)	Feb 2006	Laparoscopic Supracervical Hysterectomy	13	CPT 2007	September 2013	Survey April 2014	☑
58570	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less;	Apr 2007	Laparoscopic Total Hysterectomy	D	CPT 2008	September 2013	Survey April 2014	☑
58571	Laparoscopy, surgical, with total hysterectomy, for uterus 250 g or less; with removal of tube(s) and/or ovary(s)	Apr 2007	Laparoscopic Total Hysterectomy	D	CPT 2008	September 2013	Survey April 2014	☑
58572	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g;	Apr 2007	Laparoscopic Total Hysterectomy	D	CPT 2008	September 2013	Survey April 2014	☑
58573	Laparoscopy, surgical, with total hysterectomy, for uterus greater than 250 g; with removal of tube(s) and/or ovary(s)	Apr 2007	Laparoscopic Total Hysterectomy	D	CPT 2008	September 2013	Survey April 2014	☑
58674	Laparoscopy, surgical, ablation of uterine fibroid(s) including intraoperative ultrasound guidance and monitoring, radiofrequency	Jan 2016	Laparoscopic Radiofrequency Ablation of Uterine Fibroids	18	CPT 2017	October 2020	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
52284		Jan 2023	Cystourethroscopy with Urethral Therapeutic Drug Delivery	08	CPT 2024	April 2028		☐
58580		Jan 2023	Transcervical RF Ablation of Uterine Fibroids	09	CPT 2024	April 2028		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
61645	Percutaneous arterial transluminal mechanical thrombectomy and/or infusion for thrombolysis, intracranial, any method, including diagnostic angiography, fluoroscopic guidance, catheter placement, and intraprocedural pharmacological thrombolytic injection(s)	Apr 2015	Intracranial Endovascular Intervention	09	CPT 2016	October 2019	Remove from list. Although the RUC discussed that the subsequent hostial visit occurs, CMS has already issued their statement on 23-hr hospital stay services.	☑
61650	Endovascular intracranial prolonged administration of pharmacologic agent(s) other than for thrombolysis, arterial, including catheter placement, diagnostic angiography, and imaging guidance; initial vascular territory	Apr 2015	Intracranial Endovascular Intervention	09	CPT 2016	October 2019	Remove from list. Although the RUC discussed that the subsequent hostial visit occurs, CMS has already issued their statement on 23-hr hospital stay services.	☑
61651	Endovascular intracranial prolonged administration of pharmacologic agent(s) other than for thrombolysis, arterial, including catheter placement, diagnostic angiography, and imaging guidance; each additional vascular territory (list separately in addition to code for primary procedure)	Apr 2015	Intracranial Endovascular Intervention	09	CPT 2016	October 2019	Remove from list. Although the RUC discussed that the subsequent hostial visit occurs, CMS has already issued their statement on 23-hr hospital stay services.	☑
61736	Laser interstitial thermal therapy (litt) of lesion, intracranial, including burr hole(s), with magnetic resonance imaging guidance, when performed; single trajectory for 1 simple lesion	Jan 2021	Intracranial Laser Interstitial Thermal Therapy (LITT)	12	CPT 2022	April 2026		☐
61737	Laser interstitial thermal therapy (litt) of lesion, intracranial, including burr hole(s), with magnetic resonance imaging guidance, when performed; multiple trajectories for multiple or complex lesion(s)	Jan 2021	Intracranial Laser Interstitial Thermal Therapy (LITT)	12	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
61889		Apr 2022	Skull Mounted Cranial Neurostimulator	05	CPT 2024	April 2028	When review in 2028, ensure correct valuation, patient population and utilization assumptions. At the April 2022 RUC meeting, the RUC recommendation for CPT code 619X1 was based on the understanding that the current typical patient does not have a surgically naïve scalp and has previously undergone multiple intracranial procedures prior to the insertion of the skull-mounted neurostimulator.	☐
61891		Apr 2022	Skull Mounted Cranial Neurostimulator	05	CPT 2024	April 2028	When review in 2028, ensure correct valuation, patient population and utilization assumptions. At the April 2022 RUC meeting, the RUC recommendation for CPT code 619X1 was based on the understanding that the current typical patient does not have a surgically naïve scalp and has previously undergone multiple intracranial procedures prior to the insertion of the skull-mounted neurostimulator.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
61892		Apr 2022	Skull Mounted Cranial Neurostimulator	05	CPT 2024	April 2028	When review in 2028, ensure correct valuation, patient population and utilization assumptions. At the April 2022 RUC meeting, the RUC recommendation for CPT code 619X1 was based on the understanding that the current typical patient does not have a surgically naïve scalp and has previously undergone multiple intracranial procedures prior to the insertion of the skull-mounted neurostimulator.	☐
62328	Spinal puncture, lumbar, diagnostic; with fluoroscopic or ct guidance	Jan 2019	Lumbar Puncture	09	CPT 2020	April 2024		☐
62329	Spinal puncture, therapeutic, for drainage of cerebrospinal fluid (by needle or catheter); with fluoroscopic or ct guidance	Jan 2019	Lumbar Puncture	09	CPT 2020	April 2024		☐
62380	Endoscopic decompression of spinal cord, nerve root(s), including laminotomy, partial facetectomy, foraminotomy, discectomy and/or excision of herniated intervertebral disc, 1 interspace, lumbar	Jan 2016	Endoscopic Decompression of Spinal Cord Nerve	19	CPT 2017	October 2020	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
63620	Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 spinal lesion	Apr 2008	Stereotactic Radiosurgery	16	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
63621	Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional spinal lesion (list separately in addition to code for primary procedure)	Apr 2008	Stereotactic Radiosurgery	16	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
64450	Injection(s), anesthetic agent(s) and/or steroid; other peripheral nerve or branch	Jan 2019	Genicular Injection and RFA	10	CPT 2020	April 2024		☐
64451	Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)	Jan 2019	Radiofrequency Neurotomy Sacroiliac Joint	08	CPT 2020	April 2024		☐
64454	Injection(s), anesthetic agent(s) and/or steroid; genicular nerve branches, including imaging guidance, when performed	Jan 2019	Genicular Injection and RFA	10	CPT 2020	April 2024		☐
64566	Posterior tibial neurostimulation, percutaneous needle electrode, single treatment, includes programming	Apr 2010	Posterior Tibial Nerve Stimulation	13	CPT 2011	October 2019	Surveyed for April 2015, RUC recommended to review utilization again in 2 years (Oct 2019). In Oct 2019, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
64569	Revision or replacement of cranial nerve (eg, vagus nerve) neurostimulator electrode array, including connection to existing pulse generator	Feb 2010	Vagus Nerve Stimulator	14	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
64570	Removal of cranial nerve (eg, vagus nerve) neurostimulator electrode array and pulse generator	Feb 2010	Vagus Nerve Stimulator	14	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
64624	Destruction by neurolytic agent, genicular nerve branches including imaging guidance, when performed	Jan 2019	Genicular Injection and RFA	10	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
64625	Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)	Jan 2019	Radiofrequency Neurotomy Sacroiliac Joint	08	CPT 2020	April 2024		☐
64628	Thermal destruction of intraosseous basivertebral nerve, including all imaging guidance; first 2 vertebral bodies, lumbar or sacral	Jan 2021	Destruction of Intraosseous Basivertebral Nerve	14	CPT 2022	April 2026		☐
64629	Thermal destruction of intraosseous basivertebral nerve, including all imaging guidance; each additional vertebral body, lumbar or sacral (list separately in addition to code for primary procedure)	Jan 2021	Destruction of Intraosseous Basivertebral Nerve	14	CPT 2022	April 2026		☐
64640	Destruction by neurolytic agent; other peripheral nerve or branch	Jan 2019	Genicular Injection and RFA	10	CPT 2020	April 2024		☐
64596		Sep 2022	Spinal Neurostimulator	04	CPT 2024	April 2028	Also to be reviewed because it was contractor priced and the response rate was below 30.	☐
64597		Sep 2022	Spinal Neurostimulator	04	CPT 2024	April 2028	Also to be reviewed because it was contractor priced and the response rate was below 30.	☐
64598		Sep 2022	Spinal Neurostimulator	04	CPT 2024	April 2028	Also to be reviewed because it was contractor priced and the response rate was below 30.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
65756	Keratoplasty (corneal transplant); endothelial	Apr 2008	Endothelial Keratoplasty	20	CPT 2009	September 2012	Remove, code does not need to be re-evaluated. Though volume grew faster than expected, there was a decrease in other services of similar magnitude, that were previously reported and had similar work RVUs. All remained work neutral.	☑
65757	Backbench preparation of corneal endothelial allograft prior to transplantation (list separately in addition to code for primary procedure)	Apr 2008	Endothelial Keratoplasty	20	CPT 2009	September 2012	Remove, code does not need to be re-evaluated.	☑
65778	Placement of amniotic membrane on the ocular surface; without sutures	Feb 2010	Amniotic Membrane Placement	15	CPT 2011	September 2014	Survey for April 2015.	☑
65779	Placement of amniotic membrane on the ocular surface; single layer, sutured	Feb 2010	Amniotic Membrane Placement	15	CPT 2011	September 2014	Survey for April 2015.	☑
65780	Ocular surface reconstruction; amniotic membrane transplantation, multiple layers	Oct 2011	Relativity Assessment Workgroup	51	CPT 2011	September 2014	Survey for April 2015.	☑
65785	Implantation of intrastromal corneal ring segments	Jan 2015	Intrastomal Corneal Ring Implantation	11	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
66174	Transluminal dilation of aqueous outflow canal (eg, canaloplasty); without retention of device or stent	Apr 2010	Open Angle Glaucoma Procedures	15	CPT 2011	October 2019	Jan 2020 - Referred to CPT	☑
66175	Transluminal dilation of aqueous outflow canal (eg, canaloplasty); with retention of device or stent	Apr 2010	Open Angle Glaucoma Procedures	15	CPT 2011	October 2019	Jan 2020 - Referred to CPT	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
66183	Insertion of anterior segment aqueous drainage device, without extraocular reservoir, external approach	Apr 2013	Insertion of Anterior Segment	14	CPT 2014	October 2017	Remove from list, no demonstrated techology diffusion that impacts work or practice expense.	☑
66982	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; without endoscopic cyclophotocoagulation	Jan 2021	Cataract Removal with Drainage Device Insertion	16	CPT 2022	April 2025		☐
66984	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); without endoscopic cyclophotocoagulation	Jan 2021	Cataract Removal with Drainage Device Insertion	16	CPT 2022	April 2025		☐
66987	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; with endoscopic cyclophotocoagulation	Jan 2021	Cataract Removal with Drainage Device Insertion	16	CPT 2022	April 2025		☐
66988	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); with endoscopic cyclophotocoagulation	Jan 2021	Cataract Removal with Drainage Device Insertion	16	CPT 2022	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
66989	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; with insertion of intraocular (eg, trabecular meshwork, supraciliary, suprachoroidal) anterior segment aqueous drainage device, without extraocular reservoir, internal approach, one or more	Jan 2021	Cataract Removal with Drainage Device Insertion	16	CPT 2022	April 2025		☐
66991	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); with insertion of intraocular (eg, trabecular meshwork, supraciliary, suprachoroidal) anterior segment aqueous drainage device, without extraocular reservoir, internal approach, one or more	Jan 2021	Cataract Removal with Drainage Device Insertion	16	CPT 2022	April 2025		☐
68816	Probing of nasolacrimal duct, with or without irrigation; with transluminal balloon catheter dilation	Apr 2007	Nasolacrimal Duct Balloon Catheter Dilation	E	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
68841	Insertion of drug-eluting implant, including punctal dilation when performed, into lacrimal canaliculus, each	Jan 2021	Lacrimal Canaliculus Drug Eluting Implant Insertion	17	CPT 2022	April 2026		☐
69705	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); unilateral	Jan 2020	Dilation of Eustachian Tube	15	CPT 2021	April 2025		☐
69706	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); bilateral	Jan 2020	Dilation of Eustachian Tube	15	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
67516		Jan 2023	Suprachoroidal Injection	10	CPT 2024	April 2028	There is currently only one FDA-approved medication for this procedure, triamcinolone acetonide, and it is approved for only one indication: macular edema associated with uveitis. The relevant HCPCS code is J-3299. Medicare claims volume for this indication is expected to be low. However, if other drugs for more common indications obtain FDA approval, claims volume may grow substantially. Thus, CPT code 6X000 will be placed on the New Technology list and will be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions. The RUC recommended that if there are new drugs that have an associated J-code that these also be considered by the Relativity Assessment Workgroup as part of the New Technology screen.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
70554	Magnetic resonance imaging, brain, functional mri; including test selection and administration of repetitive body part movement and/or visual stimulation, not requiring physician or psychologist administration	Feb 2006	Functional MRI	15	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
70555	Magnetic resonance imaging, brain, functional mri; requiring physician or psychologist administration of entire neurofunctional testing	Feb 2006	Functional MRI	15	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
71271	Computed tomography, thorax, low dose for lung cancer screening, without contrast material(s)	Oct 2019	Screening CT of Thorax	07	CPT 2021	April 2025		☐
74261	Computed tomographic (ct) colonography, diagnostic, including image postprocessing; without contrast material	Apr 2009	CT Colonography	19	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
74262	Computed tomographic (ct) colonography, diagnostic, including image postprocessing; with contrast material(s) including non-contrast images, if performed	Apr 2009	CT Colonography	19	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
74263	Computed tomographic (ct) colonography, screening, including image postprocessing	Apr 2009	CT Colonography	19	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
75557	Cardiac magnetic resonance imaging for morphology and function without contrast material;	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Remove, as utilization is appropriate due to shift of utilization for deleted code which included "with flow/velocity quantification", code 75558.	☑
75558	Code Deleted CPT 2010	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Code Deleted CPT 2010	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
75559	Cardiac magnetic resonance imaging for morphology and function without contrast material; with stress imaging	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
75560	Code Deleted CPT 2010	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Code Deleted CPT 2010	☑
75561	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences;	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Remove, as utilization is appropriate due to shift of utilization for deleted code which included "with flow/velocity quantification", code 75560.	☑
75562	Code Deleted CPT 2010	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Code Deleted CPT 2010	☑
75563	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences; with stress imaging	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
75564	Code Deleted CPT 2010	Apr 2007	Cardiac MRI	F	CPT 2008	September 2011	Code Deleted CPT 2010	☑
75571	Computed tomography, heart, without contrast material, with quantitative evaluation of coronary calcium	Feb 2009	Coronary Computed Tomographic Angiography	15	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
75572	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology (including 3d image postprocessing, assessment of cardiac function, and evaluation of venous structures, if performed)	Feb 2009	Coronary Computed Tomographic Angiography	15	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
75573	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology in the setting of congenital heart disease (including 3d image postprocessing, assessment of left ventricular [lv] cardiac function, right ventricular [rv] structure and function and evaluation of vascular structures, if performed)	Feb 2009	Coronary Computed Tomographic Angiography	15	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
75574	Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3d image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed)	Feb 2009	Coronary Computed Tomographic Angiography	15	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
76391	Magnetic resonance (eg, vibration) elastography	Jan 2018	Magnetic Resonance Elastography	16	CPT 2019	April 2023		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
76881	Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation	Apr 2010	Neuromuscular Ultrasound	11	CPT 2023	April 2027	The specialty society noted and the Workgroup agreed that the dominant specialties providing the complete versus the limited ultrasound of extremity services are different. Thus, causing variation in what the typical practice expense inputs. The Workgroup recommends to 1) Refer CPT codes 76881 and 76882 to the Practice Expense Subcommittee for review of the direct practice expense inputs; 2) Refer to the CPT Editorial Panel to clarify the introductory language regarding the reference to one joint in the complete ultrasound; and 3) Review again in 3 years (October 2019). In Oct 2019, the RAW recommended to review in 2 years after additional utilization data is available. However, in October 2021, the CPT Editorial Panel approved the addition of code 76883 for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							structures throughout their anatomic course, per extremity and the revision of 76882 to add focal evaluation. CPT code 76881 is included as part of this family, therefore, review by the RAW was no longer necessary. CPT codes 76881 and 76882 were identified as part of the neuromuscular ultrasound code family with CPT code 76883 and surveyed for the January 2022 RUC meeting. The RUC requested that 76883 be added to the new technology list and 76881 and 76882 be added for review at that time.	

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
76882	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation	Apr 2010	Neuromuscular Ultrasound	11	CPT 2023	April 2027	The specialty society noted and the Workgroup agreed that the dominant specialties providing the complete versus the limited ultrasound of extremity services are different. Thus, causing variation in what the typical practice expense inputs. The Workgroup recommends to 1) Refer CPT codes 76881 and 76882 to the Practice Expense Subcommittee for review of the direct practice expense inputs; 2) Refer to the CPT Editorial Panel to clarify the introductory language regarding the reference to one joint in the complete ultrasound; and 3) Review again in 3 years (October 2019). In Oct 2019, the RAW recommended to review in 2 years after additional utilization data is available. However, in October 2021, the CPT Editorial Panel approved the addition of code 76883 for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							structures throughout their anatomic course, per extremity and the revision of 76882 to add focal evaluation. CPT code 76881 is included as part of this family, therefore, review by the RAW was no longer necessary. CPT codes 76881 and 76882 were identified as part of the neuromuscular ultrasound code family with CPT code 76883 and surveyed for the January 2022 RUC meeting. The RUC requested that 76883 be added to the new technology list and 76881 and 76882 be added for review at that time.	
76883	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity	Jan 2022	Neuromuscular Ultrasound	11	CPT 2023	April 2027		☐
76978	Ultrasound, targeted dynamic microbubble sonographic contrast characterization (non-cardiac); initial lesion	Jan 2018	Contrast-Enhanced Ultrasound	15	CPT 2019	April 2023		☐
76979	Ultrasound, targeted dynamic microbubble sonographic contrast characterization (non-cardiac); each additional lesion with separate injection (list separately in addition to code for primary procedure)	Jan 2018	Contrast-Enhanced Ultrasound	15	CPT 2019	April 2023		☐
76981	Ultrasound, elastography; parenchyma (eg, organ)	Jan 2018	Ultrasound Elastography	14	CPT 2019	April 2023		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
76982	Ultrasound, elastography; first target lesion	Jan 2018	Ultrasound Elastography	14	CPT 2019	April 2023		☐
76983	Ultrasound, elastography; each additional target lesion (list separately in addition to code for primary procedure)	Jan 2018	Ultrasound Elastography	14	CPT 2019	April 2023		☐
77021	Magnetic resonance imaging guidance for needle placement (eg, for biopsy, needle aspiration, injection, or placement of localization device) radiological supervision and interpretation	Jan 2018	Fine Needle Aspiration	04	CPT 2019	April 2023		☐
77046	Magnetic resonance imaging, breast, without contrast material; unilateral	Oct 2017	Breast MRI with Computer-Aided Detection	06	CPT 2019	April 2023		☐
77047	Magnetic resonance imaging, breast, without contrast material; bilateral	Oct 2017	Breast MRI with Computer-Aided Detection	06	CPT 2019	April 2023		☐
77048	Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (cad real-time lesion detection, characterization and pharmacokinetic analysis), when performed; unilateral	Oct 2017	Breast MRI with Computer-Aided Detection	06	CPT 2019	April 2023		☐
77049	Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (cad real-time lesion detection, characterization and pharmacokinetic analysis), when performed; bilateral	Oct 2017	Breast MRI with Computer-Aided Detection	06	CPT 2019	April 2023		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
77061	Diagnostic digital breast tomosynthesis; unilateral	Apr 2014	Breast Tomosynthesis	19	CPT 2015	April 2025	In October 2018, the RUC recommended that CMS delete G0279 amd ise codes 77061, 77062 and 77063 as created by CPT and valued by the RUC. Review again in 3 years (2022). In April 2022, recommended to request again that CMS delete G0279 since it may be reported with 77061 or 77062 and RAW review again after 3 years of claims data (April 2025).	☐
77062	Diagnostic digital breast tomosynthesis; bilateral	Apr 2014	Breast Tomosynthesis	19	CPT 2015	April 2025	In October 2018, the RUC recommended that CMS delete G0279 amd ise codes 77061, 77062 and 77063 as created by CPT and valued by the RUC. Review again in 3 years (2022). In April 2022, recommended to request again that CMS delete G0279 since it may be reported with 77061 or 77062 and RAW review again after 3 years of claims data (April 2025).	☐

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77063	Screening digital breast tomosynthesis, bilateral (list separately in addition to code for primary procedure)	Apr 2014	Breast Tomosynthesis	19	CPT 2015	April 2025	In October 2018, the RUC recommended that CMS delete G0279 amd ise codes 77061, 77062 and 77063 as created by CPT and valued by the RUC. Review again in 3 years (2022). In April 2022, recommended to request again that CMS delete G0279 since it may be reported with 77061 or 77062 and RAW review again after 3 years of claims data (April 2025).	☐
77089	Trabecular bone score (tbs), structural condition of the bone microarchitecture; using dual x-ray absorptiometry (dxa) or other imaging data on gray-scale variogram, calculation, with interpretation and report on fracture-risk	Jan 2021	Trabecular Bone Score (TBS)	19	CPT 2022	April 2026		☐
77090	Trabecular bone score (tbs), structural condition of the bone microarchitecture; technical preparation and transmission of data for analysis to be performed elsewhere	Jan 2021	Trabecular Bone Score (TBS)	19	CPT 2022	April 2026		☐
77091	Trabecular bone score (tbs), structural condition of the bone microarchitecture; technical calculation only	Jan 2021	Trabecular Bone Score (TBS)	19	CPT 2022	April 2026		☐
77092	Trabecular bone score (tbs), structural condition of the bone microarchitecture; interpretation and report on fracture-risk only by other qualified health care professional	Jan 2021	Trabecular Bone Score (TBS)	19	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting		Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
77293	Respiratory motion management simulation (list separately in addition to code for primary procedure)	Jan 2013		Respiratory Motion Management Simulation	14	CPT 2014	October 2020	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
77371	Radiation treatment delivery, stereotactic radiosurgery (srs), complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source cobalt 60 based	Sep 2005		Stereotactic Radiation Tx Delivery	7	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
77372	Radiation treatment delivery, stereotactic radiosurgery (srs), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based	Sep 2005		Stereotactic Radiation Tx Delivery	7	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
77373	Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions	Apr 2006		Stereotactic Body Radiation Therapy	B	CPT 2007	September 2010	Practice expense review (Feb 2011).	☑
77435	Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions	Apr 2006	F	Stereotactic Body Radiation Therapy	B & 3	CPT 2007	September 2010/	Survey (work) and PE review (Feb 2011). Practice expense review (Feb 2011).	☑
77520	Proton treatment delivery; simple, without compensation	Apr 2019		Proton Beam Treatment Delivery (PE Only)	19	CPT 2021	April 2025		☐
77522	Proton treatment delivery; simple, with compensation	Apr 2019		Proton Beam Treatment Delivery (PE Only)	19	CPT 2021	April 2025		☐
77523	Proton treatment delivery; intermediate	Apr 2019		Proton Beam Treatment Delivery (PE Only)	19	CPT 2021	April 2025		☐
77525	Proton treatment delivery; complex	Apr 2019		Proton Beam Treatment Delivery (PE Only)	19	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
78071	Parathyroid planar imaging (including subtraction, when performed); with tomographic (spect)	Apr 2012	Parathyroid Imaging	23	CPT 2013	October 2018	In April 2011, CPT Code 78007, Thyroid imaging, with uptake; multiple determinations was identified in the Harvard Valued-Utilization over 30,000 screen. As part of the review of the entire endocrine family, the specialty societies determined that revisions to the parathyroid imaging procedures were necessary to reflect current bundling policies, guideline changes and new technology. AMA Staff reviewed the work neutrality impacts for codes reviewed in the CPT 2013 cycle. It appeared that was only one issue where there was a large growth in utilization in the first year. For CPT 2013 the Parathyroid Imaging codes were not work neutral, and it was initially estimated as a savings overall. It appears that there was 40% increase from what was projected. The specialty societies submitted an action plan indicating that literature supporting parathyroid scintigraphy as an	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							effective diagnostic study for parathyroid disease has recently emerged and supports the clinical utility thus increasing utilization. Secondly, the availability of SPECT/CT cameras has increased and is greater than initially predicted, allowing for a higher utilization. The Workgroup agreed and also noted that these services are conducted on patients who are referred to the radiologists or nuclear medicine physicians. The physicians providing these services do not control the number of patients referred to them who receive these services. The Workgroup recommends that the specialty societies develop a CPT Assistant article to address potential current use of 78803 rather than the new codes 78071 and 78072. The Workgroup noted that these services are on the new technology list for review later this year and should be postponed and reviewed in 2 years	

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							after the CPT Assistant article is published. In October 2018, the RUC recommended to remove from list , no demonstrated technology diffusion that impacts work or practice expense.	

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
78072	Parathyroid planar imaging (including subtraction, when performed); with tomographic (spect), and concurrently acquired computed tomography (ct) for anatomical localization	Apr 2012	Parathyroid Imaging	23	CPT 2013	October 2018	In April 2011, CPT Code 78007, Thyroid imaging, with uptake; multiple determinations was identified in the Harvard Valued-Utilization over 30,000 screen. As part of the review of the entire endocrine family, the specialty societies determined that revisions to the parathyroid imaging procedures were necessary to reflect current bundling policies, guideline changes and new technology. AMA Staff reviewed the work neutrality impacts for codes reviewed in the CPT 2013 cycle. It appeared that was only one issue where there was a large growth in utilization in the first year. For CPT 2013 the Parathyroid Imaging codes were not work neutral, and it was initially estimated as a savings overall. It appears that there was 40% increase from what was projected. The specialty societies submitted an action plan indicating that literature supporting parathyroid scintigraphy as an	☑

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CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							after the CPT Assistant article is published. In October 2018, the RUC recommended to remove from list , no demonstrated technology diffusion that impacts work or practice expense.	
78265	Gastric emptying imaging study (eg, solid, liquid, or both); with small bowel transit	Apr 2015	Colon Transit Imaging	18	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
78266	Gastric emptying imaging study (eg, solid, liquid, or both); with small bowel and colon transit, multiple days	Apr 2015	Colon Transit Imaging	18	CPT 2016	October 2019	Remove from list , no demonstrated technology diffusion that impacts work or practice expense.	☑
78429	Myocardial imaging, positron emission tomography (pet), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study; with concurrently acquired computed tomography transmission scan	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78430	Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); single study, at rest or stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78431	Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); multiple studies at rest and stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
78432	Myocardial imaging, positron emission tomography (pet), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (eg, myocardial viability);	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78433	Myocardial imaging, positron emission tomography (pet), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (eg, myocardial viability); with concurrently acquired computed tomography transmission scan	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78434	Absolute quantitation of myocardial blood flow (aqmbf), positron emission tomography (pet), rest and pharmacologic stress (list separately in addition to code for primary procedure)	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78459	Myocardial imaging, positron emission tomography (pet), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study;	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78491	Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); single study, at rest or stress (exercise or pharmacologic)	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78492	Myocardial imaging, positron emission tomography (pet), perfusion study (including ventricular wall motion[s] and/or ejection fraction[s], when performed); multiple studies at rest and stress (exercise or pharmacologic)	Jan 2019	Myocardial PET	13	CPT 2020	April 2024		☐
78811	Positron emission tomography (pet) imaging; limited area (eg, chest, head/neck)	Apr 2007	PET Imaging	G	CPT 2008	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
78812	Positron emission tomography (pet) imaging; skull base to mid-thigh	Apr 2007	PET Imaging	G	CPT 2008	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
78813	Positron emission tomography (pet) imaging; whole body	Apr 2007	PET Imaging	G	CPT 2008	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
78814	Positron emission tomography (pet) with concurrently acquired computed tomography (ct) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)	Apr 2007	PET Imaging	G	CPT 2008	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
78815	Positron emission tomography (pet) with concurrently acquired computed tomography (ct) for attenuation correction and anatomical localization imaging; skull base to mid-thigh	Apr 2007	PET Imaging	G	CPT 2008	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
78816	Positron emission tomography (pet) with concurrently acquired computed tomography (ct) for attenuation correction and anatomical localization imaging; whole body	Apr 2007	PET Imaging	G	CPT 2008	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
78830	Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (spect) with concurrently acquired computed tomography (ct) transmission scan for anatomical review, localization and determination/detection of pathology, single area (eg, head, neck, chest, pelvis) or acquisition, single day imaging	Jan 2019	SPECT-CT Procedures	14	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
78831	Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (spect), minimum 2 areas (eg, pelvis and knees, chest and abdomen) or separate acquisitions (eg, lung ventilation and perfusion), single day imaging, or single area or acquisition over 2 or more days	Jan 2019	SPECT-CT Procedures	14	CPT 2020	April 2024		☐
78832	Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (spect) with concurrently acquired computed tomography (ct) transmission scan for anatomical review, localization and determination/detection of pathology, minimum 2 areas (eg, pelvis and knees, chest and abdomen) or separate acquisitions (eg, lung ventilation and perfusion), single day imaging, or single area or acquisition over 2 or more days	Jan 2019	SPECT-CT Procedures	14	CPT 2020	April 2024		☐
78835	Radiopharmaceutical quantification measurement(s) single area (list separately in addition to code for primary procedure)	Jan 2019	SPECT-CT Procedures	14	CPT 2020	April 2024		☐
76984		Sep 2022	Intraoperative Ultrasound	05	CPT 2024	April 2028		☐
76987		Sep 2022	Intraoperative Ultrasound	05	CPT 2024	April 2028		☐
76988		Sep 2022	Intraoperative Ultrasound	05	CPT 2024	April 2028		☐
76989		Sep 2022	Intraoperative Ultrasound	05	CPT 2024	April 2028		☐
75580		Jan 2023	Fractional Flow Reserve with CT	11	CPT 2024	April 2028		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81161	Dmd (dystrophin) (eg, duchenne/becker muscular dystrophy) deletion analysis, and duplication analysis, if performed	Oct 2012	Molecular Pathology -Tier 1	11	CPT 2014	October 2017	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81201	Apc (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [fap], attenuated fap) gene analysis; full gene sequence	Apr 2012	Molecular Pathology-Adenomatous Polyposis Coli	24	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81202	Apc (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [fap], attenuated fap) gene analysis; known familial variants	Apr 2012	Molecular Pathology-Adenomatous Polyposis Coli	24	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81203	Apc (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [fap], attenuated fap) gene analysis; duplication/deletion variants	Apr 2012	Molecular Pathology-Adenomatous Polyposis Coli	24	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81206	Bcr/abl1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation analysis; major breakpoint, qualitative or quantitative	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81207	Bcr/abl1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation analysis; minor breakpoint, qualitative or quantitative	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81208	Bcr/abl1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation analysis; other breakpoint, qualitative or quantitative	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81210	Braf (b-raf proto-oncogene, serine/threonine kinase) (eg, colon cancer, melanoma), gene analysis, v600 variant(s)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81216	Brca2 (brca2, dna repair associated) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81217	Brca2 (brca2, dna repair associated) (eg, hereditary breast and ovarian cancer) gene analysis; known familial variant	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81220	Cftr (cystic fibrosis transmembrane conductance regulator) (eg, cystic fibrosis) gene analysis; common variants (eg, acmg/acog guidelines)	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81221	Cftr (cystic fibrosis transmembrane conductance regulator) (eg, cystic fibrosis) gene analysis; known familial variants	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81222	Cftr (cystic fibrosis transmembrane conductance regulator) (eg, cystic fibrosis) gene analysis; duplication/deletion variants	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81223	Cftr (cystic fibrosis transmembrane conductance regulator) (eg, cystic fibrosis) gene analysis; full gene sequence	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81224	Cftr (cystic fibrosis transmembrane conductance regulator) (eg, cystic fibrosis) gene analysis; intron 8 poly-t analysis (eg, male infertility)	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81225	Cyp2c19 (cytochrome p450, family 2, subfamily c, polypeptide 19) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81227	Cyp2c9 (cytochrome p450, family 2, subfamily c, polypeptide 9) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81235	Egfr (epidermal growth factor receptor) (eg, non-small cell lung cancer) gene analysis, common variants (eg, exon 19 lrea deletion, l858r, t790m, g719a, g719s, l861q)	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81240	F2 (prothrombin, coagulation factor ii) (eg, hereditary hypercoagulability) gene analysis, 20210g>a variant	Apr 2011	Molecular Pathology Test - Tier 1	15	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81241	F5 (coagulation factor v) (eg, hereditary hypercoagulability) gene analysis, leiden variant	Apr 2011	Molecular Pathology Test - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81243	Fmr1 (fragile x mental retardation 1) (eg, fragile x mental retardation) gene analysis; evaluation to detect abnormal (eg, expanded) alleles	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81244	Fmr1 (fragile x mental retardation 1) (eg, fragile x mental retardation) gene analysis; characterization of alleles (eg, expanded size and promoter methylation status)	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81245	Flt3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene analysis; internal tandem duplication (itd) variants (ie, exons 14, 15)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81252	Gjb2 (gap junction protein, beta 2, 26kda, connexin 26) (eg, nonsyndromic hearing loss) gene analysis; full gene sequence	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81253	Gjb2 (gap junction protein, beta 2, 26kda, connexin 26) (eg, nonsyndromic hearing loss) gene analysis; known familial variants	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81254	Gjb6 (gap junction protein, beta 6, 30kda, connexin 30) (eg, nonsyndromic hearing loss) gene analysis, common variants (eg, 309kb [del(gjb6-d13s1830)] and 232kb [del(gjb6-d13s1854)])	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81256	Hfe (hemochromatosis) (eg, hereditary hemochromatosis) gene analysis, common variants (eg, c282y, h63d)	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81257	Hba1/hba2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, hb bart hydrops fetalis syndrome, hbh disease), gene analysis; common deletions or variant (eg, southeast asian, thai, filipino, mediterranean, alpha3.7, alpha4.2, alpha20.5, constant spring)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81261	Igh@ (immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, b-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplified methodology (eg, polymerase chain reaction)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81262	Igh@ (immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, b-cell), gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, southern blot)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81263	Igh@ (immunoglobulin heavy chain locus) (eg, leukemia and lymphoma, b-cell), variable region somatic mutation analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81264	Igk@ (immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, b-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81265	Comparative analysis using short tandem repeat (str) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81266	Comparative analysis using short tandem repeat (str) markers; each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) (list separately in addition to code for primary procedure)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81267	Chimerism (engraftment) analysis, post transplantation specimen (eg, hematopoietic stem cell), includes comparison to previously performed baseline analyses; without cell selection	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81268	Chimerism (engraftment) analysis, post transplantation specimen (eg, hematopoietic stem cell), includes comparison to previously performed baseline analyses; with cell selection (eg, cd3, cd33), each cell type	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81270	Jak2 (janus kinase 2) (eg, myeloproliferative disorder) gene analysis, p.val617phe (v617f) variant	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81275	Kras (kirsten rat sarcoma viral oncogene homolog) (eg, carcinoma) gene analysis; variants in exon 2 (eg, codons 12 and 13)	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81291	Mthfr (5,10-methylenetetrahydrofolate reductase) (eg, hereditary hypercoagulability) gene analysis, common variants (eg, 677t, 1298c)	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81292	Mlh1 (mutl homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; full sequence analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81293	Mlh1 (mutl homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; known familial variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81294	Mlh1 (mutl homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; duplication/deletion variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81295	Msh2 (muts homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; full sequence analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81296	Msh2 (muts homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; known familial variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81297	Msh2 (muts homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; duplication/deletion variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81298	Msh6 (muts homolog 6 [e. coli]) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; full sequence analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81299	Msh6 (muts homolog 6 [e. coli]) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; known familial variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81300	Msh6 (muts homolog 6 [e. coli]) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; duplication/deletion variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81301	Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) of markers for mismatch repair deficiency (eg, bat25, bat26), includes comparison of neoplastic and normal tissue, if performed	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81302	Mecp2 (methyl cpg binding protein 2) (eg, rett syndrome) gene analysis; full sequence analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81303	Mecp2 (methyl cpg binding protein 2) (eg, rett syndrome) gene analysis; known familial variant	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81304	Mecp2 (methyl cpg binding protein 2) (eg, rett syndrome) gene analysis; duplication/deletion variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81315	Pml/raralpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor alpha) (eg, promyelocytic leukemia) translocation analysis; common breakpoints (eg, intron 3 and intron 6), qualitative or quantitative	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81316	Pml/raralpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor alpha) (eg, promyelocytic leukemia) translocation analysis; single breakpoint (eg, intron 3, intron 6 or exon 6), qualitative or quantitative	Apr 2011	Molecular Pathology - Tier 1	15	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81317	Pms2 (postmeiotic segregation increased 2 [s. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; full sequence analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81318	Pms2 (postmeiotic segregation increased 2 [s. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; known familial variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81319	Pms2 (postmeiotic segregation increased 2 [s. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, lynch syndrome) gene analysis; duplication/deletion variants	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81321	Pten (phosphatase and tensin homolog) (eg, cowden syndrome, pten hamartoma tumor syndrome) gene analysis; full sequence analysis	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81322	Pten (phosphatase and tensin homolog) (eg, cowden syndrome, pten hamartoma tumor syndrome) gene analysis; known familial variant	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81323	Pten (phosphatase and tensin homolog) (eg, cowden syndrome, pten hamartoma tumor syndrome) gene analysis; duplication/deletion variant	Sep 2011	Molecular Pathology Test - Tier 1	09	CPT 2013	October 2016	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81331	Snrpn/ube3a (small nuclear ribonucleoprotein polypeptide n and ubiquitin protein ligase e3a) (eg, prader-willi syndrome and/or angelman syndrome), methylation analysis	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81332	Serpina1 (serpin peptidase inhibitor, clade a, alpha-1 antiproteinase, antitrypsin, member 1) (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *s and *z)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81340	Trb@ (t cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81341	Trb@ (t cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using direct probe methodology (eg, southern blot)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81342	Trg@ (t cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81350	Ugt1a1 (udp glucuronosyltransferase 1 family, polypeptide a1) (eg, drug metabolism, hereditary unconjugated hyperbilirubinemia [gilbert syndrome]) gene analysis, common variants (eg, *28, *36, *37)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81355	Vkorc1 (vitamin k epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variant(s) (eg, -1639g>a, c.173+1000c>t)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81370	Hla class i and ii typing, low resolution (eg, antigen equivalents); hla-a, -b, -c, -drb1/3/4/5, and -dqb1	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81371	Hla class i and ii typing, low resolution (eg, antigen equivalents); hla-a, -b, and -drb1 (eg, verification typing)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81372	Hla class i typing, low resolution (eg, antigen equivalents); complete (ie, hla-a, -b, and -c)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81373	Hla class i typing, low resolution (eg, antigen equivalents); one locus (eg, hla-a, -b, or -c), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81374	Hla class i typing, low resolution (eg, antigen equivalents); one antigen equivalent (eg, b*27), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81375	Hla class ii typing, low resolution (eg, antigen equivalents); hla-drb1/3/4/5 and -dqb1	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81376	Hla class ii typing, low resolution (eg, antigen equivalents); one locus (eg, hla-drb1, -drb3/4/5, -dqb1, -dqa1, -dpb1, or -dpa1), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81377	Hla class ii typing, low resolution (eg, antigen equivalents); one antigen equivalent, each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81378	Hla class i and ii typing, high resolution (ie, alleles or allele groups), hla-a, -b, -c, and -drb1	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81379	Hla class i typing, high resolution (ie, alleles or allele groups); complete (ie, hla-a, -b, and -c)	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81380	Hla class i typing, high resolution (ie, alleles or allele groups); one locus (eg, hla-a, -b, or -c), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81381	Hla class i typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, b*57:01p), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81382	Hla class ii typing, high resolution (ie, alleles or allele groups); one locus (eg, hla-drb1, -drb3/4/5, -dqb1, -dqa1, -dpb1, or -dpa1), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑
81383	Hla class ii typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, hla-dqb1*06:02p), each	Sep 2011	Molecular Pathology Test - Tier 1	05	CPT 2012	October 2015	Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81400	Molecular pathology procedure, level 1 (eg, identification of single germline variant [eg, snp] by techniques such as restriction enzyme digestion or melt curve analysis) acadm (acyl-coa dehydrogenase, c-4 to c-12 straight chain, mcad) (eg, medium chain acyl dehydrogenase deficiency), k304e variant ace (angiotensin converting enzyme) (eg, hereditary blood pressure regulation), insertion/deletion variant agtr1 (angiotensin ii receptor, type 1) (eg, essential hypertension), 1166a>c variant bckdha (branched chain keto acid dehydrogenase e1, alpha polypeptide) (eg, maple syrup urine disease, type 1a), y438n variant ccr5 (chemokine c-c motif receptor 5) (eg, hiv resistance), 32-bp deletion mutation/794 825del32 deletion clrn1 (clarin 1) (eg, usher syndrome, type 3), n48k variant f2 (coagulation factor 2) (eg, hereditary hypercoagulability), 1199g>a variant f5 (coagulation factor v) (eg, hereditary hypercoagulability), hr2 variant f7 (coagulation factor vii [serum prothrombin conversion accelerator]) (eg, hereditary hypercoagulability), r353q variant f13b (coagulation factor xiii, b polypeptide) (eg, hereditary hypercoagulability), v34l variant fgb (fibrinogen beta chain) (eg, hereditary ischemic heart disease), -455g>a variant fgfr1 (fibroblast growth factor receptor 1) (eg, pfeiffer syndrome type 1, craniosynostosis), p252r variant fgfr3 (fibroblast growth factor receptor 3) (eg, muenke syndrome), p250r variant fktn (fukutin) (eg, fukuyama congenital muscular dystrophy), retrotransposon insertion variant gne (glucosamine [udp-n-acetyl]-2-epimerase/n-acetylmannosamine kinase) (eg, inclusion body myopathy 2 [ibm2], nonaka myopathy), m712t variant ivd (isovaleryl-coa dehydrogenase) (eg, isovaleric acidemia), a282v variant lct (lactase-phlorizin hydrolase) (eg, lactose intolerance), 13910 c>t variant neb (nebulin) (eg, nemaline myopathy 2), exon 55 deletion variant pcdh15 (protocadherin-related 15) (eg, usher syndrome type 1f), r245x variant serpine1 (serpine peptidase	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	inhibitor clade e, member 1, plasminogen activator inhibitor -1, pai-1) (eg, thrombophilia), 4g variant shoc2 (soc-2 suppressor of clear homolog) (eg, noonan-like syndrome with loose anagen hair), s2g variant sry (sex determining region y) (eg, 46,xx testicular disorder of sex development, gonadal dysgenesis), gene analysis tor1a (torsin family 1, member a [torsin a]) (eg, early-onset primary dystonia [dyt1]), 907_909delgag (904_906delgag) variant							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81401	Molecular pathology procedure, level 2 (eg, 2-10 snps, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat) abcc8 (atp-binding cassette, sub-family c [cftr/mrp], member 8) (eg, familial hyperinsulinism), common variants (eg, c.3898-9g>a [c.3992-9g>a], f1388del) abl1 (abl proto-oncogene 1, non-receptor tyrosine kinase) (eg, acquired imatinib resistance), t315i variant acadm (acyl-coa dehydrogenase, c-4 to c-12 straight chain, mcad) (eg, medium chain acyl dehydrogenase deficiency), commons variants (eg, k304e, y42h) adrb2 (adrenergic beta-2 receptor surface) (eg, drug metabolism), common variants (eg, g16r, q27e) apob (apolipoprotein b) (eg, familial hypercholesterolemia type b), common variants (eg, r3500q, r3500w) apoe (apolipoprotein e) (eg, hyperlipoproteinemia type iii, cardiovascular disease, alzheimer disease), common variants (eg, *2, *3, *4) cbfb/myh11 (inv(16)) (eg, acute myeloid leukemia), qualitative, and quantitative, if performed cbs (cystathionine-beta-synthase) (eg, homocystinuria, cystathionine beta-synthase deficiency), common variants (eg, i278t, g307s) cfh/arms2 (complement factor h/age-related maculopathy susceptibility 2) (eg, macular degeneration), common variants (eg, y402h [cfh], a69s [arms2]) dek/nup214 (t(6;9)) (eg, acute myeloid leukemia), translocation analysis, qualitative, and quantitative, if performed e2a/pbx1 (t(1;19)) (eg, acute lymphocytic leukemia), translocation analysis, qualitative, and quantitative, if performed eml4/alk (inv(2)) (eg, non-small cell lung cancer), translocation or inversion analysis etv6/runx1 (t(12;21)) (eg, acute lymphocytic leukemia), translocation analysis, qualitative, and quantitative, if performed ewsr1/atf1 (t(12;22)) (eg, clear cell sarcoma), translocation analysis, qualitative, and quantitative, if performed ewsr1/erg (t(21;22)) (eg, ewing sarcoma/peripheral neuroectodermal tumor), translocation analysis, qualitative, and	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	quantitative, if performed ewsr1/fli1 (t(11;22)) (eg, ewing sarcoma/peripheral neuroectodermal tumor), translocation analysis, qualitative, and quantitative, if performed ewsr1/wt1 (t(11;22)) (eg, desmoplastic small round cell tumor), translocation analysis, qualitative, and quantitative, if performed f11 (coagulation factor xi) (eg, coagulation disorder), common variants (eg, e117x [type ii], f283l [type iii], ivs14del14, and ivs14+1g>a [type i]) fgfr3 (fibroblast growth factor receptor 3) (eg, achondroplasia, hypochondroplasia), common variants (eg, 1138g>a, 1138g>c, 1620c>a, 1620c>g) fip1l1/pdgfra (del[4q12]) (eg, imatinib-sensitive chronic eosinophilic leukemia), qualitative, and quantitative, if performed flg (filaggrin) (eg, ichthyosis vulgaris), common variants (eg, r501x, 2282del4, r2447x, s3247x, 3702delg) foxo1/pax3 (t(2;13)) (eg, alveolar rhabdomyosarcoma), translocation analysis, qualitative, and quantitative, if performed foxo1/pax7 (t(1;13)) (eg, alveolar rhabdomyosarcoma), translocation analysis, qualitative, and quantitative, if performed fus/ddit3 (t(12;16)) (eg, myxoid liposarcoma), translocation analysis, qualitative, and quantitative, if performed galc (galactosylceramidase) (eg, krabbe disease), common variants (eg, c.857g>a, 30-kb deletion) galt (galactose-1-phosphate uridylyltransferase) (eg, galactosemia), common variants (eg, q188r, s135l, k285n, t138m, l195p, y209c, ivs2-2a>g, p171s, del5kb, n314d, l218l/n314d) h19 (imprinted maternally expressed transcript [non-protein coding]) (eg, beckwith-wiedemann syndrome), methylation analysis igh@/bcl2 (t(14;18)) (eg, follicular lymphoma), translocation analysis; single breakpoint (eg, major breakpoint region [mbr] or minor cluster region [mcr]), qualitative or quantitative (when both mbr and mcr breakpoints are performed, use 81278) kcnq1ot1 (kcnq1 overlapping transcript 1 [non-protein coding]) (eg, beckwith-wiedemann syndrome), methylation analysis linc00518 (long intergenic non-protein coding rna 518) (eg, melanoma), expression							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	analysis lrrk2 (leucine-rich repeat kinase 2) (eg, parkinson disease), common variants (eg, r1441g, g2019s, i2020t) med12 (mediator complex subunit 12) (eg, fg syndrome type 1, lujan syndrome), common variants (eg, r961w, n1007s) meg3/dlk1 (maternally expressed 3 [non-protein coding]/delta-like 1 homolog [drosophila]) (eg, intrauterine growth retardation), methylation analysis mll/aff1 (t(4;11)) (eg, acute lymphoblastic leukemia), translocation analysis, qualitative, and quantitative, if performed mll/mllt3 (t(9;11)) (eg, acute myeloid leukemia), translocation analysis, qualitative, and quantitative, if performed mt-atp6 (mitochondrially encoded atp synthase 6) (eg, neuropathy with ataxia and retinitis pigmentosa [narp], leigh syndrome), common variants (eg, m.8993t>g, m.8993t>c) mt-nd4, mt-nd6 (mitochondrially encoded nadh dehydrogenase 4, mitochondrially encoded nadh dehydrogenase 6) (eg, leber hereditary optic neuropathy [lhon]), common variants (eg, m.11778g>a, m.3460g>a, m.14484t>c) mt-nd5 (mitochondrially encoded trna leucine 1 [uua/g], mitochondrially encoded nadh dehydrogenase 5) (eg, mitochondrial encephalopathy with lactic acidosis and stroke-like episodes [melas]), common variants (eg, m.3243a>g, m.3271t>c, m.3252a>g, m.13513g>a) mt-rnr1 (mitochondrially encoded 12s rna) (eg, nonsyndromic hearing loss), common variants (eg, m.1555a>g, m.1494c>t) mt-tk (mitochondrially encoded trna lysine) (eg, myoclonic epilepsy with ragged-red fibers [merrf]), common variants (eg, m.8344a>g, m.8356t>c) mt-tl1 (mitochondrially encoded trna leucine 1 [uua/g]) (eg, diabetes and hearing loss), common variants (eg, m.3243a>g, m.14709 t>c) mt-tl1 mt-ts1, mt-rnr1 (mitochondrially encoded trna serine 1 [ucn], mitochondrially encoded 12s rna) (eg, nonsyndromic sensorineural deafness [including aminoglycoside-induced nonsyndromic deafness]), common variants (eg, m.7445a>g, m.1555a>g) mutyh (muty homolog [e. coli]) (eg, myh-associated polyposis), common variants (eg,							

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	y165c, g382d) nod2 (nucleotide-binding oligomerization domain containing 2) (eg, crohn's disease, blau syndrome), common variants (eg, snp 8, snp 12, snp 13) npm1/alk (t(2;5)) (eg, anaplastic large cell lymphoma), translocation analysis pax8/pparg (t(2;3) (q13;p25)) (eg, follicular thyroid carcinoma), translocation analysis prame (preferentially expressed antigen in melanoma) (eg, melanoma), expression analysis prss1 (protease, serine, 1 [trypsin 1]) (eg, hereditary pancreatitis), common variants (eg, n29i, a16v, r122h) pygm (phosphorylase, glycogen, muscle) (eg, glycogen storage disease type v, mcardle disease), common variants (eg, r50x, g205s) runx1/runx1t1 (t(8;21)) (eg, acute myeloid leukemia) translocation analysis, qualitative, and quantitative, if performed ss18/ssx1 (t(x;18)) (eg, synovial sarcoma), translocation analysis, qualitative, and quantitative, if performed ss18/ssx2 (t(x;18)) (eg, synovial sarcoma), translocation analysis, qualitative, and quantitative, if performed vwf (von willebrand factor) (eg, von willebrand disease type 2n), common variants (eg, t791m, r816w, r854q)							

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81402	Molecular pathology procedure, level 3 (eg, >10 snps, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and t-cell receptor gene rearrangements, duplication/deletion variants of 1 exon, loss of heterozygosity [loh], uniparental disomy [upd]) chromosome 1p-/19q- (eg, glial tumors), deletion analysis chromosome 18q- (eg, d18s55, d18s58, d18s61, d18s64, and d18s69) (eg, colon cancer), allelic imbalance assessment (ie, loss of heterozygosity) col1a1/pdgfb (t(17;22)) (eg, dermatofibrosarcoma protuberans), translocation analysis, multiple breakpoints, qualitative, and quantitative, if performed cyp21a2 (cytochrome p450, family 21, subfamily a, polypeptide 2) (eg, congenital adrenal hyperplasia, 21-hydroxylase deficiency), common variants (eg, ivs2-13g, p30l, i172n, exon 6 mutation cluster [i235n, v236e, m238k], v281l, l307ffsx6, q318x, r356w, p453s, g110vfsx21, 30-kb deletion variant) esr1/pgr (receptor 1/progesterone receptor) ratio (eg, breast cancer) mefv (mediterranean fever) (eg, familial mediterranean fever), common variants (eg, e148q, p369s, f479l, m680i, i692del, m694v, m694i, k695r, v726a, a744s, r761h) trd@ (t cell antigen receptor, delta) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population uniparental disomy (upd) (eg, russell-silver syndrome, prader-willi/angelman syndrome), short tandem repeat (str) analysis	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

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81403	Molecular pathology procedure, level 4 (eg, analysis of single exon by dna sequence analysis, analysis of >10 amplicons using multiplex pcr in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons) ang (angiogenin, ribonuclease, rnase a family, 5) (eg, amyotrophic lateral sclerosis), full gene sequence arx (aristaless-related homeobox) (eg, x-linked lissencephaly with ambiguous genitalia, x-linked mental retardation), duplication/deletion analysis cel (carboxyl ester lipase [bile salt-stimulated lipase]) (eg, maturity-onset diabetes of the young [mody]), targeted sequence analysis of exon 11 (eg, c.1785delc, c.1686delt) ctnnb1 (catenin [cadherin-associated protein], beta 1, 88kda) (eg, desmoid tumors), targeted sequence analysis (eg, exon 3) daz/sry (deleted in azoospermia and sex determining region y) (eg, male infertility), common deletions (eg, azfa, azfb, azfc, azfd) dnmt3a (dna [cytosine-5-]-methyltransferase 3 alpha) (eg, acute myeloid leukemia), targeted sequence analysis (eg, exon 23) epcam (epithelial cell adhesion molecule) (eg, lynch syndrome), duplication/deletion analysis f8 (coagulation factor viii) (eg, hemophilia a), inversion analysis, intron 1 and intron 22a f12 (coagulation factor xii [hageman factor]) (eg, angioedema, hereditary, type iii; factor xii deficiency), targeted sequence analysis of exon 9 fgfr3 (fibroblast growth factor receptor 3) (eg, isolated craniosynostosis), targeted sequence analysis (eg, exon 7) (for targeted sequence analysis of multiple fgfr3 exons, use 81404) gjb1 (gap junction protein, beta 1) (eg, charcot-marie-tooth x-linked), full gene sequence gnaq (guanine nucleotide-binding protein g[q] subunit alpha) (eg, uveal melanoma), common variants (eg, r183, q209) human erythrocyte antigen gene analyses (eg, slc14a1 [kidd blood group], bcam [lutheran blood group], icam4 [landsteiner-wiener blood group], slc4a1 [diego blood group], aqp1 [colton blood group], ermap [scianna blood group], rhce [rh blood group, ccee antigens], kel [kell blood group], darc [duffy blood	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

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	group], gypa, gypb, gype [mns blood group], art4 [dombrock blood group]) (eg, sickle-cell disease, thalassemia, hemolytic transfusion reactions, hemolytic disease of the fetus or newborn), common variants hras (v-ha-ras harvey rat sarcoma viral oncogene homolog) (eg, costello syndrome), exon 2 sequence kcnc3 (potassium voltage-gated channel, shaw-related subfamily, member 3) (eg, spinocerebellar ataxia), targeted sequence analysis (eg, exon 2) kcnj2 (potassium inwardly-rectifying channel, subfamily j, member 2) (eg, andersen-tawil syndrome), full gene sequence kcnj11 (potassium inwardly-rectifying channel, subfamily j, member 11) (eg, familial hyperinsulinism), full gene sequence killer cell immunoglobulin-like receptor (kir) gene family (eg, hematopoietic stem cell transplantation), genotyping of kir family genes known familial variant not otherwise specified, for gene listed in tier 1 or tier 2, or identified during a genomic sequencing procedure, dna sequence analysis, each variant exon (for a known familial variant that is considered a common variant, use specific common variant tier 1 or tier 2 code) mc4r (melanocortin 4 receptor) (eg, obesity), full gene sequence mica (mhc class i polypeptide-related sequence a) (eg, solid organ transplantation), common variants (eg, *001, *002) mt-rnr1 (mitochondrially encoded 12s rna) (eg, nonsyndromic hearing loss), full gene sequence mt-ts1 (mitochondrially encoded trna serine 1) (eg, nonsyndromic hearing loss), full gene sequence ndp (norrie disease [pseudoglioma]) (eg, norrie disease), duplication/deletion analysis nhlrc1 (nhl repeat containing 1) (eg, progressive myoclonus epilepsy), full gene sequence phox2b (paired-like homeobox 2b) (eg, congenital central hypoventilation syndrome), duplication/deletion analysis pln (phospholamban) (eg, dilated cardiomyopathy, hypertrophic cardiomyopathy), full gene sequence rhd (rh blood group, d antigen) (eg, hemolytic disease of the fetus and newborn, rh maternal/fetal compatibility), deletion analysis							

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	(eg, exons 4, 5, and 7, pseudogene) rhd (rh blood group, d antigen) (eg, hemolytic disease of the fetus and newborn, rh maternal/fetal compatibility), deletion analysis (eg, exons 4, 5, and 7, pseudogene), performed on cell-free fetal dna in maternal blood (for human erythrocyte gene analysis of rhd, use a separate unit of 81403) sh2d1a (sh2 domain containing 1a) (eg, x-linked lymphoproliferative syndrome), duplication/deletion analysis twist1 (twist homolog 1 [drosophila]) (eg, saethre-chotzen syndrome), duplication/deletion analysis uba1 (ubiquitin-like modifier activating enzyme 1) (eg, spinal muscular atrophy, x-linked), targeted sequence analysis (eg, exon 15) vhl (von hippel-lindau tumor suppressor) (eg, von hippel-lindau familial cancer syndrome), deletion/duplication analysis vwf (von willebrand factor) (eg, von willebrand disease types 2a, 2b, 2m), targeted sequence analysis (eg, exon 28)							

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81404	Molecular pathology procedure, level 5 (eg, analysis of 2-5 exons by dna sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by southern blot analysis) acads (acyl-coa dehydrogenase, c-2 to c-3 short chain) (eg, short chain acyl-coa dehydrogenase deficiency), targeted sequence analysis (eg, exons 5 and 6) aqp2 (aquaporin 2 [collecting duct]) (eg, nephrogenic diabetes insipidus), full gene sequence arx (aristaless related homeobox) (eg, x-linked lissencephaly with ambiguous genitalia, x-linked mental retardation), full gene sequence avpr2 (arginine vasopressin receptor 2) (eg, nephrogenic diabetes insipidus), full gene sequence bbs10 (bardet-biedl syndrome 10) (eg, bardet-biedl syndrome), full gene sequence btd (biotinidase) (eg, biotinidase deficiency), full gene sequence c10orf2 (chromosome 10 open reading frame 2) (eg, mitochondrial dna depletion syndrome), full gene sequence cav3 (caveolin 3) (eg, cav3-related distal myopathy, limb-girdle muscular dystrophy type 1c), full gene sequence cd40lg (cd40 ligand) (eg, x-linked hyper igm syndrome), full gene sequence cdkn2a (cyclin-dependent kinase inhibitor 2a) (eg, cdkn2a-related cutaneous malignant melanoma, familial atypical mole-malignant melanoma syndrome), full gene sequence clrn1 (clarin 1) (eg, usher syndrome, type 3), full gene sequence cox6b1 (cytochrome c oxidase subunit vib polypeptide 1) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence cpt2 (carnitine palmitoyltransferase 2) (eg, carnitine palmitoyltransferase ii deficiency), full gene sequence crx (cone-rod homeobox) (eg, cone-rod dystrophy 2, leber congenital amaurosis), full gene sequence cyp1b1 (cytochrome p450, family 1, subfamily b, polypeptide 1) (eg, primary congenital glaucoma), full gene sequence egr2 (early growth response 2) (eg, charcot-marie-tooth), full gene sequence emd (emerin) (eg, emery-dreifuss	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

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	muscular dystrophy), duplication/deletion analysis epm2a (epilepsy, progressive myoclonus type 2a, lafora disease [laforin]) (eg, progressive myoclonus epilepsy), full gene sequence fgf23 (fibroblast growth factor 23) (eg, hypophosphatemic rickets), full gene sequence fgfr2 (fibroblast growth factor receptor 2) (eg, craniosynostosis, apert syndrome, crouzon syndrome), targeted sequence analysis (eg, exons 8, 10) fgfr3 (fibroblast growth factor receptor 3) (eg, achondroplasia, hypochondroplasia), targeted sequence analysis (eg, exons 8, 11, 12, 13) fhl1 (four and a half lim domains 1) (eg, emery-dreifuss muscular dystrophy), full gene sequence fkrp (fukutin related protein) (eg, congenital muscular dystrophy type 1c [mdc1c], limb-girdle muscular dystrophy [lgmd] type 2i), full gene sequence foxg1 (forkhead box g1) (eg, rett syndrome), full gene sequence fshmd1a (facioscapulohumeral muscular dystrophy 1a) (eg, facioscapulohumeral muscular dystrophy), evaluation to detect abnormal (eg, deleted) alleles fshmd1a (facioscapulohumeral muscular dystrophy 1a) (eg, facioscapulohumeral muscular dystrophy), characterization of haplotype(s) (ie, chromosome 4a and 4b haplotypes) gh1 (growth hormone 1) (eg, growth hormone deficiency), full gene sequence gp1bb (glycoprotein ib [platelet], beta polypeptide) (eg, bernard-soulier syndrome type b), full gene sequence (for common deletion variants of alpha globin 1 and alpha globin 2 genes, use 81257) hnf1b (hnf1 homeobox b) (eg, maturity-onset diabetes of the young [mody]), duplication/deletion analysis hras (v-ha-ras harvey rat sarcoma viral oncogene homolog) (eg, costello syndrome), full gene sequence hsd3b2 (hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 2) (eg, 3-beta-hydroxysteroid dehydrogenase type ii deficiency), full gene sequence hsd11b2 (hydroxysteroid [11-beta] dehydrogenase 2) (eg, mineralocorticoid excess syndrome), full gene sequence hspb1 (heat shock 27kda protein 1) (eg, charcot-marie-tooth disease),							

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	full gene sequence ins (insulin) (eg, diabetes mellitus), full gene sequence kcnj1 (potassium inwardly-rectifying channel, subfamily j, member 1) (eg, bartter syndrome), full gene sequence kcnj10 (potassium inwardly-rectifying channel, subfamily j, member 10) (eg, sesame syndrome, east syndrome, sensorineural hearing loss), full gene sequence litaf (lipopolysaccharide-induced tnf factor) (eg, charcot-marie-tooth), full gene sequence mefv (mediterranean fever) (eg, familial mediterranean fever), full gene sequence men1 (multiple endocrine neoplasia i) (eg, multiple endocrine neoplasia type 1, wermer syndrome), duplication/deletion analysis mmachc (methylmalonic aciduria [cobalamin deficiency] cblc type, with homocystinuria) (eg, methylmalonic acidemia and homocystinuria), full gene sequence mpv17 (mpv17 mitochondrial inner membrane protein) (eg, mitochondrial dna depletion syndrome), duplication/deletion analysis ndp (norrie disease [pseudoglioma]) (eg, norrie disease), full gene sequence ndufa1 (nadh dehydrogenase [ubiquinone] 1 alpha subcomplex, 1, 7.5kda) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence ndufaf2 (nadh dehydrogenase [ubiquinone] 1 alpha subcomplex, assembly factor 2) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence ndufs4 (nadh dehydrogenase [ubiquinone] fe-s protein 4, 18kda [nadh-coenzyme q reductase]) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence nipa1 (non-imprinted in prader-willi/angelman syndrome 1) (eg, spastic paraplegia), full gene sequence nlgn4x (neuroligin 4, x-linked) (eg, autism spectrum disorders), duplication/deletion analysis npc2 (niemann-pick disease, type c2 [epididymal secretory protein e1]) (eg, niemann-pick disease type c2), full gene sequence nr0b1 (nuclear receptor subfamily 0, group b, member 1) (eg, congenital adrenal hypoplasia), full gene sequence pdx1 (pancreatic and duodenal homeobox 1) (eg, maturity-onset diabetes of the							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	young [mody]), full gene sequence phox2b (paired-like homeobox 2b) (eg, congenital central hypoventilation syndrome), full gene sequence plp1 (proteolipid protein 1) (eg, pelizaeus-merzbacher disease, spastic paraplegia), duplication/deletion analysis pqbp1 (polyglutamine binding protein 1) (eg, renpenning syndrome), duplication/deletion analysis prnp (prion protein) (eg, genetic prion disease), full gene sequence prop1 (prop paired-like homeobox 1) (eg, combined pituitary hormone deficiency), full gene sequence prph2 (peripherin 2 [retinal degeneration, slow]) (eg, retinitis pigmentosa), full gene sequence prss1 (protease, serine, 1 [trypsin 1]) (eg, hereditary pancreatitis), full gene sequence raf1 (v-raf-1 murine leukemia viral oncogene homolog 1) (eg, leopard syndrome), targeted sequence analysis (eg, exons 7, 12, 14, 17) ret (ret proto-oncogene) (eg, multiple endocrine neoplasia, type 2b and familial medullary thyroid carcinoma), common variants (eg, m918t, 2647_2648delinstt, a883f) rho (rhodopsin) (eg, retinitis pigmentosa), full gene sequence rp1 (retinitis pigmentosa 1) (eg, retinitis pigmentosa), full gene sequence scn1b (sodium channel, voltage-gated, type i, beta) (eg, brugada syndrome), full gene sequence sco2 (sco cytochrome oxidase deficient homolog 2 [sco1l]) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence sdhc (succinate dehydrogenase complex, subunit c, integral membrane protein, 15kda) (eg, hereditary paraganglioma-pheochromocytoma syndrome), duplication/deletion analysis sdhd (succinate dehydrogenase complex, subunit d, integral membrane protein) (eg, hereditary paraganglioma), full gene sequence sgcg (sarcoglycan, gamma [35kda dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), duplication/deletion analysis sh2d1a (sh2 domain containing 1a) (eg, x-linked lymphoproliferative syndrome), full gene sequence slc16a2 (solute carrier family 16, member 2							

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	[thyroid hormone transporter]) (eg, specific thyroid hormone cell transporter deficiency, allan-herndon-dudley syndrome), duplication/deletion analysis slc25a20 (solute carrier family 25 [carnitine/acylcarnitine translocase], member 20) (eg, carnitine-acylcarnitine translocase deficiency), duplication/deletion analysis slc25a4 (solute carrier family 25 [mitochondrial carrier; adenine nucleotide translocator], member 4) (eg, progressive external ophthalmoplegia), full gene sequence sod1 (superoxide dismutase 1, soluble) (eg, amyotrophic lateral sclerosis), full gene sequence spink1 (serine peptidase inhibitor, kazal type 1) (eg, hereditary pancreatitis), full gene sequence stk11 (serine/threonine kinase 11) (eg, peutz-jeghers syndrome), duplication/deletion analysis taco1 (translational activator of mitochondrial encoded cytochrome c oxidase i) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence thap1 (thap domain containing, apoptosis associated protein 1) (eg, torsion dystonia), full gene sequence tor1a (torsin family 1, member a [torsin a]) (eg, torsion dystonia), full gene sequence ttpa (tocopherol [alpha] transfer protein) (eg, ataxia), full gene sequence ttr (transthyretin) (eg, familial transthyretin amyloidosis), full gene sequence twist1 (twist homolog 1 [drosophila]) (eg, saethre-chotzen syndrome), full gene sequence tyr (tyrosinase [oculocutaneous albinism ia]) (eg, oculocutaneous albinism ia), full gene sequence ugt1a1 (udp glucuronosyltransferase 1 family, polypeptide a1) (eg, hereditary unconjugated hyperbilirubinemia [crigler-najjar syndrome]) full gene sequence ush1g (usher syndrome 1g [autosomal recessive]) (eg, usher syndrome, type 1), full gene sequence vhl (von hippel-lindau tumor suppressor) (eg, von hippel-lindau familial cancer syndrome), full gene sequence vwf (von willebrand factor) (eg, von willebrand disease type 1c), targeted sequence analysis (eg, exons 26, 27, 37) zeb2 (zinc finger e-box binding homeobox 2) (eg, mowat-wilson syndrome), duplication/deletion							

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	analysis znf41 (zinc finger protein 41) (eg, x-linked mental retardation 89), full gene sequence							

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81405	Molecular pathology procedure, level 6 (eg, analysis of 6-10 exons by dna sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons, regionally targeted cytogenomic array analysis) abcd1 (atp-binding cassette, sub-family d [ald], member 1) (eg, adrenoleukodystrophy), full gene sequence acads (acyl-coa dehydrogenase, c-2 to c-3 short chain) (eg, short chain acyl-coa dehydrogenase deficiency), full gene sequence acta2 (actin, alpha 2, smooth muscle, aorta) (eg, thoracic aortic aneurysms and aortic dissections), full gene sequence actc1 (actin, alpha, cardiac muscle 1) (eg, familial hypertrophic cardiomyopathy), full gene sequence ankrd1 (ankyrin repeat domain 1) (eg, dilated cardiomyopathy), full gene sequence aptx (aprataxin) (eg, ataxia with oculomotor apraxia 1), full gene sequence arsa (arylsulfatase a) (eg, arylsulfatase a deficiency), full gene sequence bckdha (branched chain keto acid dehydrogenase e1, alpha polypeptide) (eg, maple syrup urine disease, type 1a), full gene sequence bcs1l (bcs1-like [s. cerevisiae]) (eg, leigh syndrome, mitochondrial complex iii deficiency, gracile syndrome), full gene sequence bmpr2 (bone morphogenetic protein receptor, type ii [serine/threonine kinase]) (eg, heritable pulmonary arterial hypertension), duplication/deletion analysis casq2 (calsequestrin 2 [cardiac muscle]) (eg, catecholaminergic polymorphic ventricular tachycardia), full gene sequence casr (calcium-sensing receptor) (eg, hypocalcemia), full gene sequence cdkl5 (cyclin-dependent kinase-like 5) (eg, early infantile epileptic encephalopathy), duplication/deletion analysis chrna4 (cholinergic receptor, nicotinic, alpha 4) (eg, nocturnal frontal lobe epilepsy), full gene sequence chrnb2 (cholinergic receptor, nicotinic, beta 2 [neuronal]) (eg, nocturnal frontal lobe epilepsy), full gene sequence cox10 (cox10 homolog, cytochrome c oxidase assembly protein) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence cox15 (cox15 homolog, cytochrome c	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

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	oxidase assembly protein) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence cpox (coproporphyrinogen oxidase) (eg, hereditary coproporphyria), full gene sequence ctrc (chymotrypsin c) (eg, hereditary pancreatitis), full gene sequence cyp11b1 (cytochrome p450, family 11, subfamily b, polypeptide 1) (eg, congenital adrenal hyperplasia), full gene sequence cyp17a1 (cytochrome p450, family 17, subfamily a, polypeptide 1) (eg, congenital adrenal hyperplasia), full gene sequence cyp21a2 (cytochrome p450, family 21, subfamily a, polypeptide2) (eg, steroid 21-hydroxylase isoform, congenital adrenal hyperplasia), full gene sequence cytogenomic constitutional targeted microarray analysis of chromosome 22q13 by interrogation of genomic regions for copy number and single nucleotide polymorphism (snp) variants for chromosomal abnormalities (when performing cytogenomic [genome-wide] analysis for constitutional chromosomal abnormalities, see 81228, 81229, 81349) (do not report analyte-specific molecular pathology procedures separately when the specific analytes are included as part of the microarray analysis of chromosome 22q13) (do not report 88271 when performing cytogenomic microarray analysis) dbt (dihydrolipoamide branched chain transacylase e2) (eg, maple syrup urine disease, type 2), duplication/deletion analysis dcx (doublecortin) (eg, x-linked lissencephaly), full gene sequence des (desmin) (eg, myofibrillar myopathy), full gene sequence dfnb59 (deafness, autosomal recessive 59) (eg, autosomal recessive nonsyndromic hearing impairment), full gene sequence dguok (deoxyguanosine kinase) (eg, hepatocerebral mitochondrial dna depletion syndrome), full gene sequence dhcr7 (7-dehydrocholesterol reductase) (eg, smith-lemli-opitz syndrome), full gene sequence eif2b2 (eukaryotic translation initiation factor 2b, subunit 2 beta, 39kda) (eg, leukoencephalopathy with vanishing white matter), full gene sequence emd (emerin) (eg, emery-							

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	dreifuss muscular dystrophy), full gene sequence eng (endoglin) (eg, hereditary hemorrhagic telangiectasia, type 1), duplication/deletion analysis eya1 (eyes absent homolog 1 [drosophila]) (eg, branchio-oto-renal [bor] spectrum disorders), duplication/deletion analysis fgfr1 (fibroblast growth factor receptor 1) (eg, kallmann syndrome 2), full gene sequence fh (fumarate hydratase) (eg, fumarate hydratase deficiency, hereditary leiomyomatosis with renal cell cancer), full gene sequence fktn (fukutin) (eg, limb-girdle muscular dystrophy [lgmd] type 2m or 2l), full gene sequence ftsj1 (ftsj rna methyltransferase homolog 1 [e. coli]) (eg, x-linked mental retardation 9), duplication/deletion analysis gabrg2 (gamma-aminobutyric acid [gaba] a receptor, gamma 2) (eg, generalized epilepsy with febrile seizures), full gene sequence gch1 (gtp cyclohydrolase 1) (eg, autosomal dominant dopa-responsive dystonia), full gene sequence gdap1 (ganglioside-induced differentiation-associated protein 1) (eg, charcot-marie-tooth disease), full gene sequence gfap (glial fibrillary acidic protein) (eg, alexander disease), full gene sequence ghr (growth hormone receptor) (eg, laron syndrome), full gene sequence ghrhr (growth hormone releasing hormone receptor) (eg, growth hormone deficiency), full gene sequence gla (galactosidase, alpha) (eg, fabry disease), full gene sequence hnf1a (hnf1 homeobox a) (eg, maturity-onset diabetes of the young [mody]), full gene sequence hnf1b (hnf1 homeobox b) (eg, maturity-onset diabetes of the young [mody]), full gene sequence htra1 (htra serine peptidase 1) (eg, macular degeneration), full gene sequence ids (iduronate 2-sulfatase) (eg, mucopolysacchridosis, type ii), full gene sequence il2rg (interleukin 2 receptor, gamma) (eg, x-linked severe combined immunodeficiency), full gene sequence ispd (isoprenoid synthase domain containing) (eg, muscle-eye-brain disease, walker-warburg syndrome), full gene sequence kras (kirsten rat sarcoma viral oncogene homolog) (eg, noonan							

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	syndrome), full gene sequence lamp2 (lysosomal-associated membrane protein 2) (eg, danon disease), full gene sequence ldlr (low density lipoprotein receptor) (eg, familial hypercholesterolemia), duplication/deletion analysis men1 (multiple endocrine neoplasia i) (eg, multiple endocrine neoplasia type 1, wermer syndrome), full gene sequence mmaa (methylmalonic aciduria [cobalamine deficiency] type a) (eg, mmaa-related methylmalonic acidemia), full gene sequence mmab (methylmalonic aciduria [cobalamine deficiency] type b) (eg, mmaa-related methylmalonic acidemia), full gene sequence mpi (mannose phosphate isomerase) (eg, congenital disorder of glycosylation 1b), full gene sequence mpv17 (mpv17 mitochondrial inner membrane protein) (eg, mitochondrial dna depletion syndrome), full gene sequence mpz (myelin protein zero) (eg, charcot-marie-tooth), full gene sequence mtm1 (myotubularin 1) (eg, x-linked centronuclear myopathy), duplication/deletion analysis myl2 (myosin, light chain 2, regulatory, cardiac, slow) (eg, familial hypertrophic cardiomyopathy), full gene sequence myl3 (myosin, light chain 3, alkali, ventricular, skeletal, slow) (eg, familial hypertrophic cardiomyopathy), full gene sequence myot (myotilin) (eg, limb-girdle muscular dystrophy), full gene sequence ndufs7 (nadh dehydrogenase [ubiquinone] fe-s protein 7, 20kda [nadh-coenzyme q reductase]) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence ndufs8 (nadh dehydrogenase [ubiquinone] fe-s protein 8, 23kda [nadh-coenzyme q reductase]) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence ndufv1 (nadh dehydrogenase [ubiquinone] flavoprotein 1, 51kda) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence nefl (neurofilament, light polypeptide) (eg, charcot-marie-tooth), full gene sequence nf2 (neurofibromin 2 [merlin]) (eg, neurofibromatosis, type 2), duplication/deletion analysis nlgn3							

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	(neuroligin 3) (eg, autism spectrum disorders), full gene sequence nlgn4x (neuroligin 4, x-linked) (eg, autism spectrum disorders), full gene sequence nphp1 (nephronophthisis 1 [juvenile]) (eg, joubert syndrome), deletion analysis, and duplication analysis, if performed nphs2 (nephrosis 2, idiopathic, steroid-resistant [podocin]) (eg, steroid-resistant nephrotic syndrome), full gene sequence nsd1 (nuclear receptor binding set domain protein 1) (eg, sotos syndrome), duplication/deletion analysis otc (ornithine carbamoyltransferase) (eg, ornithine transcarbamylase deficiency), full gene sequence pafah1b1 (platelet-activating factor acetylhydrolase 1b, regulatory subunit 1 [45kda]) (eg, lissencephaly, miller-dieker syndrome), duplication/deletion analysis park2 (parkinson protein 2, e3 ubiquitin protein ligase [parkin]) (eg, parkinson disease), duplication/deletion analysis pcca (propionyl coa carboxylase, alpha polypeptide) (eg, propionic acidemia, type 1), duplication/deletion analysis pcdh19 (protocadherin 19) (eg, epileptic encephalopathy), full gene sequence pdha1 (pyruvate dehydrogenase [lipoamide] alpha 1) (eg, lactic acidosis), duplication/deletion analysis pdhb (pyruvate dehydrogenase [lipoamide] beta) (eg, lactic acidosis), full gene sequence pink1 (pten induced putative kinase 1) (eg, parkinson disease), full gene sequence pklr (pyruvate kinase, liver and rbc) (eg, pyruvate kinase deficiency), full gene sequence plp1 (proteolipid protein 1) (eg, pelizaeus-merzbacher disease, spastic paraplegia), full gene sequence pou1f1 (pou class 1 homeobox 1) (eg, combined pituitary hormone deficiency), full gene sequence prx (periaxin) (eg, charcot-marie-tooth disease), full gene sequence pqbp1 (polyglutamine binding protein 1) (eg, renpenning syndrome), full gene sequence psen1 (presenilin 1) (eg, alzheimer disease), full gene sequence rab7a (rab7a, member ras oncogene family) (eg, charcot-marie-tooth disease), full gene sequence rai1 (retinoic acid induced 1) (eg, smith-magenis syndrome), full							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	gene sequence reep1 (receptor accessory protein 1) (eg, spastic paraplegia), full gene sequence ret (ret proto-oncogene) (eg, multiple endocrine neoplasia, type 2a and familial medullary thyroid carcinoma), targeted sequence analysis (eg, exons 10, 11, 13-16) rps19 (ribosomal protein s19) (eg, diamond-blackfan anemia), full gene sequence rrm2b (ribonucleotide reductase m2 b [tp53 inducible]) (eg, mitochondrial dna depletion), full gene sequence sco1 (sco cytochrome oxidase deficient homolog 1) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence sdhb (succinate dehydrogenase complex, subunit b, iron sulfur) (eg, hereditary paraganglioma), full gene sequence sdhc (succinate dehydrogenase complex, subunit c, integral membrane protein, 15kda) (eg, hereditary paraganglioma-pheochromocytoma syndrome), full gene sequence sgca (sarcoglycan, alpha [50kda dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence sgcb (sarcoglycan, beta [43kda dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence sgcd (sarcoglycan, delta [35kda dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence sgce (sarcoglycan, epsilon) (eg, myoclonic dystonia), duplication/deletion analysis sgcg (sarcoglycan, gamma [35kda dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence shoc2 (soc-2 suppressor of clear homolog) (eg, noonan-like syndrome with loose anagen hair), full gene sequence shox (short stature homeobox) (eg, langer mesomelic dysplasia), full gene sequence sil1 (sil1 homolog, endoplasmic reticulum chaperone [s. cerevisiae]) (eg, ataxia), full gene sequence slc2a1 (solute carrier family 2 [facilitated glucose transporter], member 1) (eg, glucose transporter type 1 [glut 1] deficiency syndrome), full gene sequence slc16a2 (solute carrier family 16, member 2 [thyroid hormone transporter]) (eg, specific thyroid hormone cell transporter							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	deficiency, allan-herndon-dudley syndrome), full gene sequence slc22a5 (solute carrier family 22 [organic cation/carnitine transporter], member 5) (eg, systemic primary carnitine deficiency), full gene sequence slc25a20 (solute carrier family 25 [carnitine/acylcarnitine translocase], member 20) (eg, carnitine-acylcarnitine translocase deficiency), full gene sequence smad4 (smad family member 4) (eg, hemorrhagic telangiectasia syndrome, juvenile polyposis), duplication/deletion analysis spast (spastin) (eg, spastic paraplegia), duplication/deletion analysis spg7 (spastic paraplegia 7 [pure and complicated autosomal recessive]) (eg, spastic paraplegia), duplication/deletion analysis spred1 (sprouty-related, evh1 domain containing 1) (eg, legius syndrome), full gene sequence stat3 (signal transducer and activator of transcription 3 [acute-phase response factor]) (eg, autosomal dominant hyper-ige syndrome), targeted sequence analysis (eg, exons 12, 13, 14, 16, 17, 20, 21) stk11 (serine/threonine kinase 11) (eg, peutz-jeghers syndrome), full gene sequence surf1 (surfeit 1) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence tardbp (tar dna binding protein) (eg, amyotrophic lateral sclerosis), full gene sequence tbx5 (t-box 5) (eg, holt-oram syndrome), full gene sequence tcf4 (transcription factor 4) (eg, pitt-hopkins syndrome), duplication/deletion analysis tgfbr1 (transforming growth factor, beta receptor 1) (eg, marfan syndrome), full gene sequence tgfbr2 (transforming growth factor, beta receptor 2) (eg, marfan syndrome), full gene sequence thrb (thyroid hormone receptor, beta) (eg, thyroid hormone resistance, thyroid hormone beta receptor deficiency), full gene sequence or targeted sequence analysis of >5 exons tk2 (thymidine kinase 2, mitochondrial) (eg, mitochondrial dna depletion syndrome), full gene sequence tnnc1 (troponin c type 1 [slow]) (eg, hypertrophic cardiomyopathy or dilated cardiomyopathy), full gene sequence tnni3							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	(troponin i, type 3 [cardiac]) (eg, familial hypertrophic cardiomyopathy), full gene sequence tpm1 (tropomyosin 1 [alpha]) (eg, familial hypertrophic cardiomyopathy), full gene sequence tsc1 (tuberous sclerosis 1) (eg, tuberous sclerosis), duplication/deletion analysis tymp (thymidine phosphorylase) (eg, mitochondrial dna depletion syndrome), full gene sequence vwf (von willebrand factor) (eg, von willebrand disease type 2n), targeted sequence analysis (eg, exons 18-20, 23-25) wt1 (wilms tumor 1) (eg, denys-drash syndrome, familial wilms tumor), full gene sequence zeb2 (zinc finger e-box binding homeobox 2) (eg, mowat-wilson syndrome), full gene sequence							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81406	Molecular pathology procedure, level 7 (eg, analysis of 11-25 exons by dna sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons) acadvl (acyl-coa dehydrogenase, very long chain) (eg, very long chain acyl-coenzyme a dehydrogenase deficiency), full gene sequence actn4 (actinin, alpha 4) (eg, focal segmental glomerulosclerosis), full gene sequence afg3l2 (afg3 atpase family gene 3-like 2 [s. cerevisiae]) (eg, spinocerebellar ataxia), full gene sequence aire (autoimmune regulator) (eg, autoimmune polyendocrinopathy syndrome type 1), full gene sequence aldh7a1 (aldehyde dehydrogenase 7 family, member a1) (eg, pyridoxine-dependent epilepsy), full gene sequence ano5 (anoctamin 5) (eg, limb-girdle muscular dystrophy), full gene sequence anos1 (anosmin-1) (eg, kallmann syndrome 1), full gene sequence app (amyloid beta [a4] precursor protein) (eg, alzheimer disease), full gene sequence ass1 (argininosuccinate synthase 1) (eg, citrullinemia type i), full gene sequence atl1 (atlastin gtpase 1) (eg, spastic paraplegia), full gene sequence atp1a2 (atpase, na+/k+ transporting, alpha 2 polypeptide) (eg, familial hemiplegic migraine), full gene sequence atp7b (atpase, cu++ transporting, beta polypeptide) (eg, wilson disease), full gene sequence bbs1 (bardet-biedl syndrome 1) (eg, bardet-biedl syndrome), full gene sequence bbs2 (bardet-biedl syndrome 2) (eg, bardet-biedl syndrome), full gene sequence bckdhb (branched-chain keto acid dehydrogenase e1, beta polypeptide) (eg, maple syrup urine disease, type 1b), full gene sequence best1 (bestrophin 1) (eg, vitelliform macular dystrophy), full gene sequence bmpr2 (bone morphogenetic protein receptor, type ii [serine/threonine kinase]) (eg, heritable pulmonary arterial hypertension), full gene sequence braf (b-raf proto-oncogene, serine/threonine kinase) (eg, noonan syndrome), full gene sequence bscl2 (berardinelli-seip congenital lipodystrophy 2 [seipin]) (eg, berardinelli-seip congenital lipodystrophy), full	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	gene sequence btk (bruton agammaglobulinemia tyrosine kinase) (eg, x-linked agammaglobulinemia), full gene sequence cacnb2 (calcium channel, voltage-dependent, beta 2 subunit) (eg, brugada syndrome), full gene sequence capn3 (calpain 3) (eg, limb-girdle muscular dystrophy [lgmd] type 2a, calpainopathy), full gene sequence cbs (cystathionine-beta-synthase) (eg, homocystinuria, cystathionine beta-synthase deficiency), full gene sequence cdh1 (cadherin 1, type 1, e-cadherin [epithelial]) (eg, hereditary diffuse gastric cancer), full gene sequence cdkl5 (cyclin-dependent kinase-like 5) (eg, early infantile epileptic encephalopathy), full gene sequence clcn1 (chloride channel 1, skeletal muscle) (eg, myotonia congenita), full gene sequence clcnkb (chloride channel, voltage-sensitive kb) (eg, bartter syndrome 3 and 4b), full gene sequence cntnap2 (contactin-associated protein-like 2) (eg, pitt-hopkins-like syndrome 1), full gene sequence col6a2 (collagen, type vi, alpha 2) (eg, collagen type vi-related disorders), duplication/deletion analysis cpt1a (carnitine palmitoyltransferase 1a [liver]) (eg, carnitine palmitoyltransferase 1a [cpt1a] deficiency), full gene sequence crb1 (crumbs homolog 1 [drosophila]) (eg, leber congenital amaurosis), full gene sequence crebbp (creb binding protein) (eg, rubinstein-taybi syndrome), duplication/deletion analysis dbt (dihydrolipoamide branched chain transacylase e2) (eg, maple syrup urine disease, type 2), full gene sequence dlat (dihydrolipoamide s-acetyltransferase) (eg, pyruvate dehydrogenase e2 deficiency), full gene sequence dld (dihydrolipoamide dehydrogenase) (eg, maple syrup urine disease, type iii), full gene sequence dsc2 (desmocollin) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 11), full gene sequence dsg2 (desmoglein 2) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 10), full gene sequence dsp (desmoplakin) (eg, arrhythmogenic right							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	ventricular dysplasia/cardiomyopathy 8), full gene sequence efhc1 (ef-hand domain [c-terminal] containing 1) (eg, juvenile myoclonic epilepsy), full gene sequence eif2b3 (eukaryotic translation initiation factor 2b, subunit 3 gamma, 58kda) (eg, leukoencephalopathy with vanishing white matter), full gene sequence eif2b4 (eukaryotic translation initiation factor 2b, subunit 4 delta, 67kda) (eg, leukoencephalopathy with vanishing white matter), full gene sequence eif2b5 (eukaryotic translation initiation factor 2b, subunit 5 epsilon, 82kda) (eg, childhood ataxia with central nervous system hypomyelination/vanishing white matter), full gene sequence eng (endoglin) (eg, hereditary hemorrhagic telangiectasia, type 1), full gene sequence eya1 (eyes absent homolog 1 [drosophila]) (eg, branchio-oto-renal [bor] spectrum disorders), full gene sequence f8 (coagulation factor viii) (eg, hemophilia a), duplication/deletion analysis fah (fumarylacetoacetate hydrolase [fumarylacetoacetase]) (eg, tyrosinemia, type 1), full gene sequence fastkd2 (fast kinase domains 2) (eg, mitochondrial respiratory chain complex iv deficiency), full gene sequence fig4 (fig4 homolog, sac1 lipid phosphatase domain containing [s. cerevisiae]) (eg, charcot-marie-tooth disease), full gene sequence ftsj1 (ftsj rna methyltransferase homolog 1 [e. coli]) (eg, x-linked mental retardation 9), full gene sequence fus (fused in sarcoma) (eg, amyotrophic lateral sclerosis), full gene sequence gaa (glucosidase, alpha; acid) (eg, glycogen storage disease type ii [pompe disease]), full gene sequence galc (galactosylceramidase) (eg, krabbe disease), full gene sequence galt (galactose-1-phosphate uridylyltransferase) (eg, galactosemia), full gene sequence gars (glycyl-trna synthetase) (eg, charcot-marie-tooth disease), full gene sequence gcdh (glutaryl-coa dehydrogenase) (eg, glutaricacidemia type 1), full gene sequence gck (glucokinase [hexokinase 4]) (eg, maturity-onset diabetes of the young [mody]), full gene sequence glud1 (glutamate dehydrogenase 1) (eg, familial							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	hyperinsulinism), full gene sequence gne (glucosamine [udp-n-acetyl]-2-epimerase/n-acetylmannosamine kinase) (eg, inclusion body myopathy 2 [ibm2], nonaka myopathy), full gene sequence grn (granulin) (eg, frontotemporal dementia), full gene sequence hadha (hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase [trifunctional protein] alpha subunit) (eg, long chain acyl-coenzyme a dehydrogenase deficiency), full gene sequence hadhb (hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase [trifunctional protein], beta subunit) (eg, trifunctional protein deficiency), full gene sequence hexa (hexosaminidase a, alpha polypeptide) (eg, tay-sachs disease), full gene sequence hlcs (hlcs holocarboxylase synthetase) (eg, holocarboxylase synthetase deficiency), full gene sequence hmbs (hydroxymethylbilane synthase) (eg, acute intermittent porphyria), full gene sequence hnf4a (hepatocyte nuclear factor 4, alpha) (eg, maturity-onset diabetes of the young [mody]), full gene sequence idua (iduronidase, alpha-l-) (eg, mucopolysaccharidosis type i), full gene sequence inf2 (inverted formin, fh2 and wh2 domain containing) (eg, focal segmental glomerulosclerosis), full gene sequence ivd (isovaleryl-coa dehydrogenase) (eg, isovaleric acidemia), full gene sequence jag1 (jagged 1) (eg, alagille syndrome), duplication/deletion analysis jup (junction plakoglobin) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 11), full gene sequence kcnh2 (potassium voltage-gated channel, subfamily h [eag-related], member 2) (eg, short qt syndrome, long qt syndrome), full gene sequence kcnq1 (potassium voltage-gated channel, kqt-like subfamily, member 1) (eg, short qt syndrome, long qt syndrome), full gene sequence kcnq2 (potassium voltage-gated channel, kqt-like subfamily, member 2) (eg, epileptic encephalopathy), full gene sequence ldb3 (lim domain binding 3) (eg, familial dilated cardiomyopathy, myofibrillar myopathy), full gene							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	sequence ldlr (low density lipoprotein receptor) (eg, familial hypercholesterolemia), full gene sequence lepr (leptin receptor) (eg, obesity with hypogonadism), full gene sequence lhcgr (luteinizing hormone/choriogonadotropin receptor) (eg, precocious male puberty), full gene sequence lmna (lamin a/c) (eg, emery-dreifuss muscular dystrophy [edmd1, 2 and 3] limb-girdle muscular dystrophy [lgmd] type 1b, dilated cardiomyopathy [cmd1a], familial partial lipodystrophy [fpld2]), full gene sequence lrp5 (low density lipoprotein receptor-related protein 5) (eg, osteopetrosis), full gene sequence map2k1 (mitogen-activated protein kinase 1) (eg, cardiofaciocutaneous syndrome), full gene sequence map2k2 (mitogen-activated protein kinase 2) (eg, cardiofaciocutaneous syndrome), full gene sequence mapt (microtubule-associated protein tau) (eg, frontotemporal dementia), full gene sequence mccc1 (methylcrotonoyl-coa carboxylase 1 [alpha]) (eg, 3-methylcrotonyl-coa carboxylase deficiency), full gene sequence mccc2 (methylcrotonoyl-coa carboxylase 2 [beta]) (eg, 3-methylcrotonyl carboxylase deficiency), full gene sequence mfn2 (mitofusin 2) (eg, charcot-marie-tooth disease), full gene sequence mtm1 (myotubularin 1) (eg, x-linked centronuclear myopathy), full gene sequence mut (methylmalonyl coa mutase) (eg, methylmalonic acidemia), full gene sequence mutyh (muty homolog [e. coli]) (eg, myh-associated polyposis), full gene sequence ndufs1 (nadh dehydrogenase [ubiquinone] fe-s protein 1, 75kda [nadh-coenzyme q reductase]) (eg, leigh syndrome, mitochondrial complex i deficiency), full gene sequence nf2 (neurofibromin 2 [merlin]) (eg, neurofibromatosis, type 2), full gene sequence notch3 (notch 3) (eg, cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy [cadasil]), targeted sequence analysis (eg, exons 1-23) npc1 (niemann-pick disease, type c1) (eg, niemann-pick disease), full gene sequence nphp1 (nephronophthisis 1 [juvenile]) (eg, joubert							

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	syndrome), full gene sequence nsd1 (nuclear receptor binding set domain protein 1) (eg, sotos syndrome), full gene sequence opa1 (optic atrophy 1) (eg, optic atrophy), duplication/deletion analysis optn (optineurin) (eg, amyotrophic lateral sclerosis), full gene sequence pafah1b1 (platelet-activating factor acetylhydrolase 1b, regulatory subunit 1 [45kda]) (eg, lissencephaly, miller-dieker syndrome), full gene sequence pah (phenylalanine hydroxylase) (eg, phenylketonuria), full gene sequence park2 (parkinson protein 2, e3 ubiquitin protein ligase [parkin]) (eg, parkinson disease), full gene sequence pax2 (paired box 2) (eg, renal coloboma syndrome), full gene sequence pc (pyruvate carboxylase) (eg, pyruvate carboxylase deficiency), full gene sequence pcca (propionyl coa carboxylase, alpha polypeptide) (eg, propionic acidemia, type 1), full gene sequence pccb (propionyl coa carboxylase, beta polypeptide) (eg, propionic acidemia), full gene sequence pcdh15 (protocadherin-related 15) (eg, usher syndrome type 1f), duplication/deletion analysis pcsk9 (proprotein convertase subtilisin/kexin type 9) (eg, familial hypercholesterolemia), full gene sequence pdha1 (pyruvate dehydrogenase [lipoamide] alpha 1) (eg, lactic acidosis), full gene sequence pdhx (pyruvate dehydrogenase complex, component x) (eg, lactic acidosis), full gene sequence phex (phosphate-regulating endopeptidase homolog, x-linked) (eg, hypophosphatemic rickets), full gene sequence pkd2 (polycystic kidney disease 2 [autosomal dominant]) (eg, polycystic kidney disease), full gene sequence pkp2 (plakophilin 2) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 9), full gene sequence pnkd (paroxysmal nonkinesigenic dyskinesia) (eg, paroxysmal nonkinesigenic dyskinesia), full gene sequence polg (polymerase [dna directed], gamma) (eg, alpers-huttenlocher syndrome, autosomal dominant progressive external ophthalmoplegia), full gene sequence pomgnt1 (protein o-linked mannose beta1,2-n acetylglucosaminyltransferase) (eg, muscle-eye-							

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	brain disease, walker-warburg syndrome), full gene sequence pomt1 (protein-o-mannosyltransferase 1) (eg, limb-girdle muscular dystrophy [lgmd] type 2k, walker-warburg syndrome), full gene sequence pomt2 (protein-o-mannosyltransferase 2) (eg, limb-girdle muscular dystrophy [lgmd] type 2n, walker-warburg syndrome), full gene sequence ppox (protoporphyrinogen oxidase) (eg, variegate porphyria), full gene sequence prkag2 (protein kinase, amp-activated, gamma 2 non-catalytic subunit) (eg, familial hypertrophic cardiomyopathy with wolff-parkinson-white syndrome, lethal congenital glycogen storage disease of heart), full gene sequence prkcg (protein kinase c, gamma) (eg, spinocerebellar ataxia), full gene sequence psen2 (presenilin 2 [alzheimer disease 4]) (eg, alzheimer disease), full gene sequence ptpn11 (protein tyrosine phosphatase, non-receptor type 11) (eg, noonan syndrome, leopard syndrome), full gene sequence pygm (phosphorylase, glycogen, muscle) (eg, glycogen storage disease type v, mcardle disease), full gene sequence raf1 (v-raf-1 murine leukemia viral oncogene homolog 1) (eg, leopard syndrome), full gene sequence ret (ret proto-oncogene) (eg, hirschsprung disease), full gene sequence rpe65 (retinal pigment epithelium-specific protein 65kda) (eg, retinitis pigmentosa, leber congenital amaurosis), full gene sequence ryr1 (ryanodine receptor 1, skeletal) (eg, malignant hyperthermia), targeted sequence analysis of exons with functionally-confirmed mutations scn4a (sodium channel, voltage-gated, type iv, alpha subunit) (eg, hyperkalemic periodic paralysis), full gene sequence scnn1a (sodium channel, nonvoltage-gated 1 alpha) (eg, pseudohypoaldosteronism), full gene sequence scnn1b (sodium channel, nonvoltage-gated 1, beta) (eg, liddle syndrome, pseudohypoaldosteronism), full gene sequence scnn1g (sodium channel, nonvoltage-gated 1, gamma) (eg, liddle syndrome, pseudohypoaldosteronism), full gene sequence							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	sdha (succinate dehydrogenase complex, subunit a, flavoprotein [fp]) (eg, leigh syndrome, mitochondrial complex ii deficiency), full gene sequence setx (senataxin) (eg, ataxia), full gene sequence sgce (sarcoglycan, epsilon) (eg, myoclonic dystonia), full gene sequence sh3tc2 (sh3 domain and tetratricopeptide repeats 2) (eg, charcot-marie-tooth disease), full gene sequence slc9a6 (solute carrier family 9 [sodium/hydrogen exchanger], member 6) (eg, christianson syndrome), full gene sequence slc26a4 (solute carrier family 26, member 4) (eg, pendred syndrome), full gene sequence slc37a4 (solute carrier family 37 [glucose-6-phosphate transporter], member 4) (eg, glycogen storage disease type ib), full gene sequence smad4 (smad family member 4) (eg, hemorrhagic telangiectasia syndrome, juvenile polyposis), full gene sequence sos1 (son of sevenless homolog 1) (eg, noonan syndrome, gingival fibromatosis), full gene sequence spast (spastin) (eg, spastic paraplegia), full gene sequence spg7 (spastic paraplegia 7 [pure and complicated autosomal recessive]) (eg, spastic paraplegia), full gene sequence stxbp1 (syntaxin-binding protein 1) (eg, epileptic encephalopathy), full gene sequence taz (tafazzin) (eg, methylglutaconic aciduria type 2, barth syndrome), full gene sequence tcf4 (transcription factor 4) (eg, pitt-hopkins syndrome), full gene sequence th (tyrosine hydroxylase) (eg, segawa syndrome), full gene sequence tmem43 (transmembrane protein 43) (eg, arrhythmogenic right ventricular cardiomyopathy), full gene sequence tnnt2 (troponin t, type 2 [cardiac]) (eg, familial hypertrophic cardiomyopathy), full gene sequence trpc6 (transient receptor potential cation channel, subfamily c, member 6) (eg, focal segmental glomerulosclerosis), full gene sequence tsc1 (tuberous sclerosis 1) (eg, tuberous sclerosis), full gene sequence tsc2 (tuberous sclerosis 2) (eg, tuberous sclerosis), duplication/deletion analysis ube3a (ubiquitin protein ligase e3a) (eg, angelman syndrome), full							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	gene sequence umod (uromodulin) (eg, glomerulocystic kidney disease with hyperuricemia and isosthenuria), full gene sequence vwf (von willebrand factor) (von willebrand disease type 2a), extended targeted sequence analysis (eg, exons 11-16, 24-26, 51, 52) was (wiskott-aldrich syndrome [eczema-thrombocytopenia]) (eg, wiskott-aldrich syndrome), full gene sequence							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81407	Molecular pathology procedure, level 8 (eg, analysis of 26-50 exons by dna sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform) abcc8 (atp-binding cassette, sub-family c [cftr/mrp], member 8) (eg, familial hyperinsulinism), full gene sequence agl (amylo-alpha-1, 6-glucosidase, 4-alpha-glucanotransferase) (eg, glycogen storage disease type iii), full gene sequence ahi1 (abelson helper integration site 1) (eg, joubert syndrome), full gene sequence apob (apolipoprotein b) (eg, familial hypercholesterolemia type b) full gene sequence aspm (asp [abnormal spindle] homolog, microcephaly associated [drosophila]) (eg, primary microcephaly), full gene sequence chd7 (chromodomain helicase dna binding protein 7) (eg, charge syndrome), full gene sequence col4a4 (collagen, type iv, alpha 4) (eg, alport syndrome), full gene sequence col4a5 (collagen, type iv, alpha 5) (eg, alport syndrome), duplication/deletion analysis col6a1 (collagen, type vi, alpha 1) (eg, collagen type vi-related disorders), full gene sequence col6a2 (collagen, type vi, alpha 2) (eg, collagen type vi-related disorders), full gene sequence col6a3 (collagen, type vi, alpha 3) (eg, collagen type vi-related disorders), full gene sequence crebbp (creb binding protein) (eg, rubinstein-taybi syndrome), full gene sequence f8 (coagulation factor viii) (eg, hemophilia a), full gene sequence jag1 (jagged 1) (eg, alagille syndrome), full gene sequence kdm5c (lysine [k]-specific demethylase 5c) (eg, x-linked mental retardation), full gene sequence kiaa0196 (kiaa0196) (eg, spastic paraplegia), full gene sequence l1cam (l1 cell adhesion molecule) (eg, masa syndrome, x-linked hydrocephaly), full gene sequence lamb2 (laminin, beta 2 [laminin s]) (eg, pierson syndrome), full gene sequence mybpc3 (myosin binding protein c, cardiac) (eg, familial hypertrophic cardiomyopathy), full gene sequence myh6 (myosin, heavy chain 6, cardiac muscle, alpha) (eg, familial dilated cardiomyopathy), full	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	gene sequence myh7 (myosin, heavy chain 7, cardiac muscle, beta) (eg, familial hypertrophic cardiomyopathy, liang distal myopathy), full gene sequence myo7a (myosin viia) (eg, usher syndrome, type 1), full gene sequence notch1 (notch 1) (eg, aortic valve disease), full gene sequence nphs1 (nephrosis 1, congenital, finnish type [nephrin]) (eg, congenital finnish nephrosis), full gene sequence opa1 (optic atrophy 1) (eg, optic atrophy), full gene sequence pcdh15 (protocadherin-related 15) (eg, usher syndrome, type 1), full gene sequence pkd1 (polycystic kidney disease 1 [autosomal dominant]) (eg, polycystic kidney disease), full gene sequence plce1 (phospholipase c, epsilon 1) (eg, nephrotic syndrome type 3), full gene sequence scn1a (sodium channel, voltage-gated, type 1, alpha subunit) (eg, generalized epilepsy with febrile seizures), full gene sequence scn5a (sodium channel, voltage-gated, type v, alpha subunit) (eg, familial dilated cardiomyopathy), full gene sequence slc12a1 (solute carrier family 12 [sodium/potassium/chloride transporters], member 1) (eg, bartter syndrome), full gene sequence slc12a3 (solute carrier family 12 [sodium/chloride transporters], member 3) (eg, gitelman syndrome), full gene sequence spg11 (spastic paraplegia 11 [autosomal recessive]) (eg, spastic paraplegia), full gene sequence sptbn2 (spectrin, beta, non-erythrocytic 2) (eg, spinocerebellar ataxia), full gene sequence tmem67 (transmembrane protein 67) (eg, joubert syndrome), full gene sequence tsc2 (tuberous sclerosis 2) (eg, tuberous sclerosis), full gene sequence ush1c (usher syndrome 1c [autosomal recessive, severe]) (eg, usher syndrome, type 1), full gene sequence vps13b (vacuolar protein sorting 13 homolog b [yeast]) (eg, cohen syndrome), duplication/deletion analysis wdr62 (wd repeat domain 62) (eg, primary autosomal recessive microcephaly), full gene sequence							

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
81408	Molecular pathology procedure, level 9 (eg, analysis of >50 exons in a single gene by dna sequence analysis) abca4 (atp-binding cassette, sub-family a [abc1], member 4) (eg, stargardt disease, age-related macular degeneration), full gene sequence atm (ataxia telangiectasia mutated) (eg, ataxia telangiectasia), full gene sequence cdh23 (cadherin-related 23) (eg, usher syndrome, type 1), full gene sequence cep290 (centrosomal protein 290kda) (eg, joubert syndrome), full gene sequence col1a1 (collagen, type i, alpha 1) (eg, osteogenesis imperfecta, type i), full gene sequence col1a2 (collagen, type i, alpha 2) (eg, osteogenesis imperfecta, type i), full gene sequence col4a1 (collagen, type iv, alpha 1) (eg, brain small-vessel disease with hemorrhage), full gene sequence col4a3 (collagen, type iv, alpha 3 [goodpasture antigen]) (eg, alport syndrome), full gene sequence col4a5 (collagen, type iv, alpha 5) (eg, alport syndrome), full gene sequence dmd (dystrophin) (eg, duchenne/becker muscular dystrophy), full gene sequence dysf (dysferlin, limb girdle muscular dystrophy 2b [autosomal recessive]) (eg, limb-girdle muscular dystrophy), full gene sequence fbn1 (fibrillin 1) (eg, marfan syndrome), full gene sequence itpr1 (inositol 1,4,5-trisphosphate receptor, type 1) (eg, spinocerebellar ataxia), full gene sequence lama2 (laminin, alpha 2) (eg, congenital muscular dystrophy), full gene sequence lrrk2 (leucine-rich repeat kinase 2) (eg, parkinson disease), full gene sequence myh11 (myosin, heavy chain 11, smooth muscle) (eg, thoracic aortic aneurysms and aortic dissections), full gene sequence neb (nebulin) (eg, nemaline myopathy 2), full gene sequence nf1 (neurofibromin 1) (eg, neurofibromatosis, type 1), full gene sequence pkhd1 (polycystic kidney and hepatic disease 1) (eg, autosomal recessive polycystic kidney disease), full gene sequence ryr1 (ryanodine receptor 1, skeletal) (eg, malignant hyperthermia), full gene sequence ryr2 (ryanodine receptor 2 [cardiac]) (eg, catecholaminergic polymorphic ventricular tachycardia,	Apr 2011	Molecular Pathology - Tier 2	16	CPT 2012		Removed. Final Rule for 2013 stated molecular pathology services will be paid for under CLFS not MFS.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
	arrhythmogenic right ventricular dysplasia), full gene sequence or targeted sequence analysis of > 50 exons ush2a (usher syndrome 2a [autosomal recessive, mild]) (eg, usher syndrome, type 2), full gene sequence vps13b (vacuolar protein sorting 13 homolog b [yeast]) (eg, cohen syndrome), full gene sequence vwf (von willebrand factor) (eg, von willebrand disease types 1 and 3), full gene sequence							
86152	Cell enumeration using immunologic selection and identification in fluid specimen (eg, circulating tumor cells in blood);	Apr 2012	Cell Enumeration Circulating Tumor Cells	25	CPT 2013	October 2016	Remove from list, part of CLFS.	☑
86153	Cell enumeration using immunologic selection and identification in fluid specimen (eg, circulating tumor cells in blood); physician interpretation and report, when required	Apr 2012	Cell Enumeration Circulating Tumor Cells	25	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
88363	Examination and selection of retrieved archival (ie, previously diagnosed) tissue(s) for molecular analysis (eg, kras mutational analysis)	Feb 2010	Archival Retrieval for Mutational Analysis	17	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
88375	Optical endomicroscopic image(s), interpretation and report, real-time or referred, each endoscopic session	Jan 2013	Optical Endomicroscopy	15	CPT 2014	October 2017	Remove from list, no demonstrated techology diffusion that impacts work or practice expense.	☑
88380	Microdissection (ie, sample preparation of microscopically identified target); laser capture	Feb 2007	Manual Microdisection	12	CPT 2008	September 2011	Survey for January 2014 (added 88380 as part of the family).	☑
88381	Microdissection (ie, sample preparation of microscopically identified target); manual	Feb 2007	Manual Microdisection	12	CPT 2008	September 2013	Survey for January 2014 (added 88380 as part of the family).	☑
88384	Code Deleted	Apr 2005	Multiple Molecular Marker Array-Based Evaluation	30	CPT 2006	September 2010	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
88385	Code Deleted	Apr 2005	Multiple Molecular Marker Array-Based Evaluation	30	CPT 2006	September 2010	Remove, code does not need to be re-evaluated	☑
88386	Code Deleted	Apr 2005	Multiple Molecular Marker Array-Based Evaluation	30	CPT 2006	September 2010	Remove, code does not need to be re-evaluated	☑
88387	Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); each tissue preparation (eg, a single lymph node)	Apr 2009	Tissue Examination for Molecular Studies	21	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
88388	Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (list separately in addition to code for primary procedure)	Apr 2009	Tissue Examination for Molecular Studies	21	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
90769	Code Deleted CPT 2009	Apr 2007	Immune Globulin Subcutaneous Infusion	H	CPT 2008	September 2011	Code Deleted CPT 2009	☑
90770	Code Deleted CPT 2009	Apr 2007	Immune Globulin Subcutaneous Infusion	H	CPT 2008	September 2011	Code Deleted CPT 2009	☑
90771	Code Deleted CPT 2009	Apr 2007	Immune Globulin Subcutaneous Infusion	H	CPT 2008	September 2011	Code Deleted CPT 2009	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
90867	Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; initial, including cortical mapping, motor threshold determination, delivery and management	Feb 2011	Transcranial Magnetic Stimulation	15	CPT 2012	April 2024	Remain on the screens in which they were identified (Contractor Priced High Volume and New Technology/New Services) and the Workgroup will review again in 3 years (April 2024). When these codes are moved from contractor priced to the assignment to RVUs the issues around the direct to indirect practice expense ratio specific to codes 90867-90869 should be addressed.	☐
90868	Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; subsequent delivery and management, per session	Feb 2011	Transcranial Magnetic Stimulation	15	CPT 2012	April 2024	Remain on the screens in which they were identified (Contractor Priced High Volume and New Technology/New Services) and the Workgroup will review again in 3 years (April 2024). When these codes are moved from contractor priced to the assignment to RVUs the issues around the direct to indirect practice expense ratio specific to codes 90867-90869 should be addressed.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
90869	Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; subsequent motor threshold re-determination with delivery and management	Feb 2011	Transcranial Magnetic Stimulation	15	CPT 2012	April 2024	Remain on the screens in which they were identified (Contractor Priced High Volume and New Technology/New Services) and the Workgroup will review again in 3 years (April 2024). When these codes are moved from contractor priced to the assignment to RVUs the issues around the direct to indirect practice expense ratio specific to codes 90867-90869 should be addressed.	☐
91112	Gastrointestinal transit and pressure measurement, stomach through colon, wireless capsule, with interpretation and report	Apr 2012	Wireless Motility Capsule	27	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
91113	Gastrointestinal tract imaging, intraluminal (eg, capsule endoscopy), colon, with interpretation and report	Jan 2021	Colon Capsule Endoscopy	21	CPT 2022	April 2026		☐
91117	Colon motility (manometric) study, minimum 6 hours continuous recording (including provocation tests, eg, meal, intracolonic balloon distension, pharmacologic agents, if performed), with interpretation and report	Apr 2010	Colon Motility	21	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
91200	Liver elastography, mechanically induced shear wave (eg, vibration), without imaging, with interpretation and report	April 2015	Liver Elastography	19	CPT 2016		Surveyed for January 2020. Decreased.	☑
92065	Orthoptic training; performed by a physician or other qualified health care professional	Apr 2021	Orthoptic Training	10	CPT 2023	April 2027		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
92066	Orthoptic training; under supervision of a physician or other qualified health care professional	Apr 2021	Orthoptic Training	10	CPT 2023	April 2027		☐
92132	Scanning computerized ophthalmic diagnostic imaging, anterior segment, with interpretation and report, unilateral or bilateral	Apr 2010	Anterior Segment Imaging	22	CPT 2011		Survey for October 2015. The RUC noted that it is the specialty societies decision whether 92133 and 92134 need to be surveyed with this service.	☑
92133	Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; optic nerve	Apr 2010	Computerized Scanning Ophthalmology Diagnostic Imaging	23	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
92134	Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; retina	Apr 2010	Computerized Scanning Ophthalmology Diagnostic Imaging	23	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
92145	Corneal hysteresis determination, by air impulse stimulation, unilateral or bilateral, with interpretation and report	Apr 2014	Corneal Hysteresis Determination	23	CPT 2015	October 2018	Survey for January 2019.	☑
92227	Imaging of retina for detection or monitoring of disease; with remote clinical staff review and report, unilateral or bilateral	Oct 2019	Remote Retinal Imaging	09	CPT 2021	April 2025		☐
92228	Imaging of retina for detection or monitoring of disease; with remote physician or other qualified health care professional interpretation and report, unilateral or bilateral	Oct 2019	Remote Retinal Imaging	09	CPT 2011	April 2025	Was reviewed in Sept 2014, Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☐
92229	Imaging of retina for detection or monitoring of disease; point-of-care autonomous analysis and report, unilateral or bilateral	Oct 2019	Remote Retinal Imaging	09	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
92284	Diagnostic dark adaptation examination with interpretation and report	Apr 2021	Dark Adaption Eye Exam	20	CPT 2023	April 2024	The RUC will review the typical technology used to perform this service when it is next re-evaluated, acknowledging that the device included in proposed direct practice costs recently was very recently replaced with a newer technology.	☐
92517	Vestibular evoked myogenic potential (vemp) testing, with interpretation and report; cervical (cvemp)	Apr 2019	Vestibular Evoked Myogenic Potential (VEMP) Testing	07	CPT 2021	April 2025		☐
92518	Vestibular evoked myogenic potential (vemp) testing, with interpretation and report; ocular (ovemp)	Apr 2019	Vestibular Evoked Myogenic Potential (VEMP) Testing	07	CPT 2021	April 2025		☐
92519	Vestibular evoked myogenic potential (vemp) testing, with interpretation and report; cervical (cvemp) and ocular (ovemp)	Apr 2019	Vestibular Evoked Myogenic Potential (VEMP) Testing	07	CPT 2021	April 2025		☐
93050	Arterial pressure waveform analysis for assessment of central arterial pressures, includes obtaining waveform(s), digitization and application of nonlinear mathematical transformations to determine central arterial pressures and augmentation index, with interpretation and report, upper extremity artery, non-invasive	Apr 2015	Arterial Pressure Waveform Analysis	20	CPT 2016	April 2022	Review in 2 years (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
93241	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93242	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; recording (includes connection and initial recording)	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93243	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; scanning analysis with report	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93244	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; review and interpretation	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93245	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93246	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; recording (includes connection and initial recording)	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93247	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; scanning analysis with report	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93248	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; review and interpretation	Jan 2020	External Extended ECG Monitoring	18	CPT 2021	April 2025		☐
93260	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable subcutaneous lead defibrillator system	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	Review in 2 years (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93261	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable subcutaneous lead defibrillator system	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
93264	Remote monitoring of a wireless pulmonary artery pressure sensor for up to 30 days, including at least weekly downloads of pulmonary artery pressure recordings, interpretation(s), trend analysis, and report(s) by a physician or other qualified health care professional	Jan 2018	Pulmonary Wireless Pressure Sensor Services	08	CPT 2019	April 2023		☐
93279	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system or leadless pacemaker system in one cardiac chamber	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93280	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93281	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93282	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93283	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93284	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93285	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; subcutaneous cardiac rhythm monitor system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93286	Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system, or leadless pacemaker system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93287	Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system, or leadless pacemaker system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93289	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93290	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93291	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; subcutaneous cardiac rhythm monitor system, including heart rhythm derived data analysis	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93292	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93293	Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, or leadless pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system, leadless pacemaker system, or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional	Jan 2023	Remote Interrogation Device Evaluation - Cardiovascular (PE Only)	20	CPT 2020	April 2027	This service was first flagged at the April 2008 meeting, Tab 23 Cardiac Device Monitoring, for CPT 2009 and reviewed at the RAW in September 2012. An Ad Hoc Workgroup was developed to determine how to address the work neutrality failure and establish guidelines for further RAW review of retrospective work neutralilty. In October 2018, 93297 and 93298 were reviewed and placed on the new technology/new services list for April 2024. CMS did not accept the practice expense for these services and instead created G2066 to report the practice expense associated with these services. In January 2023, the RUC affirmed the work RVUs and recommended direct PE inputs for 93297, 93298 and G2066. These services were placed back on the new technology/new services list to assess the work and PE in 3 years (April 2027).	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93298	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional	Jan 2023	Remote Interrogation Device Evaluation - Cardiovascular (PE Only)	20	CPT 2020	April 2027	This service was first flagged at the April 2008 meeting, Tab 23 Cardiac Device Monitoring, for CPT 2009 and reviewed at the RAW in September 2012. An Ad Hoc Workgroup was developed to determine how to address the work neutrality failure and establish guidelines for further RAW review of retrospective work neutralilty. In October 2018, 93297 and 93298 were reviewed and placed on the new technology/new services list for April 2024. CMS did not accept the practice expense for these services and instead created G2066 to report the practice expense associated with these services. In January 2023, the RUC affirmed the work RVUs and recommended direct PE inputs for 93297, 93298 and G2066. These services were placed back on the new technology/new services list to assess the work and PE in 3 years (April 2027).	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93299	Code Deleted CPT 2020	Apr 2008	Cardiac Device Monitoring	23	CPT 2009	September 2012	Ad Hoc Workgroup developed to determine how to address the work neutrality failure and estabhis guidelines for further RAW review of retrospective work neutralilty.	☑
93319	3d echocardiographic imaging and postprocessing during transesophageal echocardiography, or during transthoracic echocardiography for congenital cardiac anomalies, for the assessment of cardiac structure(s) (eg, cardiac chambers and valves, left atrial appendage, interatrial septum, interventricular septum) and function, when performed (list separately in addition to code for echocardiographic imaging)	Oct 2020	3D Imaging of Cardiac Structures	09	CPT 2022	April 2026		☐
93462	Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (list separately in addition to code for primary procedure)	Apr 2010	Diagnostic Cardiac Catheterization	26	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
93463	Pharmacologic agent administration (eg, inhaled nitric oxide, intravenous infusion of nitroprusside, dobutamine, milrinone, or other agent) including assessing hemodynamic measurements before, during, after and repeat pharmacologic agent administration, when performed (list separately in addition to code for primary procedure)	Apr 2010	Diagnostic Cardiac Catheterization	26	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑
93464	Physiologic exercise study (eg, bicycle or arm ergometry) including assessing hemodynamic measurements before and after (list separately in addition to code for primary procedure)	Apr 2010	Diagnostic Cardiac Catheterization	26	CPT 2011	September 2014	Remove from list, no demonstrated technology diffusions that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93569	Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective pulmonary arterial angiography, unilateral (list separately in addition to code for primary procedure)	Oct 2021	Pulmonary Angiography	08	CPT 2023	April 2027		☐
93573	Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective pulmonary arterial angiography, bilateral (list separately in addition to code for primary procedure)	Oct 2021	Pulmonary Angiography	08	CPT 2023	April 2027		☐
93574	Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective pulmonary venous angiography of each distinct pulmonary vein during cardiac catheterization (list separately in addition to code for primary procedure)	Oct 2021	Pulmonary Angiography	08	CPT 2023	April 2027		☐
93575	Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective pulmonary angiography of major aortopulmonary collateral arteries (mapcas) arising off the aorta or its systemic branches, during cardiac catheterization for congenital heart defects, each distinct vessel (list separately in addition to code for primary procedure)	Oct 2021	Pulmonary Angiography	08	CPT 2023	April 2027		☐
93583	Percutaneous transcatheter septal reduction therapy (eg, alcohol septal ablation) including temporary pacemaker insertion when performed	Jan 2013	Percutaneous Alcohol Ablation of Septum	17	CPT 2014	October 2017	Remove from list, no demonstrated techology diffusion that impacts work or practice expense.	☑
93590	Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, mitral valve	Jan 2016	Closure of Paravalvular Leak	22	CPT 2017	October 2020	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93591	Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve	Jan 2016	Closure of Paravalvular Leak	22	CPT 2017	October 2020	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
93592	Percutaneous transcatheter closure of paravalvular leak; each additional occlusion device (list separately in addition to code for primary procedure)	Jan 2016	Closure of Paravalvular Leak	22	CPT 2017	October 2020	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
93593	Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; normal native connections	Oct 2020	Cardiac Catheterization for Congenital Defects	10	CPT 2022	April 2026		☐
93594	Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; abnormal native connections	Oct 2020	Cardiac Catheterization for Congenital Defects	10	CPT 2022	April 2026		☐
93595	Left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone, normal or abnormal native connections	Oct 2020	Cardiac Catheterization for Congenital Defects	10	CPT 2022	April 2026		☐
93596	Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); normal native connections	Oct 2020	Cardiac Catheterization for Congenital Defects	10	CPT 2022	April 2026		☐
93597	Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); abnormal native connections	Oct 2020	Cardiac Catheterization for Congenital Defects	10	CPT 2022	April 2026		☐
93598	Cardiac output measurement(s), thermodilution or other indicator dilution method, performed during cardiac catheterization for the evaluation of congenital heart defects (list separately in addition to code for primary procedure)	Oct 2020	Cardiac Catheterization for Congenital Defects	10	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93644	Electrophysiologic evaluation of subcutaneous implantable defibrillator (includes defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters)	Apr 2014	Subcutaneous Implantable Defibrillator Procedures	09	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
93982	Code Deleted	Apr 2007	Wireless Pressure Sensor Implantation	25	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
94011	Measurement of spirometric forced expiratory flows in an infant or child through 2 years of age	Apr 2009	Infant Pulmonary Function Testing	23	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
94012	Measurement of spirometric forced expiratory flows, before and after bronchodilator, in an infant or child through 2 years of age	Apr 2009	Infant Pulmonary Function Testing	23	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
94013	Measurement of lung volumes (ie, functional residual capacity [frc], forced vital capacity [fvc], and expiratory reserve volume [erv]) in an infant or child through 2 years of age	Apr 2009	Infant Pulmonary Function Testing	23	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
94625	Physician or other qualified health care professional services for outpatient pulmonary rehabilitation; without continuous oximetry monitoring (per session)	Jan 2021	Outpatient Pulmonary Rehabilitation Services	23	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
94626	Physician or other qualified health care professional services for outpatient pulmonary rehabilitation; with continuous oximetry monitoring (per session)	Jan 2021	Outpatient Pulmonary Rehabilitation Services	23	CPT 2022	April 2026		☐
95700	Electroencephalogram (eeg) continuous recording, with video when performed, setup, patient education, and takedown when performed, administered in person by eeg technologist, minimum of 8 channels	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95705	Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, 2-12 hours; unmonitored	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95706	Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, 2-12 hours; with intermittent monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95707	Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, 2-12 hours; with continuous, real-time monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95708	Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, each increment of 12-26 hours; unmonitored	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95709	Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95710	Electroencephalogram (eeg), without video, review of data, technical description by eeg technologist, each increment of 12-26 hours; with continuous, real-time monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95711	Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, 2-12 hours; unmonitored	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
95712	Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, 2-12 hours; with intermittent monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95713	Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, 2-12 hours; with continuous, real-time monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95714	Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, each increment of 12-26 hours; unmonitored	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95715	Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95716	Electroencephalogram with video (veeg), review of data, technical description by eeg technologist, each increment of 12-26 hours; with continuous, real-time monitoring and maintenance	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95717	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation and report, 2-12 hours of eeg recording; without video	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95718	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation and report, 2-12 hours of eeg recording; with video (veeg)	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
95719	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, each increment of greater than 12 hours, up to 26 hours of eeg recording, interpretation and report after each 24-hour period; without video	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95720	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, each increment of greater than 12 hours, up to 26 hours of eeg recording, interpretation and report after each 24-hour period; with video (veeg)	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95721	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 36 hours, up to 60 hours of eeg recording, without video	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95722	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 36 hours, up to 60 hours of eeg recording, with video (veeg)	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95723	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 60 hours, up to 84 hours of eeg recording, without video	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
95724	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 60 hours, up to 84 hours of eeg recording, with video (veeg)	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95725	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 84 hours of eeg recording, without video	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95726	Electroencephalogram (eeg), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 84 hours of eeg recording, with video (veeg)	Oct 2018	Long-Term EEG Monitoring	13	CPT 2020	April 2024		☐
95800	Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (eg, by airflow or peripheral arterial tone), and sleep time	Apr 2010	Sleep Testing	28	CPT 2011	October 2016	Survey for physician work and review direct practice expense inputs for April 2017. These services have continued to grow and the inclusion of the PACS workstation equipment was questioned.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
95801	Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (eg, by airflow or peripheral arterial tone)	Apr 2010	Sleep Testing	28	CPT 2011	October 2016	Survey for physician work and review direct practice expense inputs for April 2017. These services have continued to grow and the inclusion of the PACS workstation equipment was questioned.	☑
95803	Actigraphy testing, recording, analysis, interpretation, and report (minimum of 72 hours to 14 consecutive days of recording)	Apr 2008	Actigraphy Sleep Assessment	25	CPT 2009	September 2012	Remove, code does not need to be re-evaluated	☑
95806	Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (eg, thoracoabdominal movement)	Apr 2010	Sleep Testing	28	CPT 2011	October 2016	Survey for physician work and review direct practice expense inputs for April 2017. These services have continued to grow and the inclusion of the PACS workstation equipment was questioned.	☑
95836	Electrocorticogram from an implanted brain neurostimulator pulse generator/transmitter, including recording, with interpretation and written report, up to 30 days	Jan 2018	Electrocorticography	18	CPT 2019	April 2023		☐
95905	Motor and/or sensory nerve conduction, using preconfigured electrode array(s), amplitude and latency/velocity study, each limb, includes f-wave study when performed, with interpretation and report	Feb 2009	Nerve Conduction Tests	18	CPT 2010	September 2013	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
95919	Quantitative pupillometry with physician or other qualified health care professional interpretation and report, unilateral or bilateral	Oct 2021	Quantitative Pupillometry Services	09	CPT 2023	April 2027		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
95940	Continuous intraoperative neurophysiology monitoring in the operating room, one on one monitoring requiring personal attendance, each 15 minutes (list separately in addition to code for primary procedure)	Jan 2012	Intraoperative Neurophysiology Monitoring	12	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
95941	Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby) or for monitoring of more than one case while in the operating room, per hour (list separately in addition to code for primary procedure)	Jan 2012	Intraoperative Neurophysiology Monitoring	12	CPT 2013	October 2016	Remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
95980	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; intraoperative, with programming	Apr 2007	Electronic Analysis of Implanted Neurostimulator Pulse Generator System	I	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
95981	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, without reprogramming	Apr 2007	Electronic Analysis of Implanted Neurostimulator Pulse Generator System	I	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑
95982	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, with reprogramming	Apr 2007	Electronic Analysis of Implanted Neurostimulator Pulse Generator System	I	CPT 2008	September 2011	Remove, code does not need to be re-evaluated	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
96020	Neurofunctional testing selection and administration during noninvasive imaging functional brain mapping, with test administered entirely by a physician or other qualified health care professional (ie, psychologist), with review of test results and report	Feb 2006	Functional MRI	15	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
96904	Whole body integumentary photography, for monitoring of high risk patients with dysplastic nevus syndrome or a history of dysplastic nevi, or patients with a personal or familial history of melanoma	Feb 2006	Whole Body Integumentary Photography	19	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
96931	Reflectance confocal microscopy (rcm) for cellular and sub-cellular imaging of skin; image acquisition and interpretation and report, first lesion	Oct 2015	Reflectance Confocal Microscopy	06	CPT 2017	April 2024	Review in 3 years (April 2024).	☐
96932	Reflectance confocal microscopy (rcm) for cellular and sub-cellular imaging of skin; image acquisition only, first lesion	Oct 2015	Reflectance Confocal Microscopy	06	CPT 2017	April 2024	Review in 3 years (April 2024).	☐
96933	Reflectance confocal microscopy (rcm) for cellular and sub-cellular imaging of skin; interpretation and report only, first lesion	Oct 2015	Reflectance Confocal Microscopy	06	CPT 2017	April 2024	Review in 3 years (April 2024).	☐
96934	Reflectance confocal microscopy (rcm) for cellular and sub-cellular imaging of skin; image acquisition and interpretation and report, each additional lesion (list separately in addition to code for primary procedure)	Oct 2015	Reflectance Confocal Microscopy	06	CPT 2017	April 2024	Review in 3 years (April 2024).	☐
96935	Reflectance confocal microscopy (rcm) for cellular and sub-cellular imaging of skin; image acquisition only, each additional lesion (list separately in addition to code for primary procedure)	Oct 2015	Reflectance Confocal Microscopy	06	CPT 2017	April 2024	Review in 3 years (April 2024).	☐
96936	Reflectance confocal microscopy (rcm) for cellular and sub-cellular imaging of skin; interpretation and report only, each additional lesion (list separately in addition to code for primary procedure)	Oct 2015	Reflectance Confocal Microscopy	06	CPT 2017	April 2024	Review in 3 years (April 2024).	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
97605	Negative pressure wound therapy (eg, vacuum assisted drainage collection), utilizing durable medical equipment (dme), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters	Jan 2014	Negative Wound Pressure Therapy	17	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
97606	Negative pressure wound therapy (eg, vacuum assisted drainage collection), utilizing durable medical equipment (dme), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters	Jan 2014	Negative Wound Pressure Therapy	17	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
97607	Negative pressure wound therapy, (eg, vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters	Jan 2014	Negative Wound Pressure Therapy	17	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
97608	Negative pressure wound therapy, (eg, vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters	Jan 2014	Negative Wound Pressure Therapy	17	CPT 2015	April 2022	In October 2018, RUC recommended to review again after 3 more years of data (2022). In April 2022, recommended to remove from list, no demonstrated technology diffusion that impacts work or practice expense.	☑
97610	Low frequency, non-contact, non-thermal ultrasound, including topical application(s), when performed, wound assessment, and instruction(s) for ongoing care, per day	Oct 2013	HCPAC - Ultrasonic Wound Assessment	17	CPT 2015	October 2018	Survey for January 2019.	☑
98966	Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion	Apr 2007	Non Face-to-Face Qualified Healthcare Professional Services	U	CPT 2008	September 2011	Remove, not covered by Medicare	☑
98967	Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 11-20 minutes of medical discussion	Apr 2007	Non Face-to-Face Qualified Healthcare Professional Services	U	CPT 2008	September 2011	Remove, not covered by Medicare	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
98968	Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 21-30 minutes of medical discussion	Apr 2007	Non Face-to-Face Qualified Healthcare Professional Services	U	CPT 2008	September 2011	Remove, not covered by Medicare	☑
98970	Qualified nonphysician health care professional online digital assessment and management, for an established patient, for up to 7 days, cumulative time during the 7 days; 5-10 minutes	Jan 2019	Online Digital Evaluation Service (e-Visit)	41	CPT 2020	April 2024		☐
98971	Qualified nonphysician health care professional online digital assessment and management, for an established patient, for up to 7 days, cumulative time during the 7 days; 11-20 minutes	Jan 2019	Online Digital Evaluation Service (e-Visit)	41	CPT 2020	April 2024		☐
98972	Qualified nonphysician health care professional online digital assessment and management, for an established patient, for up to 7 days, cumulative time during the 7 days; 21 or more minutes	Jan 2019	Online Digital Evaluation Service (e-Visit)	41	CPT 2020	April 2024		☐
98975	Remote therapeutic monitoring (eg, therapy adherence, therapy response); initial set-up and patient education on use of equipment	Jan 2021	Remote Therapeutic Monitoring	24	CPT 2022	April 2027	Delayed review one year to be reviewed with 989X6 from Jan 2022 meeting, tab 12	☐
98976	Remote therapeutic monitoring (eg, therapy adherence, therapy response); device(s) supply with scheduled (eg, daily) recording(s) and/or programmed alert(s) transmission to monitor respiratory system, each 30 days	Jan 2021	Remote Therapeutic Monitoring	24	CPT 2022	April 2027	Delayed review one year to be reviewed with 989X6 from Jan 2022 meeting, tab 12	☐
98977	Remote therapeutic monitoring (eg, therapy adherence, therapy response); device(s) supply with scheduled (eg, daily) recording(s) and/or programmed alert(s) transmission to monitor musculoskeletal system, each 30 days	Jan 2021	Remote Therapeutic Monitoring	24	CPT 2022	April 2027	Delayed review one year to be reviewed with 989X6 from Jan 2022 meeting, tab 12	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
98978	Remote therapeutic monitoring (eg, therapy adherence, therapy response); device(s) supply with scheduled (eg, daily) recording(s) and/or programmed alert(s) transmission to monitor cognitive behavioral therapy, each 30 days	Jan 2022	Cognitive Behavioral Therapy Monitoring	12	CPT 2023	April 2027		☐
98980	Remote therapeutic monitoring treatment management services, physician or other qualified health care professional time in a calendar month requiring at least one interactive communication with the patient or caregiver during the calendar month; first 20 minutes	Jan 2021	Remote Therapeutic Monitoring	24	CPT 2022	April 2027	Delayed review one year to be reviewed with 989X6 from Jan 2022 meeting, tab 12	☐
98981	Remote therapeutic monitoring treatment management services, physician or other qualified health care professional time in a calendar month requiring at least one interactive communication with the patient or caregiver during the calendar month; each additional 20 minutes (list separately in addition to code for primary procedure)	Jan 2021	Remote Therapeutic Monitoring	24	CPT 2022	April 2027	Delayed review one year to be reviewed with 989X6 from Jan 2022 meeting, tab 12	☐
99202	Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. when using time for code selection, 15-29 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99203	Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and low level of medical decision making. when using time for code selection, 30-44 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99204	Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. when using time for code selection, 45-59 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and high level of medical decision making. when using time for code selection, 60-74 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99211	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician or other qualified health care professional	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. when using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. when using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. when using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99215	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. when using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99363	Code Deleted	Apr 2006	Anticoagulant Management Services	I	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
99364	Code Deleted	Apr 2006	Anticoagulant Management Services	I	CPT 2007	September 2010	Remove, code does not need to be re-evaluated	☑
99417	Prolonged outpatient evaluation and management service(s) time with or without direct patient contact beyond the required time of the primary service when the primary service level has been selected using total time, each 15 minutes of total time (list separately in addition to the code of the outpatient evaluation and management service)	Apr 2019	Office Visits	09	CPT 2021	April 2025		☐
99421	Online digital evaluation and management service, for an established patient, for up to 7 days, cumulative time during the 7 days; 5-10 minutes	Jan 2019	Online Digital Evaluation Service (e-Visit)	21	CPT 2020	April 2024		☐
99422	Online digital evaluation and management service, for an established patient, for up to 7 days, cumulative time during the 7 days; 11-20 minutes	Jan 2019	Online Digital Evaluation Service (e-Visit)	21	CPT 2020	April 2024		☐
99423	Online digital evaluation and management service, for an established patient, for up to 7 days, cumulative time during the 7 days; 21 or more minutes	Jan 2019	Online Digital Evaluation Service (e-Visit)	21	CPT 2020	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99424	Principal care management services, for a single high-risk disease, with the following required elements: one complex chronic condition expected to last at least 3 months, and that places the patient at significant risk of hospitalization, acute exacerbation/decompensation, functional decline, or death, the condition requires development, monitoring, or revision of disease-specific care plan, the condition requires frequent adjustments in the medication regimen and/or the management of the condition is unusually complex due to comorbidities, ongoing communication and care coordination between relevant practitioners furnishing care; first 30 minutes provided personally by a physician or other qualified health care professional, per calendar month.	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026		☐
99425	Principal care management services, for a single high-risk disease, with the following required elements: one complex chronic condition expected to last at least 3 months, and that places the patient at significant risk of hospitalization, acute exacerbation/decompensation, functional decline, or death, the condition requires development, monitoring, or revision of disease-specific care plan, the condition requires frequent adjustments in the medication regimen and/or the management of the condition is unusually complex due to comorbidities, ongoing communication and care coordination between relevant practitioners furnishing care; each additional 30 minutes provided personally by a physician or other qualified health care professional, per calendar month (list separately in addition to code for primary procedure)	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99426	Principal care management services, for a single high-risk disease, with the following required elements: one complex chronic condition expected to last at least 3 months, and that places the patient at significant risk of hospitalization, acute exacerbation/decompensation, functional decline, or death, the condition requires development, monitoring, or revision of disease-specific care plan, the condition requires frequent adjustments in the medication regimen and/or the management of the condition is unusually complex due to comorbidities, ongoing communication and care coordination between relevant practitioners furnishing care; first 30 minutes of clinical staff time directed by physician or other qualified health care professional, per calendar month.	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026		☐
99427	Principal care management services, for a single high-risk disease, with the following required elements: one complex chronic condition expected to last at least 3 months, and that places the patient at significant risk of hospitalization, acute exacerbation/decompensation, functional decline, or death, the condition requires development, monitoring, or revision of disease-specific care plan, the condition requires frequent adjustments in the medication regimen and/or the management of the condition is unusually complex due to comorbidities, ongoing communication and care coordination between relevant practitioners furnishing care; each additional 30 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month (list separately in addition to code for primary procedure)	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99437	Chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored; each additional 30 minutes by a physician or other qualified health care professional, per calendar month (list separately in addition to code for primary procedure)	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026		☐
99439	Chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored; each additional 20 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month (list separately in addition to code for primary procedure)	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026	Was surveyed for January 2021 with the principal care management codes. The RUC noted that the CCM codes should also be re-reviewed at that time, primarily because the clinical staff time survey responses were not obtained for the 2021 review.	☐
99441	Telephone evaluation and management service by a physician or other qualified health care professional who may report evaluation and management services provided to an established patient, parent, or guardian not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion	Feb 2007	Non Face-to-Face Services	16	CPT 2008	September 2011	Remove, not covered by Medicare	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99442	Telephone evaluation and management service by a physician or other qualified health care professional who may report evaluation and management services provided to an established patient, parent, or guardian not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 11-20 minutes of medical discussion	Feb 2007	Non Face-to-Face Services	16	CPT 2008	September 2011	Remove, not covered by Medicare	☑
99443	Telephone evaluation and management service by a physician or other qualified health care professional who may report evaluation and management services provided to an established patient, parent, or guardian not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 21-30 minutes of medical discussion	Feb 2007	Non Face-to-Face Services	16	CPT 2008	September 2011	Remove, not covered by Medicare	☑
99446	Interprofessional telephone/internet/electronic health record assessment and management service provided by a consultative physician or other qualified health care professional, including a verbal and written report to the patient's treating/requesting physician or other qualified health care professional; 5-10 minutes of medical consultative discussion and review	Oct 2012	Interprofessional Telephone Consultative Services	14	CPT 2014	October 2016	Reaffirmed RUC recommendation	☑
99447	Interprofessional telephone/internet/electronic health record assessment and management service provided by a consultative physician or other qualified health care professional, including a verbal and written report to the patient's treating/requesting physician or other qualified health care professional; 11-20 minutes of medical consultative discussion and review	Oct 2012	Interprofessional Telephone Consultative Services	14	CPT 2014	October 2016	Reaffirmed RUC recommendation	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99448	Interprofessional telephone/internet/electronic health record assessment and management service provided by a consultative physician or other qualified health care professional, including a verbal and written report to the patient's treating/requesting physician or other qualified health care professional; 21-30 minutes of medical consultative discussion and review	Oct 2012	Interprofessional Telephone Consultative Services	14	CPT 2014	October 2016	Reaffirmed RUC recommendation	☑
99449	Interprofessional telephone/internet/electronic health record assessment and management service provided by a consultative physician or other qualified health care professional, including a verbal and written report to the patient's treating/requesting physician or other qualified health care professional; 31 minutes or more of medical consultative discussion and review	Oct 2012	Interprofessional Telephone Consultative Services	14	CPT 2014	October 2016	Reaffirmed RUC recommendation	☑
99451	Interprofessional telephone/internet/electronic health record assessment and management service provided by a consultative physician or other qualified health care professional, including a written report to the patient's treating/requesting physician or other qualified health care professional, 5 minutes or more of medical consultative time	Jan 2018	Interprofessional Internet Consultation	21	CPT 2019	April 2023		☐
99452	Interprofessional telephone/internet/electronic health record referral service(s) provided by a treating/requesting physician or other qualified health care professional, 30 minutes	Jan 2018	Interprofessional Internet Consultation	21	CPT 2019	April 2023		☐
99453	Remote monitoring of physiologic parameter(s) (eg, weight, blood pressure, pulse oximetry, respiratory flow rate), initial; set-up and patient education on use of equipment	Jan 2018	Chronic Care Remote Physiologic Monitoring	20	CPT 2019	April 2024		☐
99454	Remote monitoring of physiologic parameter(s) (eg, weight, blood pressure, pulse oximetry, respiratory flow rate), initial; device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days	Jan 2018	Chronic Care Remote Physiologic Monitoring	20	CPT 2019	April 2024		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99457	Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month; first 20 minutes	Jan 2018	Chronic Care Remote Physiologic Monitoring	20	CPT 2019	April 2024		☐
99458	Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month; each additional 20 minutes (list separately in addition to code for primary procedure)	Jan 2019	Chronic Care Remote Physiologic Monitoring	20	CPT 2020	April 2024		☐
99474	Self-measured blood pressure using a device validated for clinical accuracy; separate self-measurements of two readings one minute apart, twice daily over a 30-day period (minimum of 12 readings), collection of data reported by the patient and/or caregiver to the physician or other qualified health care professional, with report of average systolic and diastolic pressures and subsequent communication of a treatment plan to the patient	Jan 2019	Self-Measured Blood Pressure Monitoring	19	CPT 2020	April 2024		☐
99484	Care management services for behavioral health conditions, at least 20 minutes of clinical staff time, directed by a physician or other qualified health care professional, per calendar month, with the following required elements: initial assessment or follow-up monitoring, including the use of applicable validated rating scales, behavioral health care planning in relation to behavioral/psychiatric health problems, including revision for patients who are not progressing or whose status changes, facilitating and coordinating treatment such as psychotherapy, pharmacotherapy, counseling and/or psychiatric consultation, and continuity of care with a designated member of the care team.	Jan 2017	Psychiatric Collaborative Care Management Services	20	CPT 2018	September 2022	Surveyed for September 2022 and recommended an increase.	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99487	Complex chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored, moderate or high complexity medical decision making; first 60 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month.	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2013	April 2026	Was surveyed for January 2021 with the principal care management codes. The RUC noted that the CCM codes should also be re-reviewed at that time, primarily because the clinical staff time survey responses were not obtained for the 2021 review.	☐
99488	Code Deleted	Oct 2012	Complex Chronic Care Coordination Services	09	CPT 2013	October 2017	Code Deleted	☑
99489	Complex chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored, moderate or high complexity medical decision making; each additional 30 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month (list separately in addition to code for primary procedure)	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2013	April 2026	Was surveyed for January 2021 with the principal care management codes. The RUC noted that the CCM codes should also be re-reviewed at that time, primarily because the clinical staff time survey responses were not obtained for the 2021 review.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99490	Chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored; first 20 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month.	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2015	April 2026	Was surveyed for January 2021 with the principal care management codes. The RUC noted that the CCM codes should also be re-reviewed at that time, primarily because the clinical staff time survey responses were not obtained for the 2021 review.	☐
99491	Chronic care management services with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions that place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, comprehensive care plan established, implemented, revised, or monitored; first 30 minutes provided personally by a physician or other qualified health care professional, per calendar month.	Jan 2021	Principal Care Management (PCM) & Chronic Care Management (CCM)	25	CPT 2022	April 2026	Was surveyed for January 2021 with the principal care management codes. The RUC noted that the CCM codes should also be re-reviewed at that time, primarily because the clinical staff time survey responses were not obtained for the 2021 review.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99492	Initial psychiatric collaborative care management, first 70 minutes in the first calendar month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional, with the following required elements: outreach to and engagement in treatment of a patient directed by the treating physician or other qualified health care professional, initial assessment of the patient, including administration of validated rating scales, with the development of an individualized treatment plan, review by the psychiatric consultant with modifications of the plan if recommended, entering patient in a registry and tracking patient follow-up and progress using the registry, with appropriate documentation, and participation in weekly caseload consultation with the psychiatric consultant, and provision of brief interventions using evidence-based techniques such as behavioral activation, motivational interviewing, and other focused treatment strategies.	Jan 2017	Psychiatric Collaborative Care Management Services	20	CPT 2018	April 2023	In January 2020, the RUC identified Psychiatric Collaborative Care Management Services via the work neutrality process. These codes show a 468% increase in work RVUs for 2018. In reviewing the utilization data for these services, it appears one independent clinic is performing most of these services in the pediatric population. The Workgroup recommended that CMS investigate the reporting of services by this specific independent clinic. The specialty society indicated, and the Workgroup agreed, that a new CPT Assistant article on the appropriate usage of these codes be developed in 2020. However, due to the incorrect reporting of these services by one specific provider, the referral for a CPT Assistant article was removed. This family is on the new technology/new services screen and is scheduled for review at the April 2023	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							Relativity Assessment Workgroup meeting.	

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99493	Subsequent psychiatric collaborative care management, first 60 minutes in a subsequent month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional, with the following required elements: tracking patient follow-up and progress using the registry, with appropriate documentation, participation in weekly caseload consultation with the psychiatric consultant, ongoing collaboration with and coordination of the patient's mental health care with the treating physician or other qualified health care professional and any other treating mental health providers, additional review of progress and recommendations for changes in treatment, as indicated, including medications, based on recommendations provided by the psychiatric consultant, provision of brief interventions using evidence-based techniques such as behavioral activation, motivational interviewing, and other focused treatment strategies, monitoring of patient outcomes using validated rating scales, and relapse prevention planning with patients as they achieve remission of symptoms and/or other treatment goals and are prepared for discharge from active treatment.	Jan 2017	Psychiatric Collaborative Care Management Services	20	CPT 2018	April 2023	In January 2020, the RUC identified Psychiatric Collaborative Care Management Services (CPT codes 99492, 99493 and 99494) via the work neutrality process. These codes show a 468% increase in work RVUs for 2018. In reviewing the utilization data for these services, it appears one independent clinic is performing most of these services in the pediatric population. The Workgroup recommends that CMS investigate the reporting of services by this specific independent clinic. The specialty society indicated, and the Workgroup agreed, that a new CPT Assistant article on the appropriate usage of these codes be developed in 2020. However, due to the incorrect reporting of these services by one specific provider, the referral for a CPT Assistant article was removed. This family is on the new technology/new services screen and is	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							scheduled for review at the April 2023 Relativity Assessment Workgroup meeting.	

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
99494	Initial or subsequent psychiatric collaborative care management, each additional 30 minutes in a calendar month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional (list separately in addition to code for primary procedure)	Jan 2017	Psychiatric Collaborative Care Management Services	20	CPT 2018	April 2023	In January 2020, the RUC identified Psychiatric Collaborative Care Management Services (CPT codes 99492, 99493 and 99494) via the work neutrality process. These codes show a 468% increase in work RVUs for 2018. In reviewing the utilization data for these services, it appears one independent clinic is performing most of these services in the pediatric population. The Workgroup recommends that CMS investigate the reporting of services by this specific independent clinic. The specialty society indicated, and the Workgroup agreed, that a new CPT Assistant article on the appropriate usage of these codes be developed in 2020. However, due to the incorrect reporting of these services by one specific provider, the referral for a CPT Assistant article was removed. This family is on the new technology/new services screen and is	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
							scheduled for review at the April 2023 Relativity Assessment Workgroup meeting.	
99495	Transitional care management services with the following required elements: communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge at least moderate level of medical decision making during the service period face-to-face visit, within 14 calendar days of discharge	Oct 2012	Transitional Care Management Services	08	CPT 2013	October 2017	Survey for October 2018	☑
99496	Transitional care management services with the following required elements: communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge high level of medical decision making during the service period face-to-face visit, within 7 calendar days of discharge	Oct 2012	Transitional Care Management Services	08	CPT 2013	October 2017	Survey for October 2018	☑
99497	Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; first 30 minutes, face-to-face with the patient, family member(s), and/or surrogate	Jan 2014	Advance Care Planning	19	CPT 2015	April 2022	Review in 2 years (October 2019). In Oct 2019, indicated to review in another 2 years (January 2022).	☑
99498	Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; each additional 30 minutes (list separately in addition to code for primary procedure)	Jan 2014	Advance Care Planning	19	CPT 2015	April 2022	Review in 2 years (October 2019). In Oct 2019, indicated to review in another 2 years (January 2022).	☑

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93584		Jan 2023	Venography Services	14	CPT 2024	April 2026	In January 2023, the RUC recommended that these codes be placed on the New Technology list and will be re-reviewed on the same timeline as the family of codes 93593-93598 from October 2020 to ensure correct valuation and utilization assumptions (April 2026).	☐
93585		Jan 2023	Venography Services	14	CPT 2024	April 2026	In January 2023, the RUC recommended that these codes be placed on the New Technology list and will be re-reviewed on the same timeline as the family of codes 93593-93598 from October 2020 to ensure correct valuation and utilization assumptions (April 2026).	☐
93586		Jan 2023	Venography Services	14	CPT 2024	April 2026	In January 2023, the RUC recommended that these codes be placed on the New Technology list and will be re-reviewed on the same timeline as the family of codes 93593-93598 from October 2020 to ensure correct valuation and utilization assumptions (April 2026).	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93587		Jan 2023	Venography Services	14	CPT 2024	April 2026	In January 2023, the RUC recommended that these codes be placed on the New Technology list and will be re-reviewed on the same timeline as the family of codes 93593-93598 from October 2020 to ensure correct valuation and utilization assumptions (April 2026).	☐
93588		Jan 2023	Venography Services	14	CPT 2024	April 2026	In January 2023, the RUC recommended that these codes be placed on the New Technology list and will be re-reviewed on the same timeline as the family of codes 93593-93598 from October 2020 to ensure correct valuation and utilization assumptions (April 2026).	☐
97550		Sep 2022	Caregiver Training Services	14	CPT 2024	April 2028		☐
97551		Sep 2022	Caregiver Training Services	14	CPT 2024	April 2028		☐
97552		Sep 2022	Caregiver Training Services	14	CPT 2024	April 2028		☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
97037		Sep 2022	Post Operative Low-Level Laser Therapy	06	CPT 2024	April 2028	The RUC recommends that CPT code 9X022 be placed on the New Technology list to review when utilization is available, identifying who is performing the service.	☐
93150		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93151		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
93152		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
93153		Jan 2023	Phrenic Nerve Stimulation System	06	CPT 2024	April 2028	In January 2023, these services were placed on the new technology list and flagged for review by the RAW in three years since the survey responses were below 30. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.	☐
G0445	High intensity behavioral counseling to prevent sexually transmitted infection; face-to-face, individual, includes: education, skills training and guidance on how to change sexual behavior; performed semi-annually, 30 minutes		Fecal Bacteriotherapy		CPT 2013	October 2018		☑

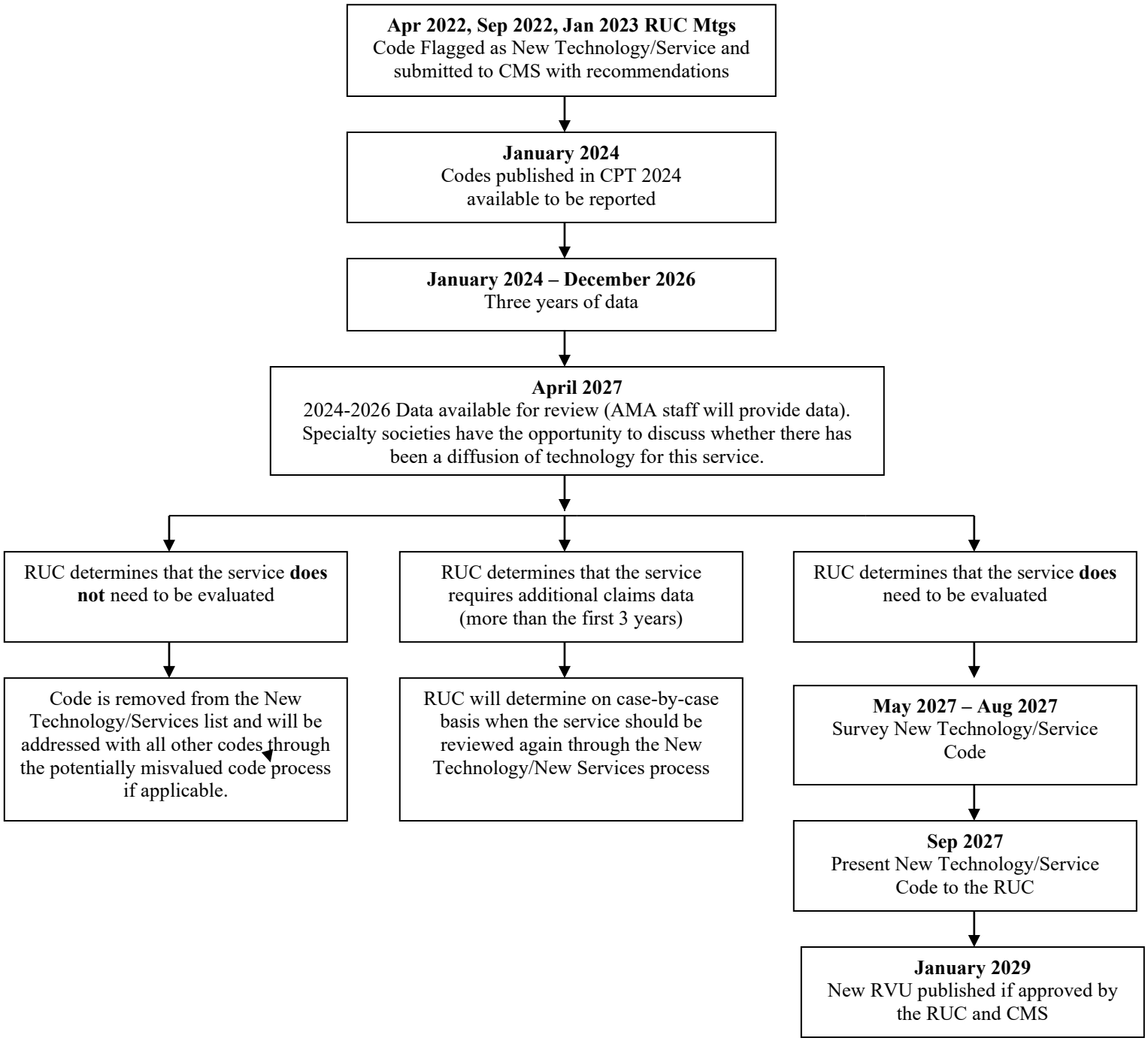
CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete
G2066	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	Jan 2023	Remote Interrogation Device Evaluation - Cardiovascular (PE Only)	20		April 2027	Codes 93297 and 93298 were first flagged at the April 2008 meeting, Tab 23 Cardiac Device Monitoring, for CPT 2009 and reviewed at the RAW in September 2012. An Ad Hoc Workgroup was developed to determine how to address the work neutrality failure and establish guidelines for further RAW review of retrospective work neutralilty. In October 2018, 93297 and 93298 were reviewed and placed on the new technology/new services list for April 2024. CMS did not accept the practice expense for these services and instead created G2066 to report the practice expense associated with these services. In January 2023, the RUC affirmed the work RVUs and recommended direct PE inputs for 93297, 93298 and G2066. These services were placed back on the new technology/new services list to assess the work and PE in 3 years (April 2027).	☐

CPT Code	Long Descriptor	RUC Meeting	Issue	Tab	CPT Year	Date to Re-Review	RUC Rec	Complete

New Technology/Services Timeline

1. Code is identified as a new technology/service at the RUC meeting in which it is initially reviewed.
2. Code is flagged in the next version of the RUC database with date to be reviewed
3. Code will be reviewed in 5 years (depending on what meeting in the CPT/RUC cycle it is initially reviewed) after at least three years of data are available.

Example



Revised May 2022

Specialty Societies Acronym List **October 2022**

Society	Acronym
Academy of Nutrition and Dietetics	ANDi
AMDA-The Society for Post-Acute and Long-Term Care Medicine	AMDA
American Academy of Allergy, Asthma & Immunology	AAAAI
American Academy of Child and Adolescent Psychiatry	AACAP
American Academy of Dermatology Association	AADA
American Academy of Family Physicians	AAFP
American Academy of Hospice and Palliative Medicine	AAHPM
American Academy of Neurology	AAN
American Academy of Ophthalmology	AAO
American Academy of Orthopaedic Surgeons	AAOS
American Academy of Otolaryngic Allergy	AAOA
American Academy of Otolaryngology - Head and Neck Surgery	AAO-HNS
American Academy of Pain Medicine	AAPM
American Academy of PAs	AAPA
American Academy of Pediatrics	AAP
American Academy of Physical Medicine & Rehabilitation	AAPMR
American Academy of Sleep Medicine	AASM
American Association for Thoracic Surgery	AATS
American Association of Clinical Urologist, Inc.	AACU
American Association of Gynecologic Laparoscopists	AAGL
American Association of Hip and Knee Surgeons	AAHKS
American Association of Neurological Surgeons	AANS
American Association of Neuromuscular & Electrodiagnostic Medicine	AANEM
American Association of Oral and Maxillofacial Surgeons	AAOMS
American Burn Association	ABA
American Chiropractic Association	ACA
American Clinical Neurophysiology Society	ACNS
American College of Allergy, Asthma & Immunology	ACAAI
American College of Cardiology	ACC
American College of Chest Physicians	CHEST
American College of Emergency Physicians	ACEP
American College of Gastroenterology	ACG
American College of Medical Genetics	ACMG
American College of Mohs Surgery	ACMS
American College of Nuclear Medicine	ACNM
American College of Obstetricians and Gynecologists	ACOG
American College of Physicians	ACP
American College of Radiation Oncology	ACRO
American College of Radiology	ACR

Society	Acronym
American College of Rheumatology	ACRh
American College of Surgeons	ACS
American Dental Association	ADA
American Gastroenterological Association	AGA
American Geriatrics Society	AGS
American Medical Association	AMA
American Medical Group Association	AMGA
American Medical Woman's Association	AMWA
American Nurses Association	ANA
American Occupational Therapy Association	AOTA
American Optometric Association	AOA(eye)
American Orthopaedic Foot and Ankle Society	AOFAS
American Osteopathic Association	AOA
American Pediatric Surgical Association	APSA
American Physical Therapy Association	APTA
American Podiatric Medical Association	APMA
American Psychiatric Association	APA(psychiatry)
American Psychological Association	APA(psychology)
American Rhinologic Society	ARS
American Roentgen Ray Society	ARRS
American Society for Clinical Pathology	ASCP
American Society for Dermatologic Surgery	ASDS
American Society for Gastrointestinal Endoscopy	ASGE
American Society for Radiation Oncology	ASTRO
American Society for Reproductive Medicine	ASRM
American Society for Surgery of the Hand	ASSH
American Society for Transplantation and Cellular Therapy	ASTCT
American Society of Addiction Medicine	ASAM
American Society of Anesthesiologists	ASA
American Society of Breast Surgeons	ASBS
American Society of Cataract and Refractive Surgery	ASCRS(cat)
American Society of Clinical Oncology	ASCO
American Society of Colon and Rectal Surgeons	ASCRS(col)
American Society of Cytopathology	ASC
American Society of Dermatopathology	ASDP
American Society of Echocardiography	ASE
American Society of General Surgeons	ASGS
American Society of Hematology	ASH
American Society of Interventional Pain Physicians	ASIPP

Specialty Societies Acronym List **October 2022**

Society	Acronym
American Society of Metabolic and Bariatric Surgery	ASMBS
American Society of Neuroimaging	ASN
American Society of Neuroradiology	ASNR
American Society of Plastic Surgeons	ASPS
American Society of Regional Anesthesia and Pain Medicine	ASRA
American Society of Retina Specialists	ASRS
American Society of Transplant Surgeons	ASTS
American Speech-Language-Hearing Association	ASHA
American Thoracic Society	ATS
American Urological Association	AUA
American Vein and Lymphatic Society	AVLS
Association of University Radiologists	AUR
College of American Pathologists	CAP
Congress of Neurological Surgeons	CNS
Heart Rhythm Society	HRS
Infectious Diseases Society of America	IDSA
International Society for the Advancement of Spine Surgery	ISASS
National Association of Medical Examiners	NAME
National Association of Social Workers	NASW
North American Neuromodulation Society	NANS
North American Spine Society	NASS
Obesity Medicine Association	OMA
Outpatient Endovascular and Interventional Society	OEIS
Radiological Society of North America	RSNA
Society for Cardiovascular Computed Tomography	SCCT
Society for Investigative Dermatology	SID
Society for Vascular Surgery	SVS
Society of American Gastrointestinal and Endoscopic Surgeons	SAGES
Society of Critical Care Medicine	SCCM
Society of Hospital Medicine	SHM
Society of Interventional Radiology	SIR
Society of Laparoscopic & Robotic Surgeons	SLS
Society of Nuclear Medicine and Molecular Imaging	SNMMI
Society of Thoracic Surgeons	STS
The Endocrine Society	ES
The Society for Cardiovascular Angiography and Interventions	SCAI
The Spine Intervention Society	SIS
Underseas and Hyperbaric Medical Society	UHMS

CPT Code	Global	Total CY2024 Physician Time - before applying post-op visit increase	Total CY2024 Physician Time with RUC Recommended Office Visit, Hospital Visit and Discharge Visit Times	Change in Total Physician Time	Percent Change - Total Time	CY2024 Work RVU before applying post-op visit increase	Surgical Global Work RVU After Incorporating RUC Recommendation for Bundled Office, Hospital and Discharge Visits	Change in Work RVU	Percent Change - Work RVU	Change in Clinical Staff Time	_99204	_99211	_99212	_99213	_99214	_99215	_99231	_99232	_99233	_99238	_99239	_99291	_99292
30117	090	133	147	14	11%	3.91	4.68	0.77	20%	0				2						0.5			
30118	090	211	232	21	10%	9.55	10.65	1.10	12%	0				3						0.5			
65780	090	192	222	30	16%	7.03	8.68	1.65	23%	0			1	4						0.5			
27278	090	185	199	14	8%	7.86	8.63	0.77	10%	0				2						0.5			
22836	090	599	620	21	4%	32.00	34.14	2.14	7%	-2				2	1		1	1	1	1			
22837	090	649	670	21	3%	35.50	37.64	2.14	6%	-2				2	1		1	1	1	1			
22838	090	649	670	21	3%	36.00	38.14	2.14	6%	-2				2	1		1	1	1	1			
33276	090	253	262	9	4%	9.50	10.03	0.53	6%	-2					1					0.5			
33278	090	239	246	7	3%	9.55	9.99	0.44	5%	0				1						0.5			
33279	090	239	246	7	3%	5.42	5.86	0.44	8%	0				1						0.5			
33280	090	155	162	7	5%	3.04	3.48	0.44	14%	0				1						0.5			
33281	090	246	255	9	4%	6.00	6.53	0.53	9%	-2					1					0.5			
33287	090	177	186	9	5%	6.05	6.58	0.53	9%	-2					1					0.5			
33288	090	256	265	9	4%	8.51	9.04	0.53	6%	-2					1					0.5			
58580	010	153	160	7	5%	7.21	7.65	0.44	6%	0				1						0.5			

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Dorsal Sacroiliac Joint Arthrodesis – Tab 4

In May 2022, the CPT Editorial Panel created Category III code 0775T for CPT 2023 to report percutaneous sacroiliac (SI) joint arthrodesis using an intra-articular implant(s), such as bone allograft material or synthetic devices. In September 2022, the Panel deleted category III code 0775T for CPT 2024 and created new Category I code 27278, which was surveyed for the January 2023 RUC meeting. CPT codes 27279 *Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device* and 27280 *Arthrodesis, sacroiliac joint, open, includes obtaining bone graft, including instrumentation, when performed* were added as family codes to the level of interest (LOI) form. The specialty societies do not consider codes 27279 and 27280 as part of the same code family, providing the following rationale:

- The surgical approach in the new interpositional procedure (27278) typically involves the posterior or dorsal approach to the SI joint, which contrasts with CPT code 27279 transfixing procedures and the 27280 open procedure, both of which approach the joint from the lateral (ilium) side of the body.
- At the September 2022 CPT Panel meeting, no substantive changes were made to codes 27279 or 27280, aside from only one revision of a single exclusionary parenthetical to account for the conversion of Category III code 0775T to Category I code 27278.
- CPT code 27280 does not have a comparable clinical relationship to the new percutaneous work involved in 27278, and a distinctly different group of physicians will be performing 27278 (interventional pain physicians and interventional radiologists).
- CPT code 27279 was reviewed by the RUC in 2014 and 2018.

Given this information, the specialty societies requested that these codes not be re-reviewed with 27278 at the January 2023 RUC meeting. **The RUC submits no recommendation regarding CPT codes 27279 and 27280 as they were not re-reviewed or re-surveyed in conjunction with 27278.**

27278 ***Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device***
The RUC reviewed the survey results from a random sample of 34 anesthesiologists, pain medicine physicians, interventional radiologists and orthopedic surgeons and determined that the survey 25th percentile work RVU of 7.86 accounts for the physician work required to perform 27278. The RUC recommends 33 minutes pre-service evaluation time, 10 minutes pre-service positioning, 11 minutes pre-service scrub/dress/wait time, 46 minutes intra-service time, 20 minutes post-service time for this service, 0.5-99238 discharge visit and 2-99213 office visits, equaling 185 minutes of total time.

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The RUC noted that selected pre and post standard time packages were modified to more accurately reflect pre- and post-service time involved with this service, as supported by the survey. The RUC concurred with the specialties that 10 minutes of pre-positioning time is typical to account for placing the patient in the prone or oblique positioning on the procedure table, padding bony prominences and assessing or adjusting the position of the extremities and head as necessary. The RUC agreed that these time allotments are clinically appropriate and sufficient for this service.

Regarding post-operative care, the RUC agrees with the inclusion of 0.5-99238 discharge visit and 2-99213 office visits to perform post-operative care within the 090-day global period. The specialty societies noted that 2-99213 visits are typical for this procedure. During the first post-operative visit, approximately two weeks after surgery, the patient's wound is examined, healing is assessed, and the absence of infection is confirmed. The physician would also assess the patient's pain score and write medication, occupational and/or physical therapy orders, as necessary. During the second post-operative visit, approximately six weeks after surgery, the physician would order and review imaging to assess functional recovery of the sacroiliac joint arthrodesis and implant to verify and ensure that appropriate fusion with the bone has occurred. Assessment of the patient's pain score, medication management, occupational and/or physical therapy orders, as necessary, would again take place, and the physician may revise treatment plan(s) and communicate with the patient and family/caregiver and primary physician.

To justify a work RVU value of 7.86, the RUC compared CPT code 27278 to the top key reference service code 22869 *Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level* (work RVU = 7.03, 43 minutes intra-service time and 194 minutes total time). The RUC recognizes that code 22869 is a strong point of comparison to the survey code in terms of intra-service time, total time and intensity. For additional support, the RUC also referenced CPT code 29880 *Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed* (work RVU= 7.39, 45 minutes intra-service time, 199 minutes total time) and noted that the surveyed code is a somewhat more intense and complex procedure to perform and would have appropriate relativity with this reference service. The RUC concluded that CPT code 27278 should be valued at the 25th percentile as supported by the survey. **The RUC recommends a work RVU of 7.86 for CPT code 27278.**

Practice Expense

The Practice Expense (PE) Subcommittee discussed the direct practice expense inputs, including the new high-cost supply item, *Dorsal SI Joint Arthrodesis Implant,* and made several modifications. The Subcommittee reviewed the vignette, which specifies a single implant and concurred that one supply input would be typical.

The addition of clinical staff code L041A *Vascular Interventional Technologist*, formerly, *Angio Technician*, was approved to accurately represent the clinical staff labor type that is typical for performing this service in a non-facility setting. The specialties clarified that there are three individual staff in the room for this procedure plus the physician. There is a Vascular Interventional Technologist who assists the physician 100% of the time as noted by the 46 minutes in CA018. There is a second Vascular Interventional Technologist whose time is divided between two staff types as accounted for by the split in minutes for CA020 *Assist physician or other qualified healthcare professional* between L041A and L037D *RN/LPN/MTA*. This Vascular Interventional Technologist both assists and circulates, assisting the physician for 75% of the time and then reported

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as a nurse blend for 25% when the individual is acting as a circulator. The circulating staff person in the room acquires images, opens supplies, adjusts and connects equipment. This by convention has been a 75% L041A / 25% L037D role for interventional procedures. There is also a nurse present solely for the anesthesia monitoring. The PE Subcommittee emphasized that the inputs related to the provision of moderate sedation are included in the moderate sedation code. Therefore, the minutes for CA017 *Sedate/apply anesthesia* and CA022 *Monitor patient following procedure/service, multitasking 1:4* were removed. In addition, the supply inputs were modified to account for moderate sedation and eliminate any duplication. **The RUC recommends the direct practice expense inputs as modified by the PE Subcommittee.**

New Technology
CPT code 27278 will be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation, patient population, and utilization assumptions.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Musculoskeletal System** **Pelvis and Hip Joint** **Arthrodesis** *Code 27279 describes percutaneous arthrodesis of the sacroiliac joint using a minimally invasive technique to place an internal fixation device(s) that passes through the ilium, across the sacroiliac joint and into the sacrum, thus transfixing the sacroiliac joint. Report ~~0775T~~ 27278 for the percutaneous placement of an intra-articular stabilization device into the sacroiliac joint using a minimally invasive technique that does not transfix the sacroiliac joint. ~~For percutaneous arthrodesis of the sacroiliac joint utilizing both a transfixation device and intra-articular implant(s), use~~ 27299~~.~~				
●27278	I1	Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device (For arthrodesis, sacroiliac joint, with placement of a percutaneous transfixation device, use 27279) (For bilateral procedure, report 27278 with modifier 50)	090	7.86

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(f)27279	I2	Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device ~~(Do not report 27279 in conjunction with 0775T)~~ (For percutaneous arthrodesis of the sacroiliac joint utilizing both a transfixation device and intra-articular implant(s), use ~~27299~~27278) ~~(For percutaneous arthrodesis of the sacroiliac joint by intra-articular implant(s), use 0775T)~~ (For bilateral procedure, report 27279 with modifier 50)	090	No Recommendation
(f)27280	I3	Arthrodesis, sacroiliac joint, open, includes obtaining bone graft, including instrumentation, when performed ~~(Do not report 27280 in conjunction with 0775T)~~ (For percutaneous/minimally invasive arthrodesis of the sacroiliac joint without fracture and/or dislocation, utilizing a transfixation device, use 27279) (To report bilateral procedure, report 27280 with modifier 50)	090	No Recommendation

~~*Code 27279 describes percutaneous arthrodesis of the sacroiliac joint using a minimally invasive technique to place an internal fixation device(s) that passes through the ilium, across the sacroiliac joint and into the sacrum, thus transfixing the sacroiliac joint. Report 0775T for the percutaneous placement of an intra-articular stabilization device into the sacroiliac joint using a minimally invasive technique that does not transfix the sacroiliac joint by placement of an internal fixation device that passes through the ilium and across the sacroiliac joint into the sacrum. For percutaneous arthrodesis of the sacroiliac joint utilizing both a transfixation device and intra-articular implant(s), use 27299.*~~

~~*0775T Arthrodesis, sacroiliac joint, percutaneous, with image guidance, includes placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s])*~~

~~*(Do not report 0775T in conjunction with 27279, 27280)*~~

~~*(For percutaneous arthrodesis, sacroiliac joint, with transfixation device, use 27279)*~~

~~*(For removal or replacement of sacroiliac intra-articular implant[s], use 27299)*~~

~~*(For bilateral procedure, report 0775T with modifier 50)*~~

(0775T has been deleted)

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(For arthrodesis, sacroiliac joint, percutaneous, including placement of intra-articular implant[s], use 27278)

●~~0809T Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, placement of transfixing device(s) and intra-articular implant(s) including allograft or synthetic device(s)~~

~~(For bilateral procedure, report 0809T with modifier 50)~~

(0809T has been deleted)

(For percutaneous arthrodesis of the sacroiliac joint, see 27278, 27279)

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November 7, 2022

Ezequiel Silva, MD
Chair, AMA/Specialty Society RVS Update Committee
American Medical Association
330 N. Wabash Avenue, Suite 39300
Chicago, IL 60611

RE: Level of Interest for CPT codes 27279 and 27280

Dear Dr. Silva,

At the September 2022 CPT Panel meeting, several radiology and pain management societies submitted a coding change application to convert CPT Category III code 0775T to Category I status. The Panel accepted the proposal and established new code 27278 which was referred to the RUC for survey of physician work. Codes 27279 and 27280 were added as family codes on the level of interest form. The undersigned societies indicated that codes 27279 and 27280 were editorial and did not require a RUC survey. This letter provides the rationale for this decision and recommendation to the RUC.

27280, Arthrodesis, sacroiliac joint, open, includes obtaining bone graft, including instrumentation, when performed

At the February 2014 CPT meeting the Editorial Panel revised code 27280 to add the word "open" to differentiate this code from new 27279. Code 27280 is a legacy code (pre-1990).

The revised code 27280 was surveyed by AANS, CNS, AAOS, and NASS for the April 2014 RUC meeting. Upon review of the data, the societies had concerns about the reliability of the survey data as there was confusion to surgeons of disparate spine and orthopaedic trauma backgrounds, with the former group potentially considering that instrumentation related to this procedure would be coded separately, as is common with many surgical procedures of the spine. The latter group, however, traditionally performs procedures where instrumentation is included as part of the procedure code. Thus, surgeons may have appraised code 27280 differently in their survey responses because no reference to instrumentation was in the code descriptor. The societies requested that the code be referred back to CPT to editorially revise the descriptor to add "includes instrumentation when performed." The specialty societies believed that a new survey using a revised descriptor would provide more accurate results. The RUC referred code 27280 to the CPT Editorial Panel with a recommendation to editorially revise the code descriptor to eliminate possible confusion about correct coding. This was approved by the Panel's Executive Committee at the May 2014 meeting and the revised code was referred back to the RUC. A survey with the revised descriptor was conducted for the September 2014 RUC meeting. The RUC accepted compelling evidence and recommended the survey 25th percentile work RVU.

At the recent September 2022 CPT Panel meeting, no changes (editorial or otherwise) were made to the code descriptor for code 27280—only one revision was made to a single exclusionary parenthetical to account for the change in codes numbers for the conversion of Cat III code 0775T to Cat I code 27278. The work for the open procedure 27280 has not changed and the providers of this service remain surgeons. Code 27280 has no relationship to the new percutaneous procedure 27278 that will be performed by a different group of physicians (interventional pain and interventional radiology).

Because code 27280 is not related to the new code 27278 in terms of providers and work required, we believe code 27280 does not require re-review in conjunction with this new code.

27279, Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device

At the February 2014 CPT meeting the Editorial Panel approved deletion of Category III code 0334T, with establishment of Category I code 27279 to describe minimally invasive sacroiliac joint arthrodesis. As noted in the April 2014 summary of recommendation form for 27279, the CPT acceptance of Cat I status for 27279 was based on sufficient literature, information regarding industry sales volume, and information that the procedure was in fairly widespread use. Although industry representatives offered to provide contact information for surgeons with experience, the involved societies determined that if the industry information about utilization was correct, a random survey of membership would result in sufficient survey responses.

Unfortunately, prior to the distribution of the surveys, an individual physician sent an email to an unknown number of physicians discussing the new code 27279 and suggesting that the work would be equivalent to code 63030 (open laminotomy with decompression, work RVU=13.18). This email was brought to the attention of RUC staff and a question about inappropriate contact was added to the RUC survey before the survey was released. The AANS, CNS, NASS, and AAOS conducted a RUC survey of randomly selected (spine) surgeons from their membership database. Six responses were excluded that had conflicts (financial conflict and/or communication conflict) yielding 28 usable surveys. The RUC agreed with the specialties that the survey respondents overestimated the postop facility work as overnight or inpatient instead of same day surgery and overestimated the work RVU. The RUC recommended a crosswalk to code 62287 (work RVU=9.03) which had the same intra-time and almost identical pre- and post-operative time. CMS agreed with the RUC recommendation of 9.03 for CY 2015.

In the final rule for 2018, based on information provided to CMS that was deemed compelling, code 27279 was nominated for review as a potentially misvalued code. The RUC added CPT code 27279 to the list of potentially misvalued services to review in April 2018. A survey request was sent to a random selection of members from the AAOS, AANS, CNS, NASS, and ISASS; 76 responses were received.

At the September 2018 RUC meeting, the societies provided compelling evidence of a flawed methodology for the prior survey of 27279 in 2014. Specifically, the societies stated that the intensity of the procedure was underestimated as the prior data included only 28 respondents and many respondents did not have experience. The societies also indicated that at the time the 2014 survey was conducted, the technology was new and not widely performed. A third point of compelling evidence was that the prior survey process was interfered with by an outside party. The societies argued that with increased and broader utilization and a considerably larger and more robust survey of physician work and intensity, a new higher work RVU of 11.00 was appropriate.

The RUC disagreed that compelling evidence was met.. Without compelling evidence approved, and based on the updated survey data, the specialty societies recommended the highest work RVU available under RUC rules, recommended maintaining the work RVU of 9.03 for code 27279.

In the PFS proposed rule for CY 2020, CMS agreed to maintain the work RVU of 9.03 as recommended by the RUC. However, CMS noted that a stakeholder stated that maintaining this RVU would constitute the continued undervaluation of this service, and that this would incentivize use of the more intensive and invasive procedure (27280), as well as incentivize this procedure to be inappropriately furnished on an inpatient basis. The stakeholder requested that, in the interest of protecting patient access, the Agency implement payment parity between the two services by proposing to crosswalk the work RVU of code 27279 to code 27280, which has a work RVU of 20.00. CMS noted that although they were proposing the RUC-recommended work RVU, they were also soliciting public comment on whether an alternative valuation would be more appropriate.

In the PFS final rule for CY 2020, CMS reviewed comments from stakeholders that indicated the intensity of 27279 was undervalued. Commenters also offered various suggestions for a different valuation such as crosswalk to the open procedure 27280, a value using regression analysis of the RUC surveys, or crosswalks to other spine procedure codes. After consideration of the public comments, CMS finalized a crosswalk work RVU of 12.13 using code 57288, *Sling operation for stress incontinence (eg, fascia or synthetic)*, that had the same intra-time, but one additional office visit.

Code 27279 was: (1) surveyed in 2014, with a RUC recommendation of 9.03; (2) surveyed again in 2018 with the RUC rejecting compelling evidence and instead recommending to maintain the value of 9.03 instead of a specialty recommended increased value of 11.00; and (3) determined in 2019 by CMS to be undervalued at 9.03 and increased using a crosswalk to 57288 for a value of 12.13 for the 2020 Medicare Physician Fee Schedule.

Given this extensive history of review and analysis of the work RVU by multiple specialty societies, the RUC, and CMS for 27279 and the fact that at the recent September 2022 CPT Panel meeting, no changes (editorial or otherwise) were made to the 27279 code descriptor, we do not believe that code 27279 warrants a re-review in conjunction with new code 27278. In addition, and importantly, we note that code 27278 will typically be performed by a different group of physicians (interventional pain and interventional radiology) when compared with 27279 which will be typically be performed by surgeons, similar to 27280.

Thank you for your consideration of this information. We look forward to responding to questions at the January 2023 RUC meeting.

Sincerely,

American Academy of Orthopaedic Surgeons (AAOS)

American Association of Neurological Surgeons (AANS)

Congress of Neurological Surgeons (CNS)

International Society for the Advancement of Spine Surgery (ISASS)

North American Spine Society (NASS)

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:27278 Tracking Number I1 Original Specialty Recommended RVU: **8.95**
Presented Recommended RVU: **7.86**
Global Period: 090 Current Work RVU: RUC Recommended RVU: **7.86**

CPT Descriptor: Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 51-year-old female has chronic right-sided lower back and buttock pain and presents with sacroiliac (SI) joint dysfunction. She is scheduled for a minimally invasive SI joint fusion with structural bone allograft implant.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 26% , In the ASC 71%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 78% , Overnight stay-less than 24 hours 22% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review medical records including laboratory tests and retrieve and review relevant preoperative diagnostic imaging studies (eg, plain films and MRI). Meet with patient and family to review planned procedure and postoperative management. Review informed consent with patient. Update preoperative history and physical exam and medical record as required. Assure appropriate selection, timing, and administration of presurgical antibiotic. Verify that all required instruments and supplies are available. Review length of procedure, anticipated blood loss, and postoperative needs with care team. After placement of urinary catheter and anesthesia lines in the supine position, turn the patient prone on the procedure room table and pad bony prominences. Assess the position of the extremities and head and adjust as needed. Scrub and gown. Perform a time-out with operating surgical team. With the patient positioned prone on the procedure table the patient is adjusted to allow unimpeded use of fluoroscopy. The lower back and buttocks are prepped and then draped with surgical barrier and drapes.

Description of Intra-Service Work: Imaging is performed in multiple obliquities, to establish the optimal view to access the sacroiliac joint (SIJ). A 22 gauge 3.5” or 5” spinal needle is used to infiltrate the working site with local anesthesia from the skin to the periosteum. The target location is marked with a hemostat and surgical marker. A 1.5 cm incision is made and hemostasis is obtained with electrocautery. Blunt dissection down to the joint is then performed and hemostasis is once again established. A guide pin is then inserted into the SIJ space and confirmed on multiple oblique views and lateral views. The position of the guide pin is adjusted to establish optimum access to the SI joint. Next, depending on the system, a coaxial dilator is advanced over the guide pin to the posterior cortical line of the sacrum which is again confirmed in the optimal view. Once alignment is confirmed, the outer working portal is gently tapped on the handle with a mallet until the hard stop on the outer working portal meets the posterior cortical line of the sacrum. Once the working portal is fully seated on the sacrum, the internal dilator and guide pin are removed. Depending on the system used, the SIJ is then decorticated using either a drilling or broaching system. The cortical allograft with demineralized bone matrix is carefully prepared on the back table by the phsycian and is loaded into a delivery insertion system. The allograft and delivery system are then carefully inserted into the working portal and are advanced to the decorticated area of the SI joint. The allograft is then deployed using an inserter and mallet. Once the allograft position is satisfactorily established the working portal is removed. After the working portal is removed the wound is closed with deep dermal suture and the skin with cyanoacrylate glue and covered with sterile dressings.

Description of Post-Service Work: Assist with patient transfer to a stretcher; communicate with the patient and family regarding the postoperative regimen; communicate with health care professionals, including written and oral reports and orders; review and interpret images on PACS workstation, write a postoperative note and document the procedure in the medical record; and write orders for recovery nurses for pain medication adjustments and activity restrictions. Later the same day, assess the patient prior to discharge to home; visit the patient to review interval chart notes; answer patient and family questions; assess neurovascular status; assess pain score and adjust pain medication as necessary; and document the services in the medical record; discuss home restrictions (eg, activity, bathing) with the patient and family members; write prescriptions for medications needed post discharge; and complete all appropriate medical records, including discharge instructions, and insurance forms. Office: Examine the patient in the office during the 90-day global period to remove dressings, assess wound healing, and redress wound. Order and review periodic imaging, as necessary. Assess pain score and write medication orders, as necessary. Order occupational or physical therapy and assess functional recovery. Revise treatment plan(s) and communicate with patient and family or caregiver, as necessary. Discuss progress with primary care physician (orally and in writing). Dictate progress notes for medical record.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Minhaj Khaja, MD, Robert Kennedy, MD, Lauren Nicola, MD, Andrew Moriarity, MD, Damean Freas, MD, Richard Rosenquist, MD, and Trent Emerick, MD, Jerry Niedzwiecki, MD					
Specialty Society(ies):	SIR, ACR, NANS, ASRA, ASA, OEIS					
CPT Code:	27278					
Sample Size:	5955	**Resp N:**	34			
Description of Sample:	500 randomly selected for SIR 750 randomly selected and 750 random subset sample of membership performing interventional raidlogy procedures for ACR 1455 randomly selected ASRA 750 radomly selected NANS 1750 randomly selected ASA					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	2.00	**5.00**	10.00	40.00
Survey RVW:	6.00	7.86	**8.95**	10.00	15.00
Pre-Service Evaluation Time:			**45.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**11.00**		
Intra-Service Time:	26.00	44.00	**46.00**	60.00	150.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

3-FAC Straightforward Patient/Difficult Procedure

CPT Code:	27278	**Recommended Physician Work RVU: 7.86**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**33.00**	**33.00**	**0.00**
Pre-Service Positioning Time:		**10.00**	**3.00**	**7.00**
Pre-Service Scrub, Dress, Wait Time:		**11.00**	**15.00**	**-4.00**
Intra-Service Time:		**46.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

7B Local/Complex Procedure

	Specialty Recommended Post-Service Time	Specialty Recommended Post Time Package	Adjustments/Recommended Post-Service Time
Immediate Post Service-Time:	**20.00**	**21.00**	**-1.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22869	090	7.03	**RUC Time**

CPT Descriptor Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
34712	090	12.00	**RUC Time**

CPT Descriptor Transcatheter delivery of enhanced fixation device(s) to the endograft (eg, anchor, screw, tack) and all associated radiological supervision and interpretation

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
64708	090	6.36	**RUC Time**	5,462

CPT Descriptor 1 Neuroplasty, major peripheral nerve, arm or leg, open; other than specified

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
		0.00		

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 18 **% of respondents:** 52.9 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 11.7 **%**

TIME ESTIMATES (Median)

	CPT Code: 27278	Top Key Reference CPT Code: 22869	2nd Key Reference CPT Code: **34712**
Median Pre-Service Time	54.00	63.00	80.00
Median Intra-Service Time	46.00	43.00	60.00
Median Immediate Post-service Time	20.00	30.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	19.00	98.00
Median Discharge Day Management Time	19.0	0.00	0.00
Median Office Visit Time	46.0	39.00	39.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**185.00**	**194.00**	**307.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	39%	55%	6%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	39%	61%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	33%	53%
Physical effort required	0%	50%	47%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	61%	39%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	75%	25%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	25%	50%	25%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	75%	25%
Physical effort required	25%	75%	25%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	25%	50%	25%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

At the May 2022 Panel meeting, the Panel accepted addition of Category III code 0775T to identify percutaneous sacroiliac (SI) joint arthrodesis using an intra-articular implant(s) such as bone allograft material or synthetic devices. Included within the changes were guidelines and parenthetical notes that direct users to the appropriate code to report for percutaneous fusion of the SI joint that utilize intra-articular spacers (0775T) versus those that utilize transfixation (placement of a transfixing device). As part of that decision, the Panel opted to provide instruction that directs users regarding reporting for things such as hybrid transfixation-intra-articular implant procedures and other necessary instructions regarding reporting for this procedure.

Since the time of the original Category III proposal for these services, the procedures have continued to mature and there has been increased literature and increased frequency of performance throughout the United States. The September 2022 CPT Panel agreed to change CPT Category III code 0775T to Category I status. The Panel established new CPT code 27278 which was referred to the RUC for survey of physician work.

Methodology

A multi-disciplinary survey including SIR, ACR, NANS, ASRA, and ASA was distributed randomly to the members of the representative societies and to a list of physicians performing the service by a vendor. A total of 34 surveys were completed. The survey was reviewed by the multi-specialty group and determined to be valid and reflective of the work and intensity involved.

Work RVU Recommendation for 27278

We are recommending the 25th percentile work RVU with a value of 7.86 for code 27278.

Pre- and Post-Service Time Packages

The specialties have selected pre-package 090 global period package 3 - facility straightforward patient/difficult procedure. The 090 global period includes 33 pre-service evaluation, 3 minutes positioning, and 15 minutes scrub, dress, and wait time, respectively. The selected post service time package is 7B local anesthesia/complex procedure with 21 minutes standard. Based on the survey data the specialties recommend the following times:

1. Evaluation: 33 minutes, this is in alignment with the standard package time for evaluation of the pre-service evaluation on preceding day and the pre-service evaluation on day of procedure.

2. Positioning: 10 minutes, this is 7 minutes more than the standard package time due to median survey results for patient positioning in the prone position or other obliquity. Although it should be noted, the survey respondents from the group of physicians provided by the vendor who more frequently provide this service and indicated 17.5 minutes, the median time supported was 10 minutes.

3. Scrub, dress, and wait: 11 minutes, this is 4 minutes less than the standard package time due to median survey results for scrub, dress and wait. Although it should be noted, the survey respondents from the group of physicians provided by the vendor who more frequently provide this service and indicated 18.5 minutes, the median time supported was 11 minutes.

4. Post: We recommend 20 minutes; this is 1 minute less than the standard package time due to median survey results and supported as the median per the survey respondents from the group of physicians provided by the vendor who more frequently provide this service.

Post-op Office Visits

The survey data supported two 99213 post-operative visits, which would be typical for this procedure. At the time of the first post-op visit with the patient, approximately 2 weeks after surgery, the patient is examined to remove dressings, assess wound healing, ensure there is no infection and that there is proper closure of the incision over the implant, and redress the wound. Additionally, the physician would assess the patient's pain score and write medication, occupational and/or physical therapy orders, as necessary.

The second post-op visit is provided approximately 6 weeks after surgery. At this time the physician would order and review imaging to assess functional recovery of the sacroiliac joint arthrodesis and implant to verify/ensure it has appropriately fused with the bone as needed. Again, the physician would assess the patient's pain score and write additional medication, occupational and/or physical therapy orders, as necessary. Finally, the physician may revise treatment plan(s) and communicate with patient and family or caregiver, as necessary. Discuss progress with primary care physician (orally and in writing).

Comparison with Key Reference Services

The key reference codes chosen by the majority of the survey respondents were 22869 and 34712. These key references are similar to 27278, and the following data and established values supports this.

CPT	RVW	IWPUT	Total Time	Eval	Posit	SDW	INTRA	IM-post
22869 Key Ref	7.03	0.071	194	33	15	15	43	30
27278 Survey	7.86	0.082	185	33	10	11	46	20
34712 Key Ref	12.00	0.082	307	40	20	20	60	30

Total time in table reflects time of post visits in addition to the pre, intra, and immediately post procedure time.

This comparison thus favorably supports our recommendation for the 25th percentile survey value of 7.86 RVW for CPT 27278.

Comparison to MPC codes

The highest value 090 day global MPC code is 64708 *Neuroplasty, major peripheral nerve, arm or leg, open; other than specified)* with 6.36 wRVUs.

Conclusion

A multi-disciplinary survey of CPT 27278 was performed with strong survey results and concordance between specialties. When comparing the survey results to the key reference services, we believe that the 25th percentile survey RVW of 7.86 appropriately ranks CPT 27278 relative to other services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0775T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Pain Management How often? Sometimes

Specialty Interventional Radiology How often? Sometimes

Specialty Anesthesiology/Pain Management How often? Sometimes

Estimate the number of times this service might be provided nationally in a one-year period? 7563
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Vendor data provided on the frequency of sales from 2019-2021 was 6,500 and per the data presented by the societies at the recent CPT Editorial Panel estimated codes 27279 and 27280 procedure utilization in Medicare claims exceed 6,500 claims per year. The Medicare population is estimated to represent 40-45% of the overall patient population, so the estimated overall utilization (Medicare + commercial) is 14,000-16,250 cases per year. MIS posterior procedures are estimated to represent as much as 50% of these overall procedure volumes, or approximately 7,000-8,125 patients per year, which is estimated to continue to grow year over year. Based on the estimates a median of the 50% of patients was selected for the combined one-year period.

Specialty Interventional Pain Management Frequency 2521 Percentage 33.33 %

Specialty Interventional Radiology Frequency 2521 Percentage 33.33 %

Specialty Anesthesiology/Pain Management Frequency 2521 Percentage 33.33 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 3,025
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Baed on the above data, 40% of population is Medicare, the median of prrojected similar cases and the data by the vendor are similar, 7,563 to 6,500 respectively. The typical patient as outlined in vignette is below Medicare age and using 40% Medicare population of the 7,563 the estimate is 3,025.

Specialty Interventional Pain Management Frequency 1008 Percentage 33.32 %

Specialty Interventional Radiology Frequency 1008 Percentage 33.32 %

Specialty Anesthesiology/Pain Management Frequency 1008 Percentage 33.32 %

Do many physicians perform this service across the United States? No

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Minor procedure

BETOS Sub-classification Level II:

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 27096

SS Rec Summary

ISSUE: Dorsal Sacroiliac Arthrodesis

TAB: 04

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	Office 38	39	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	22869	Insertion of interlaminar/interspi	090	2016	18	0.071	0.036			7.03			194	33	15	15			43			30						0.5		1	1							
2nd REF	34712	Transcatheter delivery of enhan	090	2017	4	0.082	0.039			12.00			307	40	20	20			60			30				1	1	1.0		1	1							
SVY - COMBINED	27278	Arthrodesis, sacroiliac joint, per	090		34	0.086	0.041	6.00	7.86	8.95	10.00	15.00	216	45	10	11	26	44	46	60	150	20						1.0		2				0	2	5	10	40
VENDOR	27278	Arthrodesis, sacroiliac joint, per	090		2	0.053	0.034	9.00	9.75	10.50	11.25	12.00	308	67.5	17.5	18.5	60	60	60	60	60	20							1	3				6	7	8	9	10
Multi-Society Random	27278	Arthrodesis, sacroiliac joint, per	090		32	0.048	0.033	6.00	7.80	8.52	10.00	15.00	255	45	10	11	26	42	45	60	150	20				1		1.0		2				0	2	4	10	40
REC	27278	Arthrodesis, sacroiliac joint, per	090		34	0.082	0.042			7.86			185	33	10	11			46			20						0.5		2								

FACILITY DIRECT PE INPUTS **CPT CODE(S): 27278**

SPECIALTY SOCIETY(IES): SIR, ACR, NANS, ASRA, ASA, OEIS

PRESENTER(S):_ Minhaj Khaja, MD, Robert Kennedy, MD, Lauren Nicola, MD, Andrew Moriarity, MD, Damean Freas, MD, Richard Rosenquist, MD, Trent Emerick, MD, Jerry Niedzwiecki, MD, Bradley Wargo, DO

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: 01/2023

CPT Code	Long Descriptor	Global Period
27278	Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device	090
27279	Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device	090
27280	Arthrodesis, open, sacroiliac joint, including obtaining bone graft, including instrumentation, when performed	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
27278	A 51-year-old female has chronic right-sided lower back and buttock pain and presents with sacroiliac (SI) joint dysfunction. She is scheduled for a minimally invasive SI joint fusion with structural bone allograft implant.
27279	A 50-year-old female with SI joint pain undergoes a percutaneous or minimally invasive SI joint fusion.
27280	A 32-year-old female presents with chronic posterior buttock and thigh pain following a motor vehicle accident with derangement of the sacroiliac (SI) joint. She has been diagnosed with SI joint pain that is unresponsive to nonsurgical management. Physical examination provocation maneuvers have confirmed that the SI joint is the pain generator. A diagnostic injection has confirmed pain relief. She is scheduled for an SI joint fusion.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   SIR, ACR, NANS, ASRA, ASA, and OEIS convened a panel of experts familiar with these services to evaluate the direct practice expense inputs for a new dorsal SI arthrodesis code.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   The dorsal SI arthrodesis tab for code 27278 includes a comparison code, 22869, which happens to be one of the most frequently selected Key Reference Services. The clinical staff times for scheduling the Facility site of service should be the similar based on the similar patient type and demands of procedure.

3. Is this code(s) typically reported with an E/M service?

   No

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

No

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

- *Complete pre-service diagnostic and referral forms (5) – During this time staff is reviewing the diagnostic pre-service and referral forms to ensure complete and submitted appropriately.*
- *Coordinate pre-surgery services (20) - During this time the staff is collecting and coordinating the request from referring physician and ensuring all appropriate preoperative imaging has been performed. In addition, the staff is arranging an preoperative medical clearances and coordinating with dialysis centers and primary care staff the medical fitness for procedure.*
- *Schedule space and equipment in facility (8) - Staff must schedule availability in the OR and confirm availability of the procedure specific Equipment and supplies.*
- *Provide pre-service education/obtain consent (20) – Staff provide necessary education to the patient and patient's family/caregiver(s) to prepare for the arthrodesis and for care after procedure. Staff also ensure consent forms are completed.*
- *Complete pre-procedure phone calls and prescription – (7) – Staff complete calls and prescriptions prior to 27278 to ensure everything is ready to proceed with the procedure.*

   b. Service period (includes pre, intra and post):

Discharge day management (6) – Staff complete discharge instructions review with the patient and patient's family/caregiver(s) prior to discharge.

c. Post-service period:

Post-operative visits (72) – Staff will work with the physician over the course of the post operative period and as part of the visits to collect necessary information for the physician, review current status and vitals of the patient and communicate these with the physician and assist in documenting within the medical record.

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

12. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

14. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

Yes, SA048 (pack, minimum multi-specialty visit)

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	

cover, thermometer probe	item	1	

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:
    N/A

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):
    N/A

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?
    N/A

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

Equipment Code	EQUIPMENT	Purchase Price	Equipment Formula	Cost Per Minute		
EF031	table, power	5906.76	~~Default~~ **Other – RUC determined the power table is only being used for post-op visits**	0.015674926		72

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:
    N/A

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:
    Codes 27279 and 27280 are both included as reference only as they are part of the same family as the new code 27278.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition to those revisions, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

Supply pack SA054 has been removed after discussion at the RUC meeting on 1/12/23. "Other" equipment formula used for EF031 to account for post-op visits only.

NONFACILITY DIRECT PE INPUTS **CPT CODE(S): 27278**

SPECIALTY SOCIETY(IES): SIR, ACR, NANS, ASRA, ASA, OEIS

PRESENTER(S):_ Minhaj Khaja, MD, Robert Kennedy, MD, Lauren Nicola, MD, Andrew Moriarity, MD, Damean Freas, MD, Richard Rosenquist, MD, Trent Emerick, MD, Jerry Niedzwiecki, MD, Bradley Wargo, DO

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: 01/2023

CPT Code	Long Descriptor	Global Period
27278	Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s]), without placement of transfixation device	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
27278	A 51-year-old female has chronic right-sided lower back and buttock pain and presents with sacroiliac (SI) joint dysfunction. She is scheduled for a minimally invasive SI joint fusion with structural bone allograft implant.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   SIR, ACR, NANS, ASRA, ASA, and OEIS convened a panel of experts familiar with these services to evaluate the direct practice expense inputs for a new dorsal SI arthrodesis code.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   The dorsal SI arthrodesis tab for code 27278 includes a comparison code, 22869, which happens to be one of the most frequently selected Key Reference Services. The clinical staff times for scheduling the Facility site of service should be the similar based on the similar patient type and demands of procedure.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   No

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

   Interventional Radiology, of the survey respondents approximately were 1/3 from specialty of IR. It is anticipated the dominant specialty will be relatively the same from nonfacility to facility which is anticipated to be 33%.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on

Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

This is a new CPT code

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No, code 27278 is new and the other codes in family are not transitioning.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

We are requesting 5 minutes for vital signs to measure weight and obtain heart rate, O2 saturation, respiratory rate, temperature and blood pressure before these procedures.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

- *Complete pre-service diagnostic and referral forms (5) – During this time staff is reviewing the diagnostic pre-service and referral forms to ensure complete and submitted appropriately.*
- *Coordinate pre-surgery services (10) - During this time the staff is collecting and coordinating the request from referring physician and ensuring all appropriate preoperative imaging has been performed. In addition, the staff is arranging an preoperative medical clearances and primary care staff the medical fitness for procedure.*
- *Provide pre-service education/obtain consent (10) – Staff provide necessary education to the patient and patient's family/caregiver(s) to prepare for the arthrodesis and for care after procedure. Staff also ensure consent forms are completed.*
- *Complete pre-procedure phone calls and prescription – (10) – Staff complete calls and prescriptions prior to 27278 to ensure everything is ready to proceed with the procedure*

b. Service period (includes pre, intra and post):

- *Greet the patient (3) providing gowning, ensure appropriate medical records are available.*
- *Obtain vital signs (5) of weight and obtain heart rate, O2 saturation, respiratory rate, temperature and blood pressure before these procedures.*
- *Review requisition, assess for special needs (3) review the requestion and determine if there are special considerations for the patient related to allergies, mobility or cognitive ability*
- *Prepare room, equipment and supplies (2) staff work to prepare the room to allow for access to the low back area from both posterior and lateral orientation*
- *Confirming order and protocol exam (1) staff will verify the orders for imaging match the procedure and the equipment is ready for the procedure*
- *Prepare, set-up and start IV, initial positioning and monitoring of patient (2) staff will start the IV and initially position the patient for the procedure to start monitoring them until the physician is present and begins the procedure*
- *Assist Physician - Vascular Interventional Technologist (L041A)100% Physician time (46) - This is a hip-to-hip clinical staff who is scrubbed into the procedure and assists the physician throughout the procedure from puncture to close. This staff person directly works with the physician to complete the procedure and handles equipment and supplies and maintains their sterility.*
- *Vascular Interventional Technologist/RN/LPN/MTA blend (34/12) - Circulating staff in the room that acquires images, opens supplies, adjusts and connects equipment. This by convention has been a 75% Vascular Interventional Technologist (L041A) 25% Nurse/LPN/MTA (L037D) role for interventional procedures.*
- *Complete post-procedure diagnostic forms, lab and x-ray requisitions (2) staff will complete and compile the orders for post procedure workup and follow up.*
- *Cleaning (3) clinical staff will clean the room and equipment during the immediate post period following the placement of implants.*
- *Check dressings (1) clinical staff will spend time checking the dressings to ensure no excessive bleeding by the patient following the placement of implants.*
- *Technologist QC's images in PACS (2) - The Vascular Interventional Technologist QCs all images and makes sure the images transfer to PACS.*

- *Review examination with interpreting MD/DOs (2) – VI Tech (L041A) reviews the images to confirm accuracy and completeness of imaging record of procedure.*
- *Scan exam documents into PACS (1) - VI Tech (L041A) scans all documentation into PACS including any drawings/diagrams which may have been created*

c. Post-service period:

- *Post-operative visits (72) – Staff will work with the physician over the course of the post operative period and as part of the visits to collect necessary information for the physician, review current status and vitals of the patient and communicate these with the physician and assist in documenting within the medical record.*

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

Assist Physician - Vascular Interventional Technologist (L041A)100% Physician time - This is a hip-to-hip clinical staff who is scrubbed into the procedure and assists the physician throughout the procedure from puncture to close. This staff person directly works with the physician to complete the procedure and handles equipment and supplies and maintains their sterility.

Vascular Interventional Technologist/RN/LPN/MTA blend - Circulating staff in the room that acquires images, opens supplies, adjusts and connects equipment. This by convention has been a 75% Vascular Interventional Technologist (L041A) 25% Nurse/LPN/MTA (L037D) role for interventional procedures. This staff member operates the fluoroscopy machine obtaining images, adjusting imaging parameters, opening sterile and nonsterile supplies and otherwise assists in a mobile capacity while not scrubbed in.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

For CPT 27278 we have included a Vascular Interventional Technologist/RN/LPN/MTA at 75% of the physician work time to perform the image acquisition portion of the procedure and a nurse blend at 25% of the physician time as the circulator.

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

One (1) SI Joint Arthrodesis Implant is placed in a typical patient. The implant is cortical allografts with demineralized bone matrix that is prepared in the procedure room and loaded into a delivery insertion system. The allograft and delivery system are then carefully inserted into the working portal and are advanced to the decorticated area of the SI joint. The allograft is then deployed using an inserter and mallet

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

Yes

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

SA046
kit, pack, tray - pack, drapes, laparotomy (chest-abdomen)

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

No

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

					27278	
				LOCATION	Non Fac	
				GLOBAL PERIOD	090	
			TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE		243.14799	
EQ168	light, exam		1232.887	Default	0.003272	
EF031	table, power		5906.76	~~Default~~ **Other – RUC determined the power table is only being used for post-op visits**	0.015675	
EL011	room, angiography		1193425	Highly Technical	4.521911	
EQ138	instrument pack, medium ($1500 and up)		1500	Instrument Packs	0.006971	
ED050	Technologist PACS workstation		5557	PACS	0.022018	
EQ110	electrocautery-hyfrecator, up to 45 watts		837.5	Default	0.002222	

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

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The following are changes made after the initial submission and reviewed in initial AM session
Additional information regarding question 10 & 11 regarding the VI Technologist clinical work
Added to Question 10 - Assist Physician - Vascular Interventional Technologist (L041A)100% Physician time - This is a hip-to-hip clinical staff who is scrubbed into the procedure and assists the physician throughout the procedure from puncture to close. This staff person directly works with the physician to complete the procedure and handles equipment and supplies and maintains their sterility.

1. SOR Question 10 adjusted following removed -Sedate/apply anesthesia (2) anesthesia is given to the patient to ensure the area is ready for the procedure to begin and Patient is monitored (15) for bleeding and/or discomfort following the procedure by staff
2. Added Question 17 number of implants changed from 2 to 1 as typical.
3. Removed from Question 19 - SA053 of SOR, it was not listed in the PE spreadsheet, but was inadvertantly left in the SOR.
4. Question 23 updated to reflect the equipment times will be finalized with discussions with AMA, CMS, and societies.

The following were errors identified and changes made to the PE Spreadsheet

Line Item #	Original	Action	Recommendation
Line item 9	Original total time = 50 min a. 45 minutes for the hybrid vascular interventional	Hybrid was reduced from 45mins to 34 mins, (median time is 46 minutes, not 60 as	Total time is 85 mins which includes 34 mins Hybrid tech, 46 mins for

	technologist of 1FTE (0.75-tech, 0.25 RN) b. Plus the 5 mins PACS	originally listed and 75% for split = 34) Added valued Scrub VI tech at 46 mins in separate line item 5 mins of PACS	Scrub VI tech, and 5 mins for PACS
Line item 12	Original was 45 mins (75% of 60 mins for intraservice time)	Reduced from 60 mins to 46 mins (median time) and 75% of median time)	34 mins listed for hybrid VI tech
Line item 14	Was not included in the original application	We added in hip-to-hip **scrub** vascular interventional technologist, who was not originally included in our initial spreadsheet (the actual line item with name and values). The total time for this activity is **51 mins** broken down below: 1. Line 51 - The value is 46 mins for intraservice time 2. Line 70 – 2mins for QC of images 3. Line 71 – 2 mins for review of examination with interpreting doctor 4. Line 72 – 1 min for scanning of documents into PACS, and complete exam in the RIS system	51 mins total (46 mins + 5 mins for PACs)
Line item 43	The sedation nurse was part of original application	CA017 is part of moderate sedation, 99152, also billed with 27278, since duplicative, it was deleted	Delete 2 mins time for sedation, already counted by 99152
Line item 51	Was not included in the original application	CA018 L041A, Vascular Interventional Technologist, 100% and hip-to-hip with physician, added with time of 46 mins	VI Tech was originally omitted, add at 100% for 46 minutes
Line item 53	Originally listed 45 minutes for the hybrid vascular interventional technologist of 1-FTE (0.75-tech, 0.25 RN)	Median time is 46 minutes, not 60, 75% of time is 34 for hybrid VI Tech	Adjust time for hybrid VI Tech, also referred to as circulator, to 34 minutes, which is 75% of 46

Line item 54	Originally listed 15 minutes for the hybrid RN/LPN/MTA of 1-FTE (0.75-tech, 0.25 RN)	Median time is 46 minutes, not 60, 25% of time is 12 for hybrid RN/LPN/MTA – after 2nd round of discussions suggestion was made to subtract 1 minute from nurse time since only one implant pack was opened, originally listed 11 minutes in the updated version discussed in PM session, this was adjusted to add the 1 minute back in so total was 12 and when added to the VU Tech time would equal 46 minutes.	Adjust time for hybrid RN/LPN/MTA, also referred to as circulator, to 12 minutes, which is 25% of 46
Line item 62	CA022 15 minutes for monitoring patient following procedure	Moderate sedation code 99152 includes 15 minutes of monitoring, 15 minutes removed	15 minutes removed due to duplication of time already part of 99152 for moderate sedation
Line item 108	SA044 – pack moderate sedation quantity of 1 listed	Pack for moderate sedation is already included in and part of 99152, removed for duplicity	Remove moderate sedation pack, removing 15 minutes Clarification: for code 99152) the moderate sedation PAC (SA044) does not include the cap or mask. So, the quantity listed to add a cap and mask reflect this
Line item 134	Original value was 2 implants because Vignette stated within the original application.	The new recommended value is 1 implant to reflect the typical vignette of the patient.	Change from 2 implants to 1 implant
Line items 139, 141, 146	EF027, EQ011, EQ032 listed as equipment for the procedure	EF027, EQ011, EQ032 are included in moderation sedation 99152 and considered duplicative to 27278	Removed EF027, EQ011, EQ032 from equipment After society's review of the items that were removed at the table by PE committee, the instrument table (EF027) was removed under the assumption it was being used for moderate sedation pack. A separate table is needed for the surgeon's equipment.

Line items 140-145 & 147	Original formula created duplication for the equipment time which indicated 82 mins	Changes were made in formula to eliminate redundant values and reflect the appropriate utilization time of equipment.	New formula equipment time is 66 mins., but agreed these need further discussion between society, AMA and CMS regarding the equipment formulas as the standard ones do not necessarily apply
Line item 142	EF031 table power listed 82 minutes	Time reduced from 82 to 72 to match time at post op visits	Reduced from 82 to 72 minutes

Changes made at the RUC meeting 11/12/23 afternoon

1. SA054 Suture pack and SG074 steri-strips removed from supplies
2. SC104 suture, nylon, 10-0 was removed
3. SF040 suture, vicryl, 3-0 to 6-0, p, ps was added as a supply
4. Addition of table was not discussed, but society is ok with it not being included in equipment for the physician's sterile instruments

	A	B	D	E	F	G	H	I	J	K	L	M	N
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**		**REFERENCE CODE**		**REFERENCE CODE**	
2						**22869**		**27278**		**27279**		**27280**	
3		***RUC Collaboration Website***				Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including		Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s])		Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed		Arthrodesis, open, sacroiliac joint, including obtaining bone graft, including instrumentation, when performed	
4	**Clinical Activity Code**	**Meeting Date: 01/2023 Revision Date (if applicable): Tab: 04 Specialty: SIR, ACR, NANS, ASRA, ASA, OEIS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**								
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**090**	**090**	**090**	**090**	**090**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 74.55**	**$ 12,046.48**	**$ 73.96**	**$ -**	**$ 96.31**	**$ -**	**$ 99.54**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**141.0**	**141.0**	**138.0**	**0.0**	**171.0**	**0.0**	**183.0**
9			L041A	Vascular Interventional Technologist	0.624	**0.0**	**141.0**	**85.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10			L051A	RN	0.635	**0.0**	**141.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**35.0**	**60.0**	**0.0**	**60.0**	**0.0**	**60.0**
12		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L041A	Vascular Interventional Technologist	0.624	**0.0**	**6.0**	**34.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
13			L051A	RN	0.635	**0.0**	**6.0**						
14			L041A	Vascular Interventional Technologist	0.624	**0.0**	**0.0**	**51.0**	**0.0**	**0.0**	**6.0**	**0.0**	**12.0**
15			L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**34.0**	**6.0**	**0.0**	**6.0**	**0.0**	**12.0**
16		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**63.0**	**72.0**	**72.0**	**0.0**	**99.0**	**0.0**	**99.0**
17		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ -**	**$ 58.70**	**$ 117.20**	**$ 62.79**	**$ -**	**$ 75.08**	**$ -**	**$ 77.81**
18		**PRE-SERVICE PERIOD**											
19		**Start: Following visit when decision for surgery/procedure made**											
20	CA001	~~Complete pre-service diagnostic and referral tests~~	L037D	RN/LPN/MTA	0.455		5	5	5		5		5
21	CA002	~~Coordinate pre-surgery services (including test results)~~	L037D	RN/LPN/MTA	0.455		20	10	20		20		20
22	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455		8		8		8		8
23	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455		20	10	20		20		20
24	CA005	~~Complete pre-procedure phone calls and prescription~~	L037D	RN/LPN/MTA	0.455		7	10	7		7		7
25	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455								
26	CA007	~~Review patient clinical extant information and pending regs~~	L037D	RN/LPN/MTA	0.455								
27	CA008	~~Perform regulatory mandated quality assurance activity (pre-service)~~	L037D	RN/LPN/MTA	0.455								
28		*Other activity: please include short clinical description here and type new in column A*											
31		**End: When patient enters office/facility for surgery/procedure**											
32		**SERVICE PERIOD**											
33		**Start: When patient enters office/facility for surgery/procedure:**											
34		**Pre-Service (of service period)**											
35	CA009	~~Greet patient, provide gowning, ensure appropriate medical records are available~~	L037D	RN/LPN/MTA	0.455			3					
36	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455			5					
37	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455								
38	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455			3					
39	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455			2					
40	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455			1					
41	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455								
42	CA016	~~Prepare, set up and start IV, initial positioning and monitoring of patient~~	L037D	RN/LPN/MTA	0.455			2					
43	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455			**0**					
50		**Intra-service (of service period)**											
51	CA018	Assist physician or other qualified healthcare professional---directly related to physician work time (100%)	L041A	Vascular Interventional Technologist	0.624			46					
52	CA019	~~Assist physician or other qualified healthcare professional---directly related to physician work time (50%)~~											
53	CA020	Assist physician or other qualified healthcare professional---directly related to physician work time (other%)	L041A	Vascular Interventional Technologist	0.624			34					
54	CA020	~~Assist physician or other qualified healthcare professional---directly related to physician work time (other%)~~	L037D	RN/LPN/MTA	0.455			**12**					
55	CA021	~~Perform procedure/service---NOT directly related to physician work time~~	L037D	RN/LPN/MTA	0.455								
56			L037D	RN/LPN/MTA	0.455								
57			L037D	RN/LPN/MTA	0.455								
58		*Other activity: please include short clinical*	L037D	RN/LPN/MTA	0.455								
59		*Other activity: please include short clinical*	L037D	RN/LPN/MTA	0.455								
60		*Other activity: please include short clinical*	L037D	RN/LPN/MTA	0.455								
61		**Post-Service (of service period)**											

	A	B	D	E	F	G	H	I	J	K	L	M	N
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**		**REFERENCE CODE**		**REFERENCE CODE**	
2						**22869**		**27278**		**27279**		**27280**	
3		***RUC Collaboration Website***				Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including		Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (eg, bone allograft[s], synthetic device[s])		Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed		Arthrodesis, open, sacroiliac joint, including obtaining bone graft, including instrumentation, when performed	
4	**Clinical Activity Code**	**Meeting Date: 01/2023 Revision Date (if applicable): Tab: 04 Specialty: SIR, ACR, NANS, ASRA, ASA, OEIS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**								
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**090**	**090**	**090**	**090**	**090**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 74.55**	**$ 12,046.48**	**$ 73.96**	**$ -**	**$ 96.31**	**$ -**	**$ 99.54**
8			L037D	RN/LPN/MTA	0.455	**0.0**	**141.0**	**141.0**	**138.0**	**0.0**	**171.0**	**0.0**	**183.0**
9		**TOTAL CLINICAL STAFF TIME**	L041A	Vascular Interventional Technologist	0.624	**0.0**	**141.0**	**85.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10			L051A	RN	0.635	**0.0**	**141.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**35.0**	**60.0**	**0.0**	**60.0**	**0.0**	**60.0**
12			L041A	Vascular Interventional Technologist	0.624	**0.0**	**6.0**	**34.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
13		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L051A	RN	0.635	**0.0**	**6.0**						
14			L041A	Vascular Interventional Technologist	0.624	**0.0**	**0.0**	**51.0**	**0.0**	**0.0**	**6.0**	**0.0**	**12.0**
15			L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**34.0**	**6.0**	**0.0**	**6.0**	**0.0**	**12.0**
16		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**63.0**	**72.0**	**72.0**	**0.0**	**99.0**	**0.0**	**99.0**
62	CA022	~~Monitor patient following procedure/service, multitasking 1:4~~	L037D	RN/LPN/MTA	0.455			**0**					
63	CA023	~~Monitor patient following procedure/service, no multitasking~~	L037D	RN/LPN/MTA	0.455								
64	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455			3					
65	CA025	Clean scope	L037D	RN/LPN/MTA	0.455								
66	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455								
67	CA027	~~Complete post-procedure diagnostic forms, lab req, review post procedure x-ray, lab and pathology reports~~	L037D	RN/LPN/MTA	0.455			2					
68	CA028		L037D	RN/LPN/MTA	0.455								
69	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455			1					
70	CA030	~~Technologist QC's images in PACS, checking for all images, reformats, and dose page~~	L041A	~~Vascular~~ Interventional	0.624			2					
71	CA031	Review examination with interpreting MD/DO	L041A	~~Vascular~~ Interventional	0.624			2					
72	CA032	~~Scan exam documents into PACS. Complete exam in RIS system to populate images into work~~	L041A	~~Vascular~~ Interventional	0.624			1					
76	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**	**6**	**n/a**	**6**	**n/a**	**6**	**n/a**	**12**
83		**End: Patient leaves office/facility**											
84		**POST-SERVICE PERIOD**											
85		**Start: Patient leaves office/facility**											
86	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455								
87	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455								
88		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
89		99211 16 minutes	16										
90		99212 27 minutes	27				1				1		1
91		99213 36 minutes	36				1	2	2		2		2
92		99214 53 minutes	53										
93		99215 63 minutes	63										
94	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**0.0**	**63.0**	**72.0**	**72.0**	**0.0**	**99.0**	**0.0**	**99.0**
101		**End: with last office visit before end of global**											

	A	B	D	E	F	G	H	I	J	K	L	M	N
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**		**REFERENCE CODE**		**REFERENCE CODE**	
2						**22869**		**27278**		**27279**		**27280**	
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4	**Clinical Activity Code**	**Meeting Date: 01/2023 Revision Date (if applicable): Tab: 04 Specialty: SIR, ACR, NANS, ASRA, ASA, OEIS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**								
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**090**	**090**	**090**	**090**	**090**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 74.55**	**$ 12,046.48**	**$ 73.96**	**$ -**	**$ 96.31**	**$ -**	**$ 99.54**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**141.0**	**141.0**	**138.0**	**0.0**	**171.0**	**0.0**	**183.0**
9			L041A	Vascular Interventional Technologist	0.624	**0.0**	**141.0**	**85.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10			L051A	RN	0.635	**0.0**	**141.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**35.0**	**60.0**	**0.0**	**60.0**	**0.0**	**60.0**
12		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L041A	Vascular Interventional Technologist	0.624	**0.0**	**6.0**	**34.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
13			L051A	RN	0.635	**0.0**	**6.0**						
14			L041A	Vascular Interventional Technologist	0.624	**0.0**	**0.0**	**51.0**	**0.0**	**0.0**	**6.0**	**0.0**	**12.0**
15			L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**34.0**	**6.0**	**0.0**	**6.0**	**0.0**	**12.0**
16		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**63.0**	**72.0**	**72.0**	**0.0**	**99.0**	**0.0**	**99.0**
102	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**									
103		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ -**	**$ 14.66**	**$ 11,686.14**	**$ 10.04**	**$ -**	**$ 19.68**	**$ -**	**$ 19.86**
105	SA048	pack, minimum multi-specialty visit	5.02	pack			2	2	2		3		3
106	SA052	pack, post-op incision care (staple)	4.8	pack									1
107	SA054	pack, post-op incision care (suture)	4.62	pack			1	**0**	**0**		1		
108	SA044	pack, moderate sedation	18.55	pack				**0**					
109	SA046	pack, drapes, laparotomy (chest-abdomen)	7.26	pack				1					
110	SB001	cap, surgical	1.14	item				4					
111	SB008	drape, sterile, c-arm, fluoro	5.38	item				1					
112	SB012	drape, sterile, for Mayo stand	1.07	item				1					
113	SB024	gloves, sterile	0.91	pair				2					
114	SB028	gown, surgical, sterile	5.13	item				2					
115	SB034	mask, surgical, with face shield	3.4	item				4					
116	SC028	needle, 18-26g 1.5-3.5in, spinal	9.96	item				1					
117	SC029	needle, 18-27g	0.04	item				1					
118	SF033	scalpel with blade, surgical (#10-20)	1.04	item				1					
119	SG056	gauze, sterile 4in x 4in (10 pack uou)	1.2	item				2					
120	SG074	steri-strip (6 strip uou)	1.54	item				**0**					
121	**SF040**	suture, vicryl, 3-0 to 6-0, p, ps	8.52	item				**1**					
122	SD087	guide, needle, for localization	21.29	item				1					
123	SH076	adhesive, cyanoacrylate (2ml uou).doc	31.35	item				1					
124	SB007	drape, sterile barrier 16in x 29in	0.51	item				1					
125	SF012	cautery, bipolar cord	4.86	item				1					
126	SF013	cautery, bipolar, pencil-handpiece	41.4	item				1					
127	SH047	lidocaine 1%-2% inj (Xylocaine)	0.06	ml				20					
128	SJ017	DuraPrep surgical soln (26ml)	7.96	item				1					
129	SK075	skin marking pen, sterile	1.62	item				1					
134	**NEW**	**Dorsal SI Joint Arthrodesis Implant**	**11500**	**item**				**1**					
135		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*											
137	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**								
138		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ -**	**$ 1.19**	**$ 243.15**	**$ 1.13**	**$ -**	**$ 1.55**	**$ -**	**$ 1.88**
139	EF027	table, instrument, mobile	531.926	Default	0.001183213			**0**					
140	EQ168	light, exam	1232.887	Default	0.003271745		63	66					99

	A	B	D	E	F	G	H	I	J	K	L	M	N
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4	**Clinical Activity Code**	**Meeting Date: 01/2023 Revision Date (if applicable): Tab: 04 Specialty: SIR, ACR, NANS, ASRA, ASA, OEIS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**								
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**090**	**090**	**090**	**090**	**090**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 74.55**	**$ 12,046.48**	**$ 73.96**	**$ -**	**$ 96.31**	**$ -**	**$ 99.54**
8			L037D	RN/LPN/MTA	0.455	**0.0**	**141.0**	**141.0**	**138.0**	**0.0**	**171.0**	**0.0**	**183.0**
9		**TOTAL CLINICAL STAFF TIME**	L041A	Vascular Interventional Technologist	0.624	**0.0**	**141.0**	**85.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10			L051A	RN	0.635	**0.0**	**141.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**35.0**	**60.0**	**0.0**	**60.0**	**0.0**	**60.0**
12			L041A	Vascular Interventional Technologist	0.624	**0.0**	**6.0**	**34.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
13		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L051A	RN	0.635	**0.0**	**6.0**						
14			L041A	Vascular Interventional Technologist	0.624	**0.0**	**0.0**	**51.0**	**0.0**	**0.0**	**6.0**	**0.0**	**12.0**
15			L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**34.0**	**6.0**	**0.0**	**6.0**	**0.0**	**12.0**
16		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**63.0**	**72.0**	**72.0**	**0.0**	**99.0**	**0.0**	**99.0**
141	EQ011	ECG, 3-channel (with SpO2, NIBP, temp, resp)	3139	Default	0.010131537			**0**					
142	EF031	table, power	5906.76	Other Formula	0.015674926		63	72	72		99		99
143	EL011	room, angiography	1193425.21	Highly Technical	4.521910978			53					
144	EQ138	instrument pack, medium ($1500 and up)	1500	Instrument Packs	0.00697135			62					
145	ED050	Technologist PACS workstation	5557	PACS	0.022017924			71					
146	EQ032	IV infusion pump	2439.096	Default	0.006472694			**0**					
147	EQ110	electrocautery-hyfrecator, up to 45 watts	837.5	Default	0.002222496			66					
148		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D*											

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Vertebral Body Tethering – Tab 5

At the October 2020 CPT Panel meeting, two CPT Category III codes were approved for vertebral body tethering. At the September 2022 CPT Panel meeting, the Category III codes were revised to only describe anterior lumbar or thoracolumbar tethering and two new Category I codes (22836 and 22837) were established for thoracic tethering. In addition, another new Category I code (22838) was established for tether revision, replacement or removal. In preparation for the January 2023 RUC meeting, a multi-specialty survey for 22836-22838 was prepared and randomly distributed to members of the representative specialties. The survey was also sent to a vendor list of surgeons trained in tether device placement.

Anterior vertebral body tethering (VTB) is a non-fusion spinal procedure intended to obtain and maintain surgical correction of progressive adolescent idiopathic scoliosis in growing children. VTB immediately corrects spinal curvature and increases mobility and flexibility, as opposed to posterior spinal fusion (PSF), tethering allows for additional correction based on a child's potential remaining growth. Two surgeons work together, one surgeon who performs the approach and a second surgeon, typically a spine surgeon, to attach screws to specific vertebral bodies on the convex side of the spine before connecting them using a flexible polyethylene-braided cord called a tether. The tether is then placed under tension to minimize the magnitude of curvature, which enables the spine to continue straighter growth. Over time, the vertebral bodies will ideally reshape and sustain this correction independently rather than rely on the tensioned tether as the child gets older. Continued progression without intervention is a potential outcome of this treatment but tethering revision is also a possibility. The typical patient for this service is skeletally immature, has failed or is intolerant to bracing and has an osseous structure that is dimensionally adequate to accommodate screw fixation.

The RUC noted that these services are typically performed by co-surgeons and were surveyed as such using a custom survey template approved by the Research Subcommittee. The specialty societies and RUC agreed that the work RVU valuation is reflective of the total work required to perform the procedure. For example, if one surgeon had the technical competence to perform this procedure without working with another surgeon, the appropriate CPT code would be selected once; however, if two surgeons performed the procedure as co-surgeons, each physician would report the code with modifier 62. The work RVU would be multiplied by 1.25 and then divided equally between the co-surgeons (i.e., 62.5%). Any pre-evaluation coordination time, standby intra-service time or asynchronous post-operative time has been accounted for in the survey methodology. The RUC agrees that the time allotments and physician work involved with these codes is representative of the technical aptitude and clinical nuance required to perform this service.

22836 ***Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments***
The RUC reviewed the survey results from pediatric orthopaedic surgeons and pediatric neurosurgeons and determined that the survey median work RVU of 32.00 appropriately accounts for the physician work required to perform 22836. The RUC recommends 60 minutes pre-service evaluation time, 30 minutes pre-service positioning, 15 minutes pre-service scrub/dress/wait time, 210 minutes intra-service time, 45 minutes immediate post-service time, 1-99231, 1-99232, 1-99933, 1-99238, 2-99213 and 1-99214 visits for this service, which equals 599 minutes of total time.

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The specialty societies selected pre-service time package *4-FAC Difficult Patient/Difficult Procedure* and post-service time package *9B General Anes or Complex Regional Blk/Cmplx Proc*. The selected standard time packages were modified to more accurately reflect pre- and post-service time involved with this service. The additional 20 minutes of pre-service evaluation time above the standard pre-time package time of 40 minutes accounts for both co-surgeons to review the preoperative imaging (X-ray, MRI, CT) and discuss the planned procedure, including approach, index procedure, and closure. Both surgeons will also independently meet with the anesthesiologist and patient prior to the procedure. An additional 27 minutes of pre-service positioning time is required above the standard package time of 3 minutes to account for work by both co-surgeons. The scoliosis will require additional and special lateral decubitus positioning for this procedure, not only to be able to maneuver the patient during surgery to place the tether, but also to allow the approach surgeon the ability to expose the spine (including typical deflation of the lung) and continue to work alongside the second surgeon who is performing the index procedure. Positioning also needs consideration of placement of imaging equipment. The 5-minute reduction in pre-service scrub/dress/wait time, to 15 minutes, is consistent with the median time indicated by the survey respondents.

The RUC agrees with the specialties' recommendation of 45 minutes for immediate post-service time. The 12-minute increase from the package time recognizes that each co-surgeon has different post-operative care concerns, including the need for both surgeons to write separate operative notes and orders, meet with the patient and family independently, and monitor post-operative recovery.

The RUC discussed the number and level of postoperative hospital and office visits and agreed that they fairly represent the total work of both surgeons who will independently be monitoring the patient related to their own intraoperative work. The RUC recognizes that typically each co-surgeon will conduct at least two separate post-operative visits related to their operative procedures. The first visit for the neurosurgeon or orthopaedic surgeon ("spine" Surgeon B) includes a comparison of subjective and objective pre-operative versus post-operative elements of function, dressings removal and wound assessment, medication management, activity guidance and discussion of physical and occupational therapy needs and goals. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is required, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Overall progress is discussed with referring physician(s) and dictated for the patient's medical chart. The first visit for the "approach" surgeon (Surgeon A) includes a review of the spine surgeon's (Surgeon B's) notes, pathology report and post-discharge labs and films, an interval update of H&P, examination and assessment of the patient's wounds for the presence of post-operative hematoma/seroma and the potential need for aspiration and monitor for pneumothorax or pulmonary insufficiency. Surgeon A will review the patient's activity and restrictions, perform medication management, remove sutures/staples when appropriate and complete progress notes for the medical chart and continue discussion between the co-surgeons and referring physician(s). Additional visits by both co-surgeons, as appropriate for each surgeon, will continue medication management, PT/OT progress review and order revision and the continued assessment of patient progress as deemed necessary.

To justify a work RVU value of 32.00, the RUC compared CPT code 22836 to the top key reference service 22207 *Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1 vertebral segment (eg, pedicle/vertebral body subtraction); lumbar* (work RVU = 36.68, 300 minutes intra-service time and 758 minutes total time) and the second highest key reference service 22551 *Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2* (work RVU = 25.00, 120 minutes intra-service time and 395 minutes total time). The RUC recognizes that the surveyed code is appropriate relative to the two key

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reference services, bracketed in terms of intra-service time, total time, physician work and intraoperative intensity. For additional support, the RUC referenced CPT codes 22865 *Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar* (work RVU = 31.75, 210 minutes of intra-service time and 600 minutes of total time) and 35637 *Bypass graft, with other than vein; aortoiliac* (work RVU = 33.05, 210 minutes of intra-service time and 605 minutes of total time), noting that together these two codes bracket the survey median work RVU and have nearly identical intra-service and total time as 22836. **The RUC recommends a work RVU of 32.00 for CPT code 22836.**

22837 ***Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments***
The RUC reviewed the survey results from pediatric orthopaedic surgeons and pediatric neurosurgeons and determined that the survey median work RVU of 35.50 appropriately accounts for the physician work required to perform 22837. The RUC recommends 60 minutes pre-service evaluation time, 30 minutes pre-service positioning, 15 minutes pre-service scrub/dress/wait time, 260 minutes intra-service time, 45 minutes post-service time, 1-99231, 1-99232, 1-99933, 1-99238, 2-99213 and 1-99214 visits for this service, which equals 649 minutes of total time.

The specialty societies selected pre-service time package *4-FAC Difficult Patient/Difficult Procedure* and post-service time package *9B General Anes or Complex Regional Blk/Cmplx Proc*. The standard time packages were modified to more accurately reflect pre- and post-service time involved with this service. The additional 20 minutes of pre-service evaluation time above the standard pre-time package time of 40 minutes accounts for both co-surgeons to review the preoperative imaging (X-ray, MRI, CT) and discuss the planned procedure, including approach, index procedure, and closure. Both surgeons will also independently meet with the anesthesiologist and patient prior to the procedure. An additional 27 minutes of pre-service positioning time is required above the standard package time of 3 minutes to account for work by both co-surgeons. The scoliosis will require additional and special lateral decubitus positioning for this procedure, not only to be able to maneuver the patient during surgery to place the tether, but also to allow the approach surgeon the ability to expose the spine (including typical deflation of the lung) and continue to work alongside the second surgeon who is performing the index procedure. Positioning also needs consideration of placement of imaging equipment. The 5-minute reduction in pre-service scrub/dress/wait time, to 15 minutes, is consistent with the median time indicated by the survey respondents.

The key distinction between CPT codes 22837 and 22836 is reflected in the number of vertebral segments that are involved with each procedure. Curve correction is dependent on the tensioning of the polyethylene-braided tether cord being used across vertebral segments. The typical work associated with 22836 involves a vertebral body tethering construct that applies to 7 or fewer vertebral segments, while 22837 applies to 8 or more segments. The 50-minute increase in intra-service time from 210 to 260 minutes between 22836 and 22837 reflects this clinical difference, as the tether in use will be longer when tensioning between a greater number of vertebral segments. It is also important to note that despite the slight decline in intraoperative intensity of work for 22837 compared to 22836 when accounting for the longer tether cord that is in use, the physician work in and of itself is no more intense or complex between these two services.

The RUC agrees with 45 minutes of immediate post-service time. The 12-minute increase from the package time recognizes that each co-surgeon has different post-operative care concerns to address including the need for both surgeons to write separate operative notes and orders, meet with the patient and family independently, and monitor post-operative recovery.

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The RUC discussed the number and level of postoperative hospital and office visits and agreed that they fairly represent the total work of both surgeons who will independently be monitoring the patient related to their own intraoperative work. The RUC recognizes that typically each co-surgeon will conduct at least two separate post-operative visits related to their operative procedures. The first visit for the neurosurgeon or orthopaedic surgeon ("spine" Surgeon B) includes a comparison of subjective and objective pre-operative versus post-operative elements of function, dressings removal and wound assessment, medication management, activity guidance and discussion of physical and occupational therapy needs and goals. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is required, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Overall progress is discussed with referring physician(s) and dictated for the patient's medical chart. The first visit for the "approach" surgeon (Surgeon A) includes a review of the spine surgeon's (Surgeon B's) notes, pathology report and post-discharge labs and films, an interval update of H&P, examination and assessment of the patient's wounds for the presence of post-operative hematoma/seroma and the potential need for aspiration and monitor for pneumothorax or pulmonary insufficiency. Surgeon A will review the patient's activity and restrictions, perform medication management, remove sutures/staples when appropriate and complete progress notes for the medical chart and to continue discussion between the co-surgeons and referring physician(s). Additional visits by both co-surgeons, as appropriated for each surgeon, will continue medication management, PT/OT progress review and order revision and the continued assessment of patient progress as deemed necessary.

To justify a work RVU value of 35.50, the RUC compared CPT code 22837 to the top key reference service 22207 *Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1 vertebral segment (eg, pedicle/vertebral body subtraction); lumbar* (work RVU = 36.68, 300 minutes intra-service time and 758 minutes total time) and the second highest key reference service 22551 *Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2* (work RVU = 25.00, 120 minutes intra-service time and 395 minutes total time). The RUC recognizes that the surveyed code is appropriately relative to the two key reference services, bracketed in terms of intra-service time, total time, physician work and intraoperative intensity. For additional support, the RUC referenced CPT codes 61537 *Craniotomy with elevation of bone flap; for lobectomy, temporal lobe, without electrocorticography during surgery* (work RVU = 36.45, 265 minutes of intra-service time and 614 minutes of total time) and 63087 *Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; single segment* (work RVU = 37.53, 265 minutes of intra-service time and 682 minutes of total time) noting that together these two codes bracket the survey median work RVU and have nearly identical intra-service and total time as 22837. **The RUC recommends a work RVU of 35.50 for CPT code 22837.**

22838 ***Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed***

The RUC reviewed the survey results from pediatric orthopaedic surgeons and pediatric neurosurgeons and determined that the survey median work RVU of 36.00 appropriately accounts for the physician work required to perform 22838. The RUC recommends 60 minutes pre-service evaluation time, 30 minutes pre-service positioning, 15 minutes pre-service scrub/dress/wait time, 260 minutes intra-service time and 45 minutes post-service time for this service, 1-99231, 1-99232, 1-99933, 1-99238, 2-99213 and 1-99214 visits for this service, which equals 649 minutes of total time.

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The specialty societies selected pre-service time package *4-FAC Difficult Patient/Difficult Procedure* and post-service time package *9B General Anes or Complex Regional Blk/Cmplx Proc*. The standard time packages were modified to more accurately reflect pre- and post-service time involved with this service. The additional 20 minutes of pre-service evaluation time above the standard pre-time package time of 40 minutes accounts for both co-surgeons to review the preoperative imaging (X-ray, MRI, CT) and discuss the planned procedure, including approach, index procedure, and closure. Both surgeons will also independently meet with the anesthesiologist and patient prior to the procedure. An additional 27 minutes of pre-service positioning time is required above the standard package time of 3 minutes to account for work by both co-surgeons. The scoliosis will require additional and special lateral decubitus positioning for this procedure, not only to be able to maneuver the patient during surgery to place the tether, but also to allow the approach surgeon the ability to expose the spine (including typical deflation of the lung) and continue to work alongside the second surgeon who is performing the index procedure. Positioning also needs consideration of placement of imaging equipment. The 5-minute reduction in pre-service scrub/dress/wait time, to 15 minutes, is consistent with the median time indicated by the survey respondents.

The primary distinction between CPT code 22838 and the other two vertebral body tethering codes in this family is that the typical work involved with 22838 is a revision, replacement or removal of the previously inserted tether. There is a potential for increased interoperative intensity of physician work involved with 22838 based on the complexity and complications that could occur with the revision or modification of the initial procedure. The longer tether and greater tensioning required also contributes to the overall intensity of work. Similar to 22837, 22838 includes a 50-minute increase in intra-service time from 210 to 260 minutes from 22836, as this service will likely involve 8 or more vertebral segments as opposed to 7 or fewer. The work RVU increase from 35.50 to 36.00 between 22837 and 22838 accounts for the overall increase in intensity and complexity of service.

The RUC agrees with 45 minutes of immediate post-service time. The 12-minute increase from the package time recognizes that each co-surgeon has different post-operative care concerns to address including the need for both surgeons to write separate operative notes and orders, meet with the patient and family independently, and monitor post-operative recovery.

The RUC discussed the number and level of postoperative hospital and office visits and agreed that they fairly represent the total work of both surgeons who will independently be monitoring the patient related to their own intraoperative work. The RUC recognizes that typically each co-surgeon will conduct at least two separate post-operative visits related to their operative procedures. The first visit for the neurosurgeon or orthopaedic surgeon ("spine" Surgeon B) includes a comparison of subjective and objective pre-operative versus post-operative elements of function, dressings removal and wound assessment, medication management, activity guidance and discussion of physical and occupational therapy needs and goals. Shared decision-making and assessment of the patient will be required to determine if further imaging or testing is required, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Overall progress is discussed with referring physician(s) and dictated for the patient's medical chart. The first visit for the "approach" surgeon (Surgeon A) includes a review of the spine surgeon's (Surgeon B's) notes, pathology report and post-discharge labs and films, an interval update of H&P, examination and assessment of the patient's wounds for the presence of post-operative hematoma/seroma and the potential need for aspiration and monitor for pneumothorax or pulmonary insufficiency. Surgeon A will review the patient's activity and restrictions, perform medication management, remove sutures/staples when appropriate and complete progress notes for the medical chart and continue discussion between the co-surgeons and referring physician(s).

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Additional visits by both co-surgeons, as appropriated for each surgeon, will continue medication management, PT/OT progress review and order revision and the continued assessment of patient progress as deemed necessary.

To justify a work RVU value of 36.00, the RUC compared CPT code 22838 to the top key reference service 22207 *Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1 vertebral segment (eg, pedicle/vertebral body subtraction); lumbar* (work RVU = 36.68, 300 minutes intra-service time and 758 minutes total time) and the second highest key reference service 22861 *Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical* (work RVU = 33.36, 180 minutes intra-service time and 477 minutes total time). The RUC recognizes that the surveyed code is appropriately relative to the two key reference services, 22207 and 22861 in terms of intra-service time, total time, physician work and intraoperative intensity. For additional support, the RUC referenced CPT codes 61537 *Craniotomy with elevation of bone flap; for lobectomy, temporal lobe, without electrocorticography during surgery* (work RVU = 36.45, 265 minutes of intra-service time and 614 minutes of total time) and 63087 *Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; single segment* (work RVU = 37.53, 265 minutes of intra-service time and 682 minutes of total time) noting that together these two codes bracket the survey median work RVU and total time and have nearly identical intra-service time as 22838. Lastly, the RUC compared code 22838 to 22837. Although both codes have the same time and visit details and same total time, the RUC agreed with the survey respondents that the work for revising a tethering device was slightly more intense because the operation is being performed through scarred tissue from the implantation procedure. The RUC determined that the difference of 0.50 work RVUs was justified. **The RUC recommends a work RVU of 36.00 for CPT code 22838.**

Practice Expense
The Practice Expense Subcommittee reviewed the direct practice expense inputs and made no modifications. The Subcommittee agreed that the additional 15 minutes of clinical staff time to the standard 090-day global package is in accordance with other co-surgeon, 62-modifier codes, involving multidisciplinary coordination of care by clinical staff of co-surgeons prior to the procedure. This additional time was included under CA008 *Perform regulatory mandated quality assurance activity* which is consistent with the most recent CMS assignment for additional 15 minutes for co-surgery in the Medicare Physician Fee schedule 2019 Proposed Rule. It was also noted that these inputs are for a pediatric patient population so EF023 *table, exam* is typical as opposed to the use of a power table for adult patients with spine pain and disease. **The RUC recommends the direct practice expense inputs as submitted by the specialty societies.**

New Technology
CPT codes 22836, 22837 and 22838 will be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation, patient population, and utilization assumptions.

RAW Flag
The RUC recommends flagging CPT 22838 since the survey response was below 30. This service will be reviewed by the Relativity Assessment Workgroup in three years. At that time, the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.
RUC Database Flag

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The RUC and specialty societies agreed that CPT code 22838 should be marked as "Do not use to validate physician work" in the RUC database given the low survey response.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Musculoskeletal System** **Spine Deformity (eg, Scoliosis, Kyphosis)** *To report instrumentation procedures, see 22840-22855, 22859. (Report in addition to code[s] for the definitive procedure[s].) Do not append modifier 62 to spinal instrumentation codes 22840-22848, 22850, 22852, 22853, 22854, 22859.* *To report bone graft procedures, see 20930-20938. (Report in addition to code[s] for the definitive procedure[s].) Do not append modifier 62 to bone graft codes 20900-20938.* *A vertebral segment describes the basic constituent part into which the spine may be divided. It represents a single complete vertebral bone with its associated articular processes and laminae.* For the following codes, when two surgeons work together as primary surgeons performing distinct part(s) of an arthrodesis for spinal deformity, each surgeon should report his/her distinct operative work by appending modifier 62 to the procedure code. In this situation, modifier 62 may be appended to procedure code(s) 22800-22819 as long as both surgeons continue to work together as primary surgeons. The spinal deformity arthrodesis codes (22800, 22802, 22804, 22808, 22810, 22812) and kyphectomy codes (22818, 22819) should not be reported in conjunction with thoracic vertebral body tethering codes (22836, 22837, 22838) or lumbar or thoracolumbar vertebral body tethering codes (0656T, 0657T, 0X114T). When two surgeons work together as primary surgeons performing distinct part(s) of thoracic vertebral body tethering, each surgeon should report his/her distinct operative work by appending modifier 62 to the procedure code. In this situation, modifier 62 may be appended to the procedure code(s) 22836, 22837, 22838 as long as both surgeons continue to work together as primary surgeons. **Spine (Vertebral Column)** **Spinal Instrumentation** *Segmental instrumentation is defined as fixation at each end of the construct and at least one additional interposed bony attachment.* *Non-segmental instrumentation is defined as fixation at each end of the construct and may span several vertebral segments without attachment to the intervening segments.*				

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Insertion of spinal instrumentation is reported separately and in addition to arthrodesis. Instrumentation procedure codes 22840-22848, 22853, 22854, 22859 are reported in addition to the definitive procedure(s). Do not append modifier 62 to spinal instrumentation codes 22840-22848, 22850, 22852, 22853, 22854, 22859.

To report bone graft procedures, see 20930-20938. (Report in addition to code[s] for definitive procedure[s].) Do not append modifier 62 to bone graft codes 20900-20938.

A vertebral segment describes the basic constituent part into which the spine may be divided. It represents a single complete vertebral bone with its associated articular processes and laminae. A vertebral interspace is the nonbony compartment between two adjacent vertebral bodies, which contains the intervertebral disc, and includes the nucleus pulposus, annulus fibrosus, and two cartilaginous endplates.

Codes 22849, 22850, 22852, and 22855 are subject to modifier 51 if reported with other definitive procedure(s), including arthrodesis, decompression, and exploration of fusion. Code 22849 should not be reported in conjunction with 22850, 22852, and 22855 at the same spinal levels. Only the appropriate insertion code (22840-22848) should be reported when previously placed spinal instrumentation is being removed or revised during the same session where new instrumentation is inserted at levels including all or part of the previously instrumented segments. Do not report the reinsertion (22849) or removal (22850, 22852, 22855) procedures in addition to the insertion of the new instrumentation (22840-22848).

Codes 22836, 22837, 22838 describe anterior thoracic vertebral body tethering which is a means of correcting scoliosis without fusion using a tether (cord) that compresses the vertebral growth plates on the convex side of the curve thus inhibiting their growth, while allowing the growth plates on the concave side of the curve to continue to grow. Codes 22836, 22837 may not be reported with anterior instrumentation codes 22845, 22846, 22847.

For the following codes, when two surgeons work together as primary surgeons performing distinct part(s) of thoracic vertebral body tethering, each surgeon should report his/her distinct operative work by appending modifier 62 to the procedure code. In this situation, modifier 62 may be appended to the procedure code(s) 22836, 22837, 22838 as long as both surgeons continue to work together as primary surgeons.

Regions of the spine include cervical, cervicothoracic, thoracic, thoracolumbar, lumbar, lumbosacral, sacral, and coccygeal.

✚ *22840* *Posterior non-segmental instrumentation (eg, Harrington rod technique, pedicle fixation across 1 interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, facet screw fixation) (List separately in addition to code for primary procedure)*

✚ *22845* *Anterior instrumentation; 2 to 3 vertebral segments (List separately in addition to code for primary procedure)*

(Use 22845 in conjunction with 22100-22102, 22110- 22114, 22206, 22207, 22210-22214, 22220-22224, 22310- 22327, 22532, 22533, 22548-22558, 22590-22612, 22630, 22633, 22634, 22800-22812, 63001-63030, 63040-63042, 63045-63047, 63050-63056, 63064, 63075, 63077, 63081, 63085, 63087, 63090, 63101, 63102, 63170-63290, 63300-63307)

(For vertebral body tethering of the thoracic spine, see 22836, 22837, 22838)

(For vertebral body tethering of the lumbar or thoracolumbar spine, see 0656T, 0657T, X114T)

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✚ *22846*		*4 to 7 vertebral segments (List separately in addition to code for primary procedure)* *(Use 22846 in conjunction with 22100-22102, 22110- 22114, 22206, 22207, 22210-22214, 22220-22224, 22310- 22327, 22532, 22533, 22548-22558, 22590-22612, 22630, 22633, 22634, 22800-22812, 63001-63030, 63040-63042, 63045-63047, 63050-63056, 63064, 63075, 63077, 63081, 63085, 63087, 63090, 63101, 63102, 63170-63290, 63300-63307)* (For vertebral body tethering of the thoracic spine, see 22836, 22837, 22838) (For vertebral body tethering of the lumbar or thoracolumbar spine, see 0656T, 0657T, X114T)		
✚*22847*		*8 or more vertebral segments (List separately in addition to code for primary procedure)* *(Use 22847 in conjunction with 22100-22102, 22110- 22114, 22206, 22207, 22210-22214, 22220-22224, 22310- 22327, 22532, 22533, 22548-22558, 22590-22612, 22630, 22633, 22634, 22800-22812, 63001-63030, 63040-63042, 63045-63047, 63050-63056, 63064, 63075, 63077, 63081, 63085, 63087, 63090, 63101, 63102, 63170-63290, 63300-63307)* (Do not report 22845, 22846, 22847 in conjunction with 22836, 22837, 22838) (For vertebral body tethering of the thoracic spine, see 22836, 22837, 22838) (For vertebral body tethering of the lumbar or thoracolumbar spine, see 0656T, 0657T, X114T)		
●22836	J1	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments (For anterior lumbar or thoracolumbar vertebral body tethering, up to 7 vertebral segments, use 0656T)	090	32.00
●22837	J2	8 or more vertebral segments (Do not report 22836, 22837 in conjunction with 22845, 22846, 22847, 32601) (For anterior lumbar or thoracolumbar vertebral body tethering, 8 or more vertebral segments, use 0657T)	090	35.50
●22838	J3	Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed (Do not report 22838 in conjunction with 22849, 22855, 32601)	090	36.00

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✚ *22848* *Pelvic fixation (attachment of caudal end of instrumentation to pelvic bony structures) other than sacrum (List separately in addition to code for primary procedure)*

Respiratory System
Lungs and Pleura
Thoracoscopy (Video-assisted thoracic surgery [VATS])

32601 *Thoracoscopy, diagnostic (separate procedure); lungs, pericardial sac, mediastinal or pleural space, without biopsy*

(Do not report 32601 in conjunction with 22836, 22837, 22838)

32604 *pericardial sac, with biopsy*

32606 *mediastinal space, with biopsy*

Category III Codes

▲0656T Anterior lumbar or thoracolumbar v~~V~~ertebral body tethering~~, anterior~~; up to 7 vertebral segments

Sunset January ~~2027~~ 2028

▲0657T 8 or more vertebral segments

Sunset January ~~2027~~ 2028

(Do not report 0656T, 0657T in conjunction with 22800, 22802, 22804, 22808, 22810, 22812, 22818, 22819, 22845, 22846, 22847)

(For vertebral body tethering of the thoracic spine, see 22836, 22837)

#●0790T Revision (eg, augmentation, division of tether), replacement, or removal of thoracolumbar or lumbar vertebral body tethering, including thoracoscopy, when performed

Sunset January 2028

(For revision, replacement, or removal of thoracic vertebral body tethering, use 22838)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:22836 Tracking Number J1 Original Specialty Recommended RVU: **32.00**
Presented Recommended RVU: **32.00**
Global Period: 090 Current Work RVU: **n/a** RUC Recommended RVU: **32.00**

CPT Descriptor: Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 13-year-old skeletally immature female is diagnosed with thoracic idiopathic scoliosis and has either failed or is intolerant to bracing. The curve magnitude and remaining growth suggest likely continued progression without intervention. A vertebral body tethering construct is applied from T6 to T11 to provide initial coronal correction through tensioning.

Percentage of Survey Respondents who found Vignette to be Typical: 87%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 100% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 100%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: [Both Co-Surgeons] The results of preadmission testing are reviewed. The preoperative imaging is examined with special attention to preoperative screw trajectory planning under C-arm fluoroscopy and the vascular anatomy on the anterior lumbar spine. The medical record is reviewed to ensure that the patient is stable for the planned surgical procedure. The preoperative history and physical examination is updated. Preoperative orders for antibiotics and pain medications are written. Select and order the appropriate antibiotic(s) and confirm timing and administration. Meet with patient and family to review planned procedure and post-operative management. Review and obtain informed consent, including witness. Review length and type of anesthesia with anesthesiologist. Review positioning recommendations and supplies with operating room staff. Verify that all required instruments and supplies are available. Monitor/assist with lateral decubitus positioning of patient. Indicate areas surrounding skin incision to be prepped and draped. Scrub and gown. Perform surgical "time out" with operating surgical team and anesthesia team. Engage fluroscopy or CT in preparation for intraoperative imaging.

Description of Intra-Service Work:
[Co-Surgeon A Exposure] Surgical access is gained through the preferred approach which is typically thoracoscopic and typically requiring a single lung ventilation technique and lung deflation to allow access. At each operative level, access is gained to the chest by a sharp thoracostomy, laterally – typically in the axillary line. The scope is inserted and the lung deflated on that side to enable visualization of the lateral aspect of the vertebral body. The procedure is typically performed thoracoscopically and visualized on a video monitor. Using an ultrasonic scalpel or a thermal device, the parietal pleura is incised longitudinally to identify the segmental vessels along the vertebrae to be instrumented. At 7 vertebral segments or less, coagulate the segmental vessels and expose the lateral aspect of the vertebral bodies intended for instrumentation. Dissection to release the diaphragm is required if the construct will extend distally to T12 or L1. Because all the vertebral bodies to be instrumented cannot be approached through the same thoracostomy, the procedure must be repeated as many times as it takes to access all of the vertebral levels involved in the procedure.

[Co-Surgeon B Tether Placement] The trajectory and placement on the vertebral body are confirmed at all levels prior to each anchor insertion, screw preparation, and screw insertion using intraoperative fluoroscopy or CT image guidance. Due to smaller vertebral body size and variable venous anatomy, caution should be observed if extending instrumentation

proximal to T5. At each level, a pronged staple is secured to the vertebral body, as needed. Then an entry awl is used to create a trajectory for the screw. Each screw must be inserted in the narrow safe zone between the spinal canal posteriorly and the great vessels anteriorly. Approach to the next level of vertebra may require another level of thoracostomy as not all levels can be approached through the same thoracostomy. The hole is tapped, and a screw of appropriate length and diameter is chosen and inserted. Following placement of all screws, a cord is then secured to the most cranial screw and segmentally tensioned, maintaining compression by tightening set screws at the adjacent levels in order to achieve correction of the spinal curvature. Applying the correct amount of tension is critical to the procedure. Following final tensioning, intraoperative fluoroscopy or radiography is used to assess curve correction on AP and lateral imaging.

[Co-Surgeon A Closure] Closure of each thoracotomy site is performed and a chest tube is placed.

Description of Post-Service Work: Immediate post-service: Apply sterile dressings. Inspect urinary catheter and bag contents for blood. Discuss postoperative recovery care with anesthesia and nursing staff. Discuss procedure and outcome with family in waiting area. Write brief operative note. Write postoperative note in the recovery room. Dictate operative report and copy referring physician(s). Patient is discharged from recovery room. Write orders for transferring to floor and discuss postoperative plan with floor staff.

Daily hospital post-service work: Monitor and document patient progress; evaluate for cardio respiratory function. Auscultate heart, lungs, and abdomen for bowel sounds. Manage dressings to wounds daily, monitoring status of incision, looking for signs of infection. Remove chest tube. Assess pain scores and adequacy of analgesia. Review nursing/other staff patient chart notes. Write orders for physiotherapy. Activity parameters are modified to advance the patient's ambulation and mobility. Chart patient progress notes, daily. Answer patient and family questions. Answer nursing/other staff questions.

Discharge day management: The patient is discharged when there is adequate pain control with oral analgesics, adequate solid and liquid intake, normal voiding of urine, and independent ambulation. Write prescriptions for medications needed after discharge. Home restrictions (ie, diet, activity, bathing) are discussed with the patient, family members and discharging nurse. All appropriate medical records are completed, including day of discharge progress notes, discharge summary and discharge instructions, and insurance forms.

Office post-discharge work: Each co-surgeon will conduct separate postoperative visits related to their operative procedures.

The neurosurgeon or orthopaedic surgeon ("spine" surgeon) visits includes a review of the approach surgeon's notes and a discussion with the patient of the preop presentation, review of the operative note and comparison of subjective and objective preop versus postop elements of function. Dressings will be removed and the wound assessed for signs of infection and redressed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events and that the patient is not also getting medication for pain from the approach surgeon. The spine surgeon will also discuss safely weaning the patient from narcotics and muscle relaxants, and discussing how the medication use might impact the patient's daily activities. The spine surgeon will further discuss appropriate use of NSAIDs (prescribed or OTC) and/or other analgesics to switch to as the patient is transitioned from narcotics and muscle relaxants. Orders for changes in pain medication will be made based on the patient's response to pain experience and medication adverse events. The spine surgeon will discuss activity guidance, advancing activities, and potential medication-impact on activity. The spine surgeon will review activity levels and discuss physical and occupation therapy needs and goals, including ordering therapy. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is needed, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management, PT progress review and order revision, interval imaging orders as needed, and continued assessment of patient progress. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

The "approach" surgeon work includes a review of the spine surgeon's notes, pathology report and postdischarge labs and films. The approach surgeon will examine the patient, take down dressings and assess the wound for the presence of postoperative hematoma/seroma and assess the need for aspiration. The patient will be closely monitored for pneumothorax or pulmonary insufficiency. The drains (and chest tube, if placed) will be assessed and removed when appropriate. The patient's activity and restrictions will be reviewed. Medication management is performed including a PDMP check and to

verify use as appropriate with postop instructions and no adverse events. The spine surgeon will be contacted to discuss any changes that may be needed in pain medication. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management and continued assessment of patient progress. Sutures/staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD					
Specialty Society(ies):	AAOS, AANS, CNS, NASS					
CPT Code:	22836					
Sample Size:	1585	**Resp N:**	30			
Description of Sample:	Pediatric orthopaedic surgeons and pediatric neurosurgeons (n=1540) Vendor list of trained surgeons (n=45)					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	2.00	**4.00**	12.00	35.00
Survey RVW:	24.00	29.00	**32.00**	37.40	50.00
Pre-Service Evaluation Time:			**60.00**		
Pre-Service Positioning Time:			**30.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	149.00	180.00	**210.00**	240.00	420.00

Immediate Post Service-Time:	**45.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**115.00**	99231x **1.00** 99232x **1.00** 99233x **1.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**86.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	22836	**Recommended Physician Work RVU: 32.00**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**60.00**	**40.00**	**20.00**
Pre-Service Positioning Time:		**30.00**	**3.00**	**27.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**210.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**45.00**	**33.00**	**12.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	115.00	99231x **1.00** 99232x **1.00** 99233x **1.00**
Discharge Day Mgmt:	38.00	99238x **1.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	86.00	99211x **0.00** 12x **0.00** 13x **2.00** 14x **1.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22207	090	36.68	**RUC Time**

CPT Descriptor Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1 vertebral segment (eg, pedicle/vertebral body subtraction); lumbar

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22551	090	25.00	**RUC Time**

CPT Descriptor Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
34705	090	29.58	**RUC Time**	10,152

CPT Descriptor 1 Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
50360	090	39.88	**RUC Time**	12,214

CPT Descriptor 2 Renal allotransplantation, implantation of graft; without recipient nephrectomy

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 11 **% of respondents:** 36.6 **%**

Number of respondents who choose 2nd Key Reference Code: 11 **% of respondents:** 36.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 22836	Top Key Reference CPT Code: 22207	2nd Key Reference CPT Code: **22551**
Median Pre-Service Time	105.00	130.00	98.00
Median Intra-Service Time	210.00	300.00	120.00
Median Immediate Post-service Time	45.00	45.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	115.0	160.00	40.00
Median Discharge Day Management Time	38.0	38.00	38.00
Median Office Visit Time	86.0	85.00	69.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**599.00**	**758.00**	**395.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	27%	55%	18%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	27%	73%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	9%	27%	64%
Physical effort required	9%	36%	55%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	18%	18%	64%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	27%	46%	27%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	27%	73%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	9%	27%	64%
Physical effort required	0%	27%	73%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	27%	73%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The Center for Devices and Radiological Health of the Food and Drug Administration approved a humanitarian device exemption (HDE) for The Tether™ - Vertebral Body Tethering System on August 16, 2019. This device is indicated for skeletally immature patients that require surgical treatment to obtain and maintain correction of progressive idiopathic scoliosis, with a major Cobb angle of 30 to 65 degrees whose osseous structure is dimensionally adequate to

accommodate screw fixation, as determined by radiographic imaging. Patients should have failed bracing and/or be intolerant to brace wear.

At the October 2020 CPT Panel meeting, two CPT Category III codes were approved for vertebral body tethering. At the September 2022 CPT Panel meeting, the work for thoracic vertebral body tethering was split out of the Cat III codes as new Cat I codes (22836 and 22837). In addition, a new Cat I code (22838) for tether revision, replacement, or removal was established.

Survey Process

Survey Instrument: The Research Subcommittee approved a request to revise the RUC survey instrument consistent with prior revisions to accommodate surveying codes that typically require co-surgeons, where Surgeon A will perform the approach and closure and Surgeon B will perform the index procedure. The intent of the very few edits was to collect the total time of both surgeons in a single survey. Please refer to the Research Subcommittee letter dated September 27, 2022 for the specific approved edits.

Survey Sample: The Research Subcommittee approved use of a targeted survey sample (vendor list of trained surgeons) in addition to a random survey of specialty society members who may perform vertebral tethering. Surveys were sent to 45 surgeons whose names were provided by the device vendor and an additional 1350 society members who self identify as pediatric orthopaedic surgeons or neurosurgeons. Multiple reminder emails were sent to non-respondents. Please note that the vendor list was not all inclusive of all trained surgeons, but instead a list of surgeons who allowed the vendor to distribute their names.

Recommendation – 22836

The survey median work RVU of 32.00 is recommended for code 22836.

Pre-time Package 4

Evaluation time: The survey median time of 60 minutes is recommended which is an additional 20 minutes to the 40 minutes in the pretime package. This additional time accounts for both co-surgeons to review the preoperative imaging (x-ray, MRI, CT) and discuss the planned procedure, including approach, index procedure, and closure. Both surgeons will also independently meet with the anesthesiologist and patient prior to the procedure. A total of 60 minutes covers the pretime for evaluation and assessment by both surgeons.

Positioning time: The survey median time of 30 minutes is recommended for positioning which will be performed by both surgeons. The scoliosis will require additional and special positioning for this procedure, not only to be able to maneuver the patient during surgery to place the tether, but also to allow the approach surgeon the ability to expose the spine (including typical deflation of the lung) and continue to work alongside the second surgeon who is performing the index procedure. Positioning also needs consideration of the need for imaging equipment.

Scrub, dress, wait time: The survey median time of 15 minutes is recommended which is less than the package time.

Post-time Package 9B

The survey median time of 45 minutes is recommended. This is greater than the package time, reflecting the immediate postoperative work and time of both surgeons to write separate operative notes and orders, meet with the patient and family, and monitor immediate postoperative recovery. Each surgeon has different postoperative concerns.

Postop Office Visits

Each surgeon will conduct separate postoperative visits related to their operative procedures. Each surgeon will typically provide at least two postop office visits. In hindsight, the survey instrument should also have been revised to ask for the postop visits of both surgeons. The median number of visits (3) underestimates the total number of required visits by both surgeons which will typically be at least four.

The first visit for the neurosurgeon or orthopaedic surgeon ("spine" surgeon) includes a discussion with the patient of the preop presentation, review of the operative note and comparison of subjective and objective preop versus postop elements of function. Dressings will be removed and the wound assessed for signs of infection and redressed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events and that the patient is not also getting medication for pain from the approach surgeon. The spine surgeon will also discuss safely weaning the patient from narcotics and muscle relaxants, and discussing how the medication use might impact the patient's daily activities. The spine surgeon will further discuss appropriate use of NSAIDs (prescribed or OTC) and/or other analgesics to switch to as the patient is transitioned from narcotics and muscle relaxants. Orders for changes in pain medication will be made based on the patient's response to pain experience and medication adverse events. The spine surgeon will discuss activity guidance, advancing activities, and potential

medication-impact on activity. The spine surgeon will review activity levels and discuss physical and occupation therapy needs and goals, including ordering therapy. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is needed, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

The first visit for the "approach" surgeon includes a review of the spine surgeon's notes, pathology report and postdischarge labs and films. The approach surgeon will examine the patient, take down dressings and assess the wound for the presence of postoperative hematoma/seroma and assess the need for aspiration. The patient will be closely monitored for pneumothorax or pulmonary insufficiency. The drains (and chest tube, if placed) will be assessed and removed when appropriate. The patient's activity and restrictions will be reviewed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events. The spine surgeon will be contacted to discuss any changes that may be needed in pain medication. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management and continued assessment of patient progress. Sutures/staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

Additional visits by both co-surgeons will include (as appropriated for each surgeon) an interval update of H&P, medication management, PT/OT progress review and order revision, interval imaging orders as needed, and continued assessment of patient progress. Sutures and staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

Summary

For a co-surgeon procedure, the RVU of 32.00 will multiplied by 1.25 and each surgeon will claim 20.00 work RVUs for this procedure that will involve 105 minutes of preservice time, 210 minutes of operative time, multiple hospital visits and multiple office visits. The recommended work RVU of 32.00 falls midway between REF1 and REF2. The recommended total time and intra-time also falls midway between the key reference services. The intraoperative intensity of 22836 appropriate falls between 22207 (posterior approach, lumbar) and 22551 (anterior approach, cervical). Code 22865, *Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar* (wRVU = 31.75, intra-time = 210, total time = 600) and code 35637, *Bypass graft, with other than vein; aortoiliac* (wRVU = 33.05, intra-time = 210, total time = 605) bracket the survey median work RVU and provide further support.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0656T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty orthopaedic surgery How often? Rarely

Specialty neurosurgery How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 200
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate is based on 2021 FDA-approved device implant for thoracic spine.

Specialty orthopaedic surgery Frequency 180 Percentage 90.00 %

Specialty neurosurgery Frequency 20 Percentage 10.00 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure will be performed only on children.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Do many physicians perform this service across the United States? No

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 22802

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:22837 Tracking Number J2 Original Specialty Recommended RVU: **35.50**
Presented Recommended RVU: **35.50**
Global Period: 090 Current Work RVU: **n/a** RUC Recommended RVU: **35.50**

CPT Descriptor: Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 13-year-old skeletally immature female is diagnosed with thoracic idiopathic scoliosis and has either failed or is intolerant to bracing. The curve magnitude and remaining growth suggest likely continued progression without intervention. A vertebral body tethering construct is applied from T5 to T12 to provide initial coronal correction through tensioning.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 100% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 100%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: [Both Co-Surgeons] The results of preadmission testing are reviewed. The preoperative imaging is examined with special attention to preoperative screw trajectory planning under C-arm fluoroscopy and the vascular anatomy on the anterior lumbar spine. The medical record is reviewed to ensure that the patient is stable for the planned surgical procedure. The preoperative history and physical examination is updated. Preoperative orders for antibiotics and pain medications are written. Select and order the appropriate antibiotic(s) and confirm timing and administration. Meet with patient and family to review planned procedure and post-operative management. Review and obtain informed consent, including witness. Review length and type of anesthesia with anesthesiologist. Review positioning recommendations and supplies with operating room staff. Verify that all required instruments and supplies are available. Monitor/assist with lateral decubitus positioning of patient. Indicate areas surrounding skin incision to be prepped and draped. Scrub and gown. Perform surgical "time out" with operating surgical team and anesthesia team. Engage fluroscopy or CT in preparation for intraoperative imaging.

Description of Intra-Service Work:
[Co-Surgeon A Exposure] Surgical access is gained through the preferred approach which is typically thoracoscopic and typically requiring a single lung ventilation technique and lung deflation to allow access. At each operative level, access is gained to the chest by a sharp thoracostomy, laterally – typically in the axillary line. The scope is inserted and the lung deflated on that side to enable visualization of the lateral aspect of the vertebral body. The procedure is typically performed thoracoscopically and visualized on a video monitor. Using an ultrasonic scalpel or a thermal device, the parietal pleura is incised longitudinally to identify the segmental vessels along the vertebrae to be instrumented. At 7 vertebral segments or less, coagulate the segmental vessels and expose the lateral aspect of the vertebral bodies intended for instrumentation. Dissection to release the diaphragm is required if the construct will extend distally to T12 or L1. Because all the vertebral bodies to be instrumented cannot be approached through the same thoracostomy, the procedure must be repeated as many times as it takes to access all of the vertebral levels involved in the procedure.

[Co-Surgeon B Tether Placement] The trajectory and placement on the vertebral body are confirmed at all levels prior to each anchor insertion, screw preparation, and screw insertion using intraoperative fluoroscopy or CT image guidance. Due to smaller vertebral body size and variable venous anatomy, caution should be observed if extending instrumentation

proximal to T5. At each level, a pronged staple is secured to the vertebral body, as needed. Then an entry awl is used to create a trajectory for the screw. Each screw must be inserted in the narrow safe zone between the spinal canal posteriorly and the great vessels anteriorly. Approach to the next level of vertebra may require another level of thoracostomy as not all levels can be approached through the same thoracostomy. The hole is tapped, and a screw of appropriate length and diameter is chosen and inserted. Following placement of all screws, a cord is then secured to the most cranial screw and segmentally tensioned, maintaining compression by tightening set screws at the adjacent levels. Applying the correct amount of tension is critical to the procedure. Following final tensioning, intraoperative fluoroscopy or radiography is used to assess curve correction on AP and lateral imaging.

[Co-Surgeon A Closure] Closure of each thoracotomy site is performed and a chest tube is placed.

Description of Post-Service Work: Immediate post-service: Apply sterile dressings. Inspect urinary catheter and bag contents for blood. Discuss postoperative recovery care with anesthesia and nursing staff. Discuss procedure and outcome with family in waiting area. Write brief operative note. Write postoperative note in the recovery room. Dictate operative report and copy referring physician(s). Patient is discharged from recovery room. Write orders for transferring to floor and discuss postoperative plan with floor staff.

Daily hospital post-service work: Monitor and document patient progress; evaluate for cardio respiratory function. Auscultate heart, lungs, and abdomen for bowel sounds. Manage dressings to wounds daily, monitoring status of incision, looking for signs of infection. Remove chest tube. Assess pain scores and adequacy of analgesia. Review nursing/other staff patient chart notes. Write orders for physiotherapy. Activity parameters are modified to advance the patient's ambulation and mobility. Chart patient progress notes, daily. Answer patient and family questions. Answer nursing/other staff questions.

Discharge day management: The patient is discharged when there is adequate pain control with oral analgesics, adequate solid and liquid intake, normal voiding of urine, and independent ambulation. Write prescriptions for medications needed after discharge. Home restrictions (ie, diet, activity, bathing) are discussed with the patient, family members and discharging nurse. All appropriate medical records are completed, including day of discharge progress notes, discharge summary and discharge instructions, and insurance forms.

Office post-discharge work: Each co-surgeon will conduct separate postoperative visits related to their operative procedures.

The neurosurgeon or orthopaedic surgeon ("spine" surgeon) visits includes a review of the approach surgeon's notes and a discussion with the patient of the preop presentation, review of the operative note and comparison of subjective and objective preop versus postop elements of function. Dressings will be removed and the wound assessed for signs of infection and redressed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events and that the patient is not also getting medication for pain from the approach surgeon. The spine surgeon will also discuss safely weaning the patient from narcotics and muscle relaxants, and discussing how the medication use might impact the patient's daily activities. The spine surgeon will further discuss appropriate use of NSAIDs (prescribed or OTC) and/or other analgesics to switch to as the patient is transitioned from narcotics and muscle relaxants. Orders for changes in pain medication will be made based on the patient's response to pain experience and medication adverse events. The spine surgeon will discuss activity guidance, advancing activities, and potential medication-impact on activity. The spine surgeon will review activity levels and discuss physical and occupation therapy needs and goals, including ordering therapy. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is needed, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management, PT progress review and order revision, interval imaging orders as needed, and continued assessment of patient progress. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

The "approach" surgeon work includes a review of the spine surgeon's notes, pathology report and postdischarge labs and films. The approach surgeon will examine the patient, take down dressings and assess the wound for the presence of postoperative hematoma/seroma and assess the need for aspiration. The patient will be closely monitored for pneumothorax or pulmonary insufficiency. The drains (and chest tube, if placed) will be assessed and removed when appropriate. The patient's activity and restrictions will be reviewed. Medication management is performed including a PDMP check and to

verify use as appropriate with postop instructions and no adverse events. The spine surgeon will be contacted to discuss any changes that may be needed in pain medication. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management and continued assessment of patient progress. Sutures/staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD					
Specialty Society(ies):	AAOS, AANS, CNS, NASS					
CPT Code:	22837					
Sample Size:	1585	**Resp N:**	30			
Description of Sample:	Pediatric orthopaedic surgeons and pediatric neurosurgeons (n=1540) Vendor list of trained surgeons (n=45)					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	1.00	**2.00**	10.00	37.00
Survey RVW:	24.50	32.00	**35.50**	41.07	55.00
Pre-Service Evaluation Time:			**60.00**		
Pre-Service Positioning Time:			**30.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	150.00	213.00	**260.00**	300.00	420.00

Immediate Post Service-Time:	**45.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**115.00**	99231x **1.00** 99232x **1.00** 99233x **1.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**86.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	22837	**Recommended Physician Work RVU: 35.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**60.00**	**40.00**	**20.00**
Pre-Service Positioning Time:		**30.00**	**3.00**	**27.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**260.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**45.00**	**33.00**	**12.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	115.00	99231x **1.00** 99232x **1.00** 99233x **1.00**
Discharge Day Mgmt:	38.00	99238x **1.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	86.00	99211x **0.00** 12x **0.00** 13x **2.00** 14x **1.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22207	090	36.68	**RUC Time**

CPT Descriptor Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1 vertebral segment (eg, pedicle/vertebral body subtraction); lumbar

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22551	090	25.00	**RUC Time**

CPT Descriptor Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
34705	090	29.58	**RUC Time**	10,152

CPT Descriptor 1 Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
50360	090	39.88	**RUC Time**	12,214

CPT Descriptor 2 Renal allotransplantation, implantation of graft; without recipient nephrectomy

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 12 **% of respondents:** 40.0 **%**

Number of respondents who choose 2nd Key Reference Code: 5 **% of respondents:** 16.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 22837	Top Key Reference CPT Code: 22207	2nd Key Reference CPT Code: **22551**
Median Pre-Service Time	105.00	130.00	98.00
Median Intra-Service Time	260.00	300.00	120.00
Median Immediate Post-service Time	45.00	45.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	115.0	160.00	40.00
Median Discharge Day Management Time	38.0	38.00	38.00
Median Office Visit Time	86.0	85.00	69.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**649.00**	**758.00**	**395.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	8%	17%	50%	25%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	25%	75%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	8%	17%	75%
Physical effort required	17%	33%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	25%	8%	67%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	0%	40%	60%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	20%	0%	80%
Physical effort required	0%	0%	100%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	20%	80%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The Center for Devices and Radiological Health of the Food and Drug Administration approved a humanitarian device exemption (HDE) for The Tether™ - Vertebral Body Tethering System on August 16, 2019. This device is indicated for skeletally immature patients that require surgical treatment to obtain and maintain correction of progressive idiopathic scoliosis, with a major Cobb angle of 30 to 65 degrees whose osseous structure is dimensionally adequate to

accommodate screw fixation, as determined by radiographic imaging. Patients should have failed bracing and/or be intolerant to brace wear.

At the October 2020 CPT Panel meeting, two CPT Category III codes were approved for vertebral body tethering. At the September 2022 CPT Panel meeting, the work for thoracic vertebral body tethering was split out of the Cat III codes as new Cat I codes (22836 and 22837). In addition, a new Cat I code (22838) for tether revision, replacement, or removal was established.

Survey Process

Survey Instrument: The Research Subcommittee approved a request to revise the RUC survey instrument consistent with prior revisions to accommodate surveying codes that typically require co-surgeons, where Surgeon A will perform the approach and closure and Surgeon B will perform the index procedure. The intent of the very few edits was to collect the total time of both surgeons in a single survey. Please refer to the Research Subcommittee letter dated September 27, 2022 for the specific approved edits.

Survey Sample: The Research Subcommittee approved use of a targeted survey sample (vendor list of trained surgeons) in addition to a random survey of specialty society members who may perform vertebral tethering. Surveys were sent to 45 surgeons whose names were provided by the device vendor and an additional 1350 society members who self identify as pediatric orthopaedic surgeons or neurosurgeons. Multiple reminder emails were sent to non-respondents. Please note that the vendor list was not all inclusive of all trained surgeons, but instead a list of surgeons who allowed the vendor to distribute their names.

Recommendation – 22837

The survey median work RVU of 35.50 is recommended for code 22837.

Pre-time Package 4

Evaluation time: The survey median time of 60 minutes is recommended which is an additional 20 minutes to the 40 minutes in the pretime package. This additional time accounts for both co-surgeons to review the preoperative imaging (x-ray, MRI, CT) and discuss the planned procedure, including approach, index procedure, and closure. Both surgeons will also independently meet with the anesthesiologist and patient prior to the procedure. A total of 60 minutes covers the pretime for evaluation and assessment by both surgeons.

Positioning time: The survey median time of 30 minutes is recommended for positioning which will be performed by both surgeons. The scoliosis will require additional and special positioning for this procedure, not only to be able to maneuver the patient during surgery to place the tether, but also to allow the approach surgeon the ability to expose the spine (including typical deflation of the lung) and continue to work alongside the second surgeon who is performing the index procedure. Positioning also needs consideration of the need for imaging equipment.

Scrub, dress, wait time: The survey median time of 15 minutes is recommended which is less than the package time.

Post-time Package 9B

The survey median time of 45 minutes is recommended. This is greater than the package time, reflecting the immediate postoperative work and time of both surgeons to write separate operative notes and orders, meet with the patient and family, and monitor immediate postoperative recovery. Each surgeon has different postoperative concerns.

Postop Office Visits

Each surgeon will conduct separate postoperative visits related to their operative procedures. Each surgeon will typically provide at least two postop office visits. In hindsight, the survey instrument should also have been revised to ask for the postop visits of both surgeons. The median number of visits (3) underestimates the total number of required visits by both surgeons which will typically be at least four.

The first visit for the neurosurgeon or orthopaedic surgeon ("spine" surgeon) includes a discussion with the patient of the preop presentation, review of the operative note and comparison of subjective and objective preop versus postop elements of function. Dressings will be removed and the wound assessed for signs of infection and redressed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events and that the patient is not also getting medication for pain from the approach surgeon. The spine surgeon will also discuss safely weaning the patient from narcotics and muscle relaxants, and discussing how the medication use might impact the patient's daily activities. The spine surgeon will further discuss appropriate use of NSAIDs (prescribed or OTC) and/or other analgesics to switch to as the patient is transitioned from narcotics and muscle relaxants. Orders for changes in pain medication will be made based on the patient's response to pain experience and medication adverse events. The spine surgeon will discuss activity guidance, advancing activities, and potential

medication-impact on activity. The spine surgeon will review activity levels and discuss physical and occupation therapy needs and goals, including ordering therapy. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is needed, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

The first visit for the "approach" surgeon includes a review of the spine surgeon's notes, pathology report and postdischarge labs and films. The approach surgeon will examine the patient, take down dressings and assess the wound for the presence of postoperative hematoma/seroma and assess the need for aspiration. The patient will be closely monitored for pneumothorax or pulmonary insufficiency. The drains (and chest tube, if placed) will be assessed and removed when appropriate. The patient's activity and restrictions will be reviewed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events. The spine surgeon will be contacted to discuss any changes that may be needed in pain medication. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management and continued assessment of patient progress. Sutures/staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

Additional visits by both co-surgeons will include (as appropriated for each surgeon) an interval update of H&P, medication management, PT/OT progress review and order revision, interval imaging orders as needed, and continued assessment of patient progress. Sutures and staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

Summary

For a co-surgeon procedure, the RVU of 35.50 will multiplied by 1.25 and each surgeon will claim 22.19 work RVUs for this procedure that will involve 105 minutes of preservice time, 260 minutes of operative time, multiple hospital visits and multiple office visits. The recommended work RVU of 35.50 falls appropriately between REF1 and REF2. The recommended total time and intra-time also falls appropriately between the key reference services. The intraoperative intensity of 22837 appropriate falls between 22207 (posterior approach, lumbar) and 22551 (anterior approach, cervical), and is less than 22836 accounting for a longer tether cord, but not more intense work. Code 61537, *Craniotomy with elevation of bone flap; for lobectomy, temporal lobe, without electrocorticography during surgery* (wRVU = 36.45, intra-time = 265, total time = 614) and code 63087, *Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; single segment* (wRVU = 37.53, intra-time = 265, total time = 682) provide further support.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the

provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0657T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty orthopaedic surgery How often? Rarely

Specialty neurosurgery How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 90
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate is based on 2021 FDA-approved device implant for thoracic spine.

Specialty orthopaedic surgery Frequency 80 Percentage 88.88 %

Specialty neurosurgery Frequency 10 Percentage 11.11 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure will be performed only on children.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 22802

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:22838 Tracking Number J3 Original Specialty Recommended RVU: **36.00**
Presented Recommended RVU: **36.00**
Global Period: 090 Current Work RVU: **n/a** RUC Recommended RVU: **36.00**

CPT Descriptor: Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 15-year-old female who is two years post a primary tethering procedure presents with radiographic evidence of a broken tether device and an increase of the size of the scoliosis. The patient has remaining skeletal growth. The patient is referred for removal of the broken tether and placement of a new vertebral body tethering construct to provide coronal correction.

Percentage of Survey Respondents who found Vignette to be Typical: 77%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 100% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 100%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: [Both Co-Surgeons] The results of preadmission testing are reviewed. The preoperative imaging is examined with special attention to preoperative screw trajectory planning under C-arm fluoroscopy and the vascular anatomy on the anterior lumbar spine. The medical record is reviewed to ensure that the patient is stable for the planned surgical procedure. The preoperative history and physical examination is updated. Preoperative orders for antibiotics and pain medications are written. Select and order the appropriate antibiotic(s) and confirm timing and administration. Meet with patient and family to review planned procedure and post-operative management. Review and obtain informed consent, including witness. Review length and type of anesthesia with anesthesiologist. Review positioning recommendations and supplies with operating room staff. Verify that all required instruments and supplies are available. Monitor/assist with lateral decubitus positioning of patient. Indicate areas surrounding skin incision to be prepped and draped. Scrub and gown. Perform surgical "time out" with operating surgical team and anesthesia team. Engage fluroscopy or CT in preparation for intraoperative imaging.

Description of Intra-Service Work:
[Co-Surgeon A Exposure] Surgical access is gained through the preferred approach which is typically thoracoscopic and typically requiring a single lung ventilation technique and lung deflation to allow access. Several levels of thoracostomy may be required to visualize and manipulate the entire construct. Using an ultrasonic scalpel or thermal device, pleural adhesions are removed from the intact anterior vertebral body tethering construct.

[Co-Surgeon B Tether Removal and Replacement] The cord is inspected and assessed for any areas of breakage. Set screws are removed and the broken cord is removed. The vertebral body screws are assessed. Any loose vertebral body screws are removed or replaced. New vertebral body screws may be added at adjacent levels. The trajectory and placement on the vertebral body screws are confirmed at all levels prior to anchor insertion, screw preparation, and screw insertion using fluoroscopy or CT image guidance. Due to smaller vertebral body size and variable venous anatomy, caution should be observed if extending instrumentation proximal to T5. Because all the vertebral bodies to be instrumented cannot be approached through the same thoracostomy, the procedure must be repeated as many times as it takes to access all of the vertebral levels involved in the procedure.

When appropriate, a new cord is then secured to the most cranial screw and segmentally tensioned, maintaining compression by tightening set screws at the adjacent levels. Applying the correct amount of tension is critical to the procedure and requires careful consideration of all patient factors. The broken cord segments are removed from the thorax. Following final tensioning, intraoperative fluoroscopy or radiography is used to assess curve correction on AP and lateral imaging.

[Co-Surgeon A Closure] Closure of each thoracotomy site is performed and a chest tube is placed.

Description of Post-Service Work: Immediate post-service: Apply sterile dressings. Inspect urinary catheter and bag contents for blood. Discuss postoperative recovery care with anesthesia and nursing staff. Discuss procedure and outcome with family in waiting area. Write brief operative note. Write postoperative note in the recovery room. Dictate operative report and copy referring physician(s). Patient is discharged from recovery room. Write orders for transferring to floor and discuss postoperative plan with floor staff.

Daily hospital post-service work: Monitor and document patient progress; evaluate for cardio respiratory function. Auscultate heart, lungs, and abdomen for bowel sounds. Manage dressings to wounds daily, monitoring status of incision, looking for signs of infection. Remove chest tube. Assess pain scores and adequacy of analgesia. Review nursing/other staff patient chart notes. Write orders for physiotherapy. Activity parameters are modified to advance the patient's ambulation and mobility. Chart patient progress notes, daily. Answer patient and family questions. Answer nursing/other staff questions.

Discharge day management: The patient is discharged when there is adequate pain control with oral analgesics, adequate solid and liquid intake, normal voiding of urine, and independent ambulation. Write prescriptions for medications needed after discharge. Home restrictions (ie, diet, activity, bathing) are discussed with the patient, family members and discharging nurse.. All appropriate medical records are completed, including day of discharge progress notes, discharge summary and discharge instructions, and insurance forms.

Office post-discharge work: Each co-surgeon will conduct separate postoperative visits related to their operative procedures.

The neurosurgeon or orthopaedic surgeon ("spine" surgeon) visits includes a review of the approach surgeon's notes and a discussion with the patient of the preop presentation, review of the operative note and comparison of subjective and objective preop versus postop elements of function. Dressings will be removed and the wound assessed for signs of infection and redressed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events and that the patient is not also getting medication for pain from the approach surgeon. The spine surgeon will also discuss safely weaning the patient from narcotics and muscle relaxants, and discussing how the medication use might impact the patient's daily activities. The spine surgeon will further discuss appropriate use of NSAIDs (prescribed or OTC) and/or other analgesics to switch to as the patient is transitioned from narcotics and muscle relaxants. Orders for changes in pain medication will be made based on the patient's response to pain experience and medication adverse events. The spine surgeon will discuss activity guidance, advancing activities, and potential medication-impact on activity. The spine surgeon will review activity levels and discuss physical and occupation therapy needs and goals, including ordering therapy. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is needed, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management, PT progress review and order revision, interval imaging orders as needed, and continued assessment of patient progress. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

The "approach" surgeon work includes a review of the spine surgeon's notes, pathology report and postdischarge labs and films. The approach surgeon will examine the patient, take down dressings and assess the wound for the presence of postoperative hematoma/seroma and assess the need for aspiration. The patient will be closely monitored for pneumothorax or pulmonary insufficiency. The drains (and chest tube, if placed) will be assessed and removed when appropriate. The patient's activity and restrictions will be reviewed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events. The spine surgeon will be contacted to discuss any changes that may be needed in pain medication. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P,

medication management and continued assessment of patient progress. Sutures/staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD					
Specialty Society(ies):	AAOS, AANS, CNS, NASS					
CPT Code:	22838					
Sample Size:	1585	**Resp N:**	26			
Description of Sample:	Pediatric orthopaedic surgeons and pediatric neurosurgeons (n=1540) Vendor list of trained surgeons (n=45)					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**1.00**	3.00	10.00
Survey RVW:	22.00	32.93	**36.00**	41.13	60.00
Pre-Service Evaluation Time:			**85.00**		
Pre-Service Positioning Time:			**30.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	160.00	240.00	**260.00**	300.00	500.00

Immediate Post Service-Time:	**45.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**115.00**	99231x **1.00** 99232x **1.00** 99233x **1.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**86.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	22838	**Recommended Physician Work RVU: 36.00**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**60.00**	**40.00**	**20.00**
Pre-Service Positioning Time:		**30.00**	**3.00**	**27.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**260.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**45.00**	**33.00**	**12.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	115.00	99231x **1.00** 99232x **1.00** 99233x **1.00**
Discharge Day Mgmt:	38.00	99238x **1.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	86.00	99211x **0.00** 12x **0.00** 13x **2.00** 14x **1.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22207	090	36.68	**RUC Time**

CPT Descriptor Osteotomy of spine, posterior or posterolateral approach, 3 columns, 1 vertebral segment (eg, pedicle/vertebral body subtraction); lumbar

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
22861	090	33.36	**RUC Time**

CPT Descriptor Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
34705	090	29.58	**RUC Time**	10,152

CPT Descriptor 1 Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
50360	090	39.88	**RUC Time**	12,214

CPT Descriptor 2 Renal allotransplantation, implantation of graft; without recipient nephrectomy

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 8 **% of respondents:** 30.7 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 15.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 22838	Top Key Reference CPT Code: 22207	2nd Key Reference CPT Code: **22861**
Median Pre-Service Time	105.00	130.00	80.00
Median Intra-Service Time	260.00	300.00	180.00
Median Immediate Post-service Time	45.00	45.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	115.0	160.00	80.00
Median Discharge Day Management Time	38.0	38.00	38.00
Median Office Visit Time	86.0	85.00	69.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**649.00**	**758.00**	**477.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	25%	62%	13%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	62%	38%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	12%	50%	38%
Physical effort required	12%	50%	38%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	25%	75%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	50%	0%	50%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	50%	50%
Physical effort required	0%	25%	75%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	25%	75%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The Center for Devices and Radiological Health of the Food and Drug Administration approved a humanitarian device exemption (HDE) for The Tether™ - Vertebral Body Tethering System on August 16, 2019. This device is indicated for skeletally immature patients that require surgical treatment to obtain and maintain correction of progressive idiopathic scoliosis, with a major Cobb angle of 30 to 65 degrees whose osseous structure is dimensionally adequate to

accommodate screw fixation, as determined by radiographic imaging. Patients should have failed bracing and/or be intolerant to brace wear.

At the October 2020 CPT Panel meeting, two CPT Category III codes were approved for vertebral body tethering. At the September 2022 CPT Panel meeting, the work for thoracic vertebral body tethering was split out of the Cat III codes as new Cat I codes (22836 and 22837). In addition, a new Cat I code (22838) for tether revision, replacement, or removal was established.

Survey Process

Survey Instrument: The Research Subcommittee approved a request to revise the RUC survey instrument consistent with prior revisions to accommodate surveying codes that typically require co-surgeons, where Surgeon A will perform the approach and closure and Surgeon B will perform the index procedure. The intent of the very few edits was to collect the total time of both surgeons in a single survey. Please refer to the Research Subcommittee letter dated September 27, 2022 for the specific approved edits.

Survey Sample: The Research Subcommittee approved use of a targeted survey sample (vendor list of trained surgeons) in addition to a random survey of specialty society members who may perform vertebral tethering. Surveys were sent to 45 surgeons whose names were provided by the device vendor and an additional 1350 society members who self identify as pediatric orthopaedic surgeons or neurosurgeons. Multiple reminder emails were sent to non-respondents. Please note that the vendor list was not all inclusive of all trained surgeons, but instead a list of surgeons who allowed the vendor to distribute their names.

Survey Response: Although only 26 responses were received for this new and infrequently performed procedure, the majority of respondents had performed this service in the past 12 months. Of the 11 respondents who did not performed this service in the past 12 months, five indicated performing the service in the past five years (ie, 20 out of 26 respondents are experienced providers).

Recommendation – 22838

The survey median work RVU of 36.00 is recommended for code 22838.

Pre-time Package 4

Evaluation time: Sixty minutes is recommended which is an additional 20 minutes to the 40 minutes in the pretime package. The typical patient for 22838 will be undergoing a removal and replacement tether due to fracture of the previously placed cord. This additional time for evaluation by both co-surgeons adds consideration of how to approach the removal and replacement given there will be scar tissue involved. Preoperative review of imaging (x-ray, MRI, CT) will be more extensive prior to marking the patient and confirming the operative approach and discussion of the planned procedure. Both surgeons will also independently meet with the anesthesiologist and patient/family prior to the procedure. A total of 60 minutes covers the pretime for evaluation and assessment by both surgeons and is consistent with codes 22836 and 22837.

Positioning time: The survey median time of 30 minutes is recommended for positioning which will be performed by both surgeons. The scoliosis will require additional and special positioning for this procedure, not only to be able to maneuver the patient during surgery to place the tether, but also to allow the approach surgeon the ability to expose the spine (including typical deflation of the lung) and continue to work alongside the second surgeon who is performing the index procedure. Positioning also needs consideration of the need for imaging equipment.

Scrub, dress, wait time: The survey median time of 15 minutes is recommended which is less than the package time.

Post-time Package 9B

The survey median time of 45 minutes is recommended. This is greater than the package time, reflecting the immediate postoperative work and time of both surgeons to write separate operative notes and orders, meet with the patient and family, and monitor immediate postoperative recovery. Each surgeon has different postoperative concerns.

Postop Office Visits

Each surgeon will conduct separate postoperative visits related to their operative procedures. Each surgeon will typically provide at least two postop office visits. In hindsight, the survey instrument should also have been revised to ask for the postop visits of both surgeons. The median number of visits (3) underestimates the total number of required visits by both surgeons which will typically be at least four.

The first visit for the neurosurgeon or orthopaedic surgeon ("spine" surgeon) includes a discussion with the patient of the preop presentation, review of the operative note and comparison of subjective and objective preop versus postop elements of function. Dressings will be removed and the wound assessed for signs of infection and redressed.

Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events and that the patient is not also getting medication for pain from the approach surgeon. The spine surgeon will also discuss safely weaning the patient from narcotics and muscle relaxants, and discussing how the medication use might impact the patient's daily activities. The spine surgeon will further discuss appropriate use of NSAIDs (prescribed or OTC) and/or other analgesics to switch to as the patient is transitioned from narcotics and muscle relaxants. Orders for changes in pain medication will be made based on the patient's response to pain experience and medication adverse events. The spine surgeon will discuss activity guidance, advancing activities, and potential medication-impact on activity. The spine surgeon will review activity levels and discuss physical and occupation therapy needs and goals, including ordering therapy. Shared decision making and assessment of the patient will be required to determine if further imaging or testing is needed, including whether an X-ray should be ordered if there are concerns for iatrogenic instability. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

The first visit for the "approach" surgeon includes a review of the spine surgeon's notes, pathology report and postdischarge labs and films. The approach surgeon will examine the patient, take down dressings and assess the wound for the presence of postoperative hematoma/seroma and assess the need for aspiration. The patient will be closely monitored for pneumothorax or pulmonary insufficiency. The drains (and chest tube, if placed) will be assessed and removed when appropriate. The patient's activity and restrictions will be reviewed. Medication management is performed including a PDMP check and to verify use as appropriate with postop instructions and no adverse events. The spine surgeon will be contacted to discuss any changes that may be needed in pain medication. Progress is discussed with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart. Additional visits will include an interval update of H&P, medication management and continued assessment of patient progress. Sutures/staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

Additional visits by both co-surgeons will include (as appropriated for each surgeon) an interval update of H&P, medication management, PT/OT progress review and order revision, interval imaging orders as needed, and continued assessment of patient progress. Sutures and staples will be removed when appropriate. In addition, return to school forms will be completed, including guidance on advancing activities toward full return to school. Pain medication will be adjusted as needed. Progress is discussed between the co-surgeons and with referring physician(s) (verbal and written). Progress notes are written/dictated for the medical chart.

Summary

For a co-surgeon procedure, the RVU of 36.00 will multiplied by 1.25 and each surgeon will claim 22.50 work RVUs for this procedure that will involve 130 minutes of preservice time, 260 minutes of operative time, multiple hospital visits and multiple office visits. The recommended work RVU of 36.00 falls appropriately between REF1 and REF2. The recommended total time and intra-time also falls appropriately between the key reference services. The intraoperative intensity of 22838 appropriate falls between 22207 (posterior approach, lumbar) and 22861 (Revision arthroplasty, anterior). Code 61537, *Craniotomy with elevation of bone flap; for lobectomy, temporal lobe, without electrocorticography during surgery* (wRVU = 36.45, intra-time = 265, total time = 614) and code 63087, *Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; single segment* (wRVU = 37.53, intra-time = 265, total time = 682) provide further support.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.

- ☐ Multiple codes are used to maintain consistency with similar codes.
- ☐ Historical precedents.
- ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 22899 Unlisted procedure, spine

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty orthopaedic surgery How often? Rarely

Specialty neurosurgery How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 10
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate is based on 2021 FDA-approved device implant for thoracic spine.

Specialty orthopaedic surgery Frequency 9 Percentage 90.00 %

Specialty neurosurgery Frequency 1 Percentage 10.00 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure will be performed only on children.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Do many physicians perform this service across the United States? No

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 22802

ISSUE: Vertebral Body Tethering

TAB: 5

SOURCE	CPT	DESC	global	Review Year	Resp	IWPUT	WPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE EVAL	PRE POSIT	PRE SDW	INTRA MIN	INTRA 25th	INTRA MED	INTRA 75th	INTRA MAX	IMMD P-SD	FAC Inpt / Obs / Dschrg 91 92 33 32 31	FAC Inpt / Obs / Dschrg 38 39	Office 15 14 13 12 11	12 Month Svy Experience MIN	25th	MED	75th	MAX
REF1	**22207**	Osteotomy of spine, posterior or posterolater	**90**	**2007**	**11**	**0.076**	**0.048**			**36.68**			**758**	**80**	**30**	**20**			**300**			**45**	**3 2**	**1.0**	**3 1**					
REF2	**22551**	Arthrodesis, anterior interbody, including disc	**90**	**2010**	**11**	**0.140**	**0.063**			**25.00**			**395**	**60**	**18**	**20**			**120**			**30**	**1**	**1.0**	**3**					
current	**0656T**	Vertebral body tethering, anterior; up to 7 ver	**YYY**	**n/a**		n/a	n/a						**n/a**																	
SVY	**2X002**	Anterior thoracic vertebral body tethering, inc	**90**	**n/a**	**30**	**0.095**	**0.053**	**24.00**	**29.00**	**32.00**	**37.40**	**50.00**	**599**	**60**	**30**	**15**	**149**	**180**	**210**	**240**	**420**	**45**	1 1 1	1.0	1 2	**0**	**2**	**4**	**12**	**35**
REC	**2X002**	**Anterior thoracic vertebral body tethering**	**90**	**n/a**	**30**	**0.095**	**0.053**			**32.00**			**599**	**60**	**30**	**15**			**210**			**45**	1 1 1	1.0	1 2					
	2X002	*Vendor List*	*90*		*21*	*0.098*	*0.054*	*24.00*	*29.00*	*32.00*	*35.00*	*50.00*	*591*	*75*	*30*	*15*	*150*	*180*	*210*	*240*	*420*	*45*	*1 1 1*	*1.0*	*1 2*	*0*	*3*	***5***	*15*	*35*
	2X002	*Random List*	*90*		*9*	*0.106*	*0.061*	*25.00*	*29.00*	*36.20*	*40.00*	*45.00*	*591*	*55*	*30*	*15*	*149*	*180*	*240*	*240*	*360*	*35*	*1 1 1*	*1.0*	*1 2*	*0*	*0*	***1***	*2*	*4*
REF1	**22207**	Osteotomy of spine, posterior or posterolater	**90**	**2007**	**12**	**0.076**	**0.048**			**36.68**			**758**	**80**	**30**	**20**			**300**			**45**	**3 2**	**1.0**	**3 1**					
REF2	**22551**	Arthrodesis, anterior interbody, including disc	**90**	**2010**	**5**	**0.140**	**0.063**			**25.00**			**395**	**60**	**18**	**20**			**120**			**30**	**1**	**1.0**	**3**					
current	**0657T**	Vertebral body tethering, anterior; 8 or more	**YYY**	**n/a**		n/a	n/a						**n/a**																	
SVY	**2X003**	Anterior thoracic vertebral body tethering, inc	**90**	**n/a**	**30**	**0.090**	**0.055**	**24.50**	**32.00**	**35.50**	**41.07**	**55.00**	**649**	**60**	**30**	**15**	**150**	**213**	**260**	**300**	**420**	**45**	1 1 1	1.0	1 2	**0**	**1**	**2**	**10**	**37**
REC	**2X003**	**Anterior thoracic vertebral body tethering**	**90**	**n/a**	**30**	**0.090**	**0.055**			**35.50**			**649**	**60**	**30**	**15**			**260**			**45**	1 1 1	1.0	1 2					
	2X003	*Vendor List*			*21*	*0.087*	*0.053*	*24.50*	*32.00*	*35.00*	*39.75*	*55.00*	*664*	*75*	*30*	*15*	*150*	*220*	*260*	*300*	*420*	*45*	*1 1 1*	*1.0*	*1 2*	*1*	*2*	***5***	*15*	*37*
	22837	*Random List*			*9*	*0.098*	*0.059*	*28.00*	*32.00*	*37.20*	*41.50*	*45.00*	*634*	*55*	*30*	*15*	*153*	*180*	*260*	*270*	*380*	*35*	*1 1 1*	*1.0*	*1 2*	*0*	*0*	***0***	*1*	*2*
REF1	**22207**	Osteotomy of spine, posterior or posterolater	**90**	**2007**	**8**	**0.076**	**0.048**			**36.68**			**758**	**80**	**30**	**20**			**300**			**45**	**3 2**	**1.0**	**3 1**					
REF2	**22861**	Revision including replacement of total disc a	**90**	**2008**	**4**	**0.135**	**0.070**			**33.36**			**477**	**40**	**20**	**20**			**180**			**30**	**2**	**1.0**	**3**					
current	**22899**	Unlisted procedure, spine		**n/a**		n/a	n/a						**n/a**																	
SVY	**22838**	Revision (eg, augmentation, division of tether	**90**	**n/a**	**26**	**0.090**	**0.053**	**22.00**	**32.93**	**36.00**	**41.13**	**60.00**	**674**	**85**	**30**	**15**	**160**	**240**	**260**	**300**	**500**	**45**	1 1 1	1.0	1 2	**0**	**0**	**1**	**3**	**10**
REC	**22838**	**Revision (eg, augmentation, division of te**	**90**	**n/a**	**26**	**0.092**	**0.055**			**36.00**			**649**	**60**	**30**	**15**			**260**			**45**	1 1 1	1.0	1 2	**0**	**0**	**1**	**3**	**10**
	22838	*Vendor List*			*18*	*0.090*	*0.053*	*22.00*	*32.13*	*36.00*	*39.15*	*60.00*	*679*	*90*	*30*	*15*	*160*	*240*	*260*	*300*	*500*	*45*	*1 1 1*	*1.0*	*1 2*	*0*	*0*	***1***	*3*	*10*
	22838	*Random List*			*8*	*0.098*	*0.057*	*33.00*	*34.83*	*37.50*	*43.45*	*50.00*	*662*	*70*	*35*	*15*	*220*	*235*	*255*	*288*	*400*	*48*	*1 1 1*	*1.0*	*1 2*	*0*	*0*	***0***	*0*	*3*

FACILITY DIRECT PE INPUTS

CPT CODE(S): 22836, 22837, 22838
SPECIALTY SOCIETY(IES): AAOS, AANS, CNS, NASS
PRESENTER(S): William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: 01/2023

CPT CodeX	Long Descriptor	Global Period
22836	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments	090
22837	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments	090
22838	Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
22836	A 13-year-old skeletally immature female is diagnosed with thoracic idiopathic scoliosis and has either failed or is intolerant to bracing. The curve magnitude and remaining growth suggest likely continued progression without intervention. A vertebral body tethering construct is applied from T6 to T11 to provide initial coronal correction through tensioning.
22837	A 13-year-old skeletally immature female is diagnosed with thoracic idiopathic scoliosis and has either failed or is intolerant to bracing. The curve magnitude and remaining growth suggest likely continued progression without intervention. A vertebral body tethering construct is applied from T5 to T12 to provide initial coronal correction through tensioning.
22838	A 15-year-old female who is two years post a primary tethering procedure presents with radiographic evidence of a broken tether device and an increase of the size of the scoliosis. The patient has remaining skeletal growth. The patient is referred for removal of the broken tether and placement of a new vertebral body tethering construct to provide coronal correction.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The surveying specialty advisors considered the PE details and precedents for similar complex spine procedures.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   Code 22857 was chosen as a reference as this code was recently reviewed by the PE Subcommittee (04/2022) and represents a similar complex spine procedure involving co-surgeons for an anterior approach to the spine. Additionally, code 22558 is included as an additional reference code that includes the same additional 15 minutes of preservice clinical staff time for coordination of care for an anterior spine procedure involving co-surgeons.

3. Is this code(s) typically reported with an E/M service?

   No

FACILITY DIRECT PE INPUTS

CPT CODE(S): 22836, 22837, 22838
SPECIALTY SOCIETY(IES): AAOS, AANS, CNS, NASS
PRESENTER(S): William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

N/A

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

Sixty minutes was established by the PEAC in 2002 as the typical total time it takes, on average, across all specialties, and for all categories of pre-service work, to get a patient into a facility for a major surgical procedure. This time has been applied across the appropriate activities. **Additionally, the PEAC approved 15 minutes of additional time for complex spine procedures involving multidisciplinary coordination of care by clinical staff of co-surgeons prior to the procedure**. Although not all clinical staff activities will be duplicated, some activities will need to be performed by clinical staff of each co-surgeon. The additional 15 minutes will account for coordination between the approach surgeon and spine surgeon's clinical staff for activities including, amongst others:

- -intake questions from the requesting team and from the patient/family, basic education of the patient regarding role of the co-surgeon and process
- -coordinating labs and imaging requested by the approach surgeon in addition to those ordered by the spine surgeon
- -summarizing studies and lab results typical to the approach surgeon for his/her review,
- -The approach surgeon's clinical staff would then report all of this information to the surgeon to determine any additional testing that might be needed and ordered and then communicate the appropriate information to the spine surgeon and the spine surgeon's clinical staff.
- -Additionally, the clinical staff for each surgeon will communicate/coordinate appropriate additional equipment for the procedure.

We have allocated the 15 minutes to CA008 which is consistent with the most recent CMS PE assignment for additional 15 minutes for co-surgery. Below is an excerpt from the Medicare Physician Fee schedule 2019 Proposed Rule:

FACILITY DIRECT PE INPUTS

CPT CODE(S): 22836, 22837, 22838
SPECIALTY SOCIETY(IES): AAOS, AANS, CNS, NASS
PRESENTER(S): William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

"For the direct PE inputs, we are proposing to refine the preservice clinical labor times to match our standards for 90-day global procedures. We are proposing to refine the clinical labor time for the ''Coordinate presurgery services (including test results)'' (CA002) activity from 25 minutes to 20 minutes, to refine the clinical labor time for the ''Schedule space and equipment in facility'' (CA003) activity from 12 minutes to 8 minutes, and to refine the clinical labor time for the ''Provide preservice education/obtain consent'' (CA004) activity from 26 minutes to 20 minutes. ***We are also proposing to add 15 minutes of clinical labor time for the ''Perform regulatory mandated quality assurance activity (pre-service)'' (CA008) activity.*** *We agree with the recommendation that the total preservice clinical labor time for CPT code 335X1 [33440] is unchanged from the two reference codes at 75 minutes. However,* ***we believe that the clinical labor associated with additional coordination between multiple specialties prior to patient arrival is more accurately described through the use of the CA008 activity code than by distributing these 15 minutes amongst the other preservice clinical labor activities.*** *We previously established standard preservice times for 90-day global procedures, and did not want to propose clinical labor times above those standards for CPT code 335X1 [33440]. We also note that there is no effect on the total clinical labor direct costs in this situation, since the same 15 minutes of preservice clinical labor time is still being furnished.*"

The stakeholder societies also note that the PE Subcommittee approved 15 minutes for CA008 at the 04/2022 RUC meeting for code 22857.

Based on this precedent in addition to the activities of each surgeon's clinical staff as described above, we are proposing 15 minutes under CA008.

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

Activity	Clinical Staff Work	TIME
Complete pre-service diagnostic and referral forms	Staff reviews all forms with patient and family to ensure all relevant history and diagnostic information is included.	5
Coordinate pre-surgery services (including test results)	Staff coordinates collection and documentation of imaging/lab results, patient specific information and other relevant patient information for a surgical procedure including conducting requisite pre-surgery assessment with anesthesiologist. Enter and record all clinical updates in EHR.	20
Schedule space and equipment in facility	Staff interacts with facility to schedule space, supplies, equipment, and review checklists.	8
Provide pre-service education/obtain consent	Staff reviews procedure, complication risk, process of recovery, and answers patient/family questions.	20
Complete pre-procedure phone calls and prescription	Staff reviews preoperative medication changes, preop diet restrictions, reviews patient medical status and answers final pre-admission questions.	7
Perform regulatory mandated	Clinical staff of each co-surgeon will need to coordinate	15

FACILITY DIRECT PE INPUTS

CPT CODE(S): 22836, 22837, 22838
SPECIALTY SOCIETY(IES): AAOS, AANS, CNS, NASS
PRESENTER(S): William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

quality assurance activity (pre-service)	the co-surgeons schedules, provide distinct education/obtain consent, complete distinct pre-procedure phone calls to patient/family.	

b. Service period (includes pre, intra and post):

Prior to discharge, office clinical staff will assist with necessary post-discharge care coordination, such as: Responding to patient/family questions about home activity restrictions. Confirmation of discharge antibiotics if needed, and pain medication. Coordination of drain management, for discharge, when present. Coordination with other physicians and QHPs involved in the care of the patient for transfer of records. Transitioning discharge information to the surgeons offices medical record, including medication list, correspondence and imaging or lab results pending at discharge.

c. Post-service period:

The clinical staff work includes the standard activities involved in any E/M visit including ensuring the appropriate supplies are available in the room, ensuring imaging and lab reports are available, rooming and gowning the patient, reviewing current medications/allergies in EHR, obtaining vital signs, assisting with positioning, wound care, coordination of care, and cleaning of the room.

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

12. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

14. Are you recommending a PE supply pack for this recommendation? **Yes** or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

SA048	pack, minimum multi-specialty visit
SA054	pack, post-op incision care (suture)

Note that children undergoing this procedure will typical have sutures and not staples.

FACILITY DIRECT PE INPUTS

CPT CODE(S): 22836, 22837, 22838
SPECIALTY SOCIETY(IES): AAOS, AANS, CNS, NASS
PRESENTER(S): William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

16. **DESCRIPTION**	**Code**	**Unit**	**Item Qty**	**Unit price**
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

DESCRIPTION	**Code**	**Unit**	**Item Qty**	**Unit price**
pack, post-op incision care (suture)	**SA054**	**pack**		**4.62**
kit, suture removal		kit	1	
povidone soln (Betadine)		ml	10	
gauze, sterile 4in x 4in		item	2	
gloves, sterile		pair	1	
steri-strip (6 strip uou)		item	2	
swab-pad, alcohol		item	2	
tape, surgical paper 1in (Micropore)		inch	12	
tincture of benzoin, swab		item	1	

17. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A

18. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

19. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A

FACILITY DIRECT PE INPUTS

CPT CODE(S): 22836, 22837, 22838
SPECIALTY SOCIETY(IES): AAOS, AANS, CNS, NASS
PRESENTER(S): William Creevy, MD; Hussein Elkousy, MD; Kevin Neal, MD; John Ratliff, MD; Clemens Schirmer, MD, PhD; Kano Mayer, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

20. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

EF023	table, exam	Office Visits (all visits)

Note that pediatric orthopedic surgeons who treat scoliosis pediatric patients will typically not have a power table. This is distinctly different than spine surgeons who care for adult patients with spine pain and disease.

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

21. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

22. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition to those revisions, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**RUC Practice Expense Spreadsheet**					**REF CODE 1 RUC 02/2006**		**REF CODE 1 RUC 04/2022**		**REF CODE 2 PEAC 2002**		**RECOMMEND**		**RECOMMEND**		**RECOMMEND**	
2						**22857**		**22857**		**22558**		**22836**		**22837**		**22838**	
3		***RUC Collaboration Website***				Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression), single		Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression), single		Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression), lumbar		Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments		Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments		Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy	
4	**Clinical Activity Code**	**Meeting Date: 01/2023 Revision Date (if applicable): Tab: 5 Specialty: AAOS, AANS, CNS, NASS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**												
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 132.91**	**$ -**	**$ 119.07**	**$ -**	**$ 132.24**	**$ -**	**$ 117.46**	**$ -**	**$ 117.46**	**$ -**	**$ 117.46**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**231.0**	**0.0**	**212.0**	**0.0**	**231.0**	**0.0**	**212.0**	**0.0**	**212.0**	**0.0**	**212.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**144.0**	**0.0**	**125.0**	**0.0**	**144.0**	**0.0**	**125.0**	**0.0**	**125.0**	**0.0**	**125.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ -**	**$ 105.11**	**$ -**	**$ 96.46**	**$ -**	**$ 105.11**	**$ -**	**$ 96.46**	**$ -**	**$ 96.46**	**$ -**	**$ 96.46**
13		**PRE-SERVICE PERIOD**															
14		**Start: Following visit when decision for surgery/procedure made**															
15	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455		5		5		5		5		5		5
16	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455		20		20		20		20		20		20
17	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455		8		8		8		8		8		8
18	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455		20		20		20		20		20		20
19	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455		7		7		7		7		7		7
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455				15				15		15		15
23	N/A (2006)	***Other activity*** *: coordination of care*	L037D	RN/LPN/MTA	0.455		15				15						
29		**End: When patient enters office/facility for surgery/procedure**															
30		**SERVICE PERIOD**															
31		**Start: When patient enters office/facility for surgery/procedure:**															
59		**Post-Service (of service period)**															
74	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**	**12**	**n/a**	**12**	**n/a**	**12**	**n/a**	**12**	**n/a**	**12**	**n/a**	**12**
81		**End: Patient leaves office/facility**															
82		**POST-SERVICE PERIOD**															
83		**Start: Patient leaves office/facility**															
86		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
89		99213 36 minutes	36				4		2		4		2		2		2
90		99214 53 minutes	53						1				1		1		1
91		99215 63 minutes	63														
92	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**0.0**	**144.0**	**0.0**	**125.0**	**0.0**	**144.0**	**0.0**	**125.0**	**0.0**	**125.0**	**0.0**	**125.0**
99		**End: with last office visit before end of global period**															

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	**RUC Practice Expense Spreadsheet**					**REF CODE 1 RUC 02/2006**		**REF CODE 1 RUC 04/2022**		**REF CODE 2 PEAC 2002**		**RECOMMEND**		**RECOMMEND**		**RECOMMEND**	
2						**22857**		**22857**		**22558**		**22836**		**22837**		**22838**	
3		***RUC Collaboration Website***				Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression), single		Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression), single		Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression), lumbar		Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments		Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments		Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy	
4	**Clinical Activity Code**	**Meeting Date: 01/2023 Revision Date (if applicable): Tab: 5 Specialty: AAOS, AANS, CNS, NASS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**												
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 132.91**	**$ -**	**$ 119.07**	**$ -**	**$ 132.24**	**$ -**	**$ 117.46**	**$ -**	**$ 117.46**	**$ -**	**$ 117.46**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**231.0**	**0.0**	**212.0**	**0.0**	**231.0**	**0.0**	**212.0**	**0.0**	**212.0**	**0.0**	**212.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**	**0.0**	**75.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**	**0.0**	**12.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**144.0**	**0.0**	**125.0**	**0.0**	**144.0**	**0.0**	**125.0**	**0.0**	**125.0**	**0.0**	**125.0**
100	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**													
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ -**	**$ 25.55**	**$ -**	**$ 20.53**	**$ -**	**$ 24.88**	**$ -**	**$ 19.68**	**$ -**	**$ 19.68**	**$ -**	**$ 19.68**
102	SA048	pack, minimum multi-specialty visit	5.02	pack			4		3		4		3		3		3
103	SA053	pack, post-op incision care (suture & staple)	5.47	pack			1		1								
104	SA052	pack, post-op incision care (staple)	4.8	pack							1						
105	SA054	pack, post-op incision care (suture)	4.62	pack									1		1		1
109																	
110	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**												
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ -**	**$ 2.26**	**$ -**	**$ 2.08**	**$ -**	**$ 2.26**	**$ -**	**$ 1.32**	**$ -**	**$ 1.32**	**$ -**	**$ 1.32**
112	EF031	table, power	5906.76	Office Visits	0.015674926		144		125		144						
113	EQ168	light, exam	1232.887	Office Visits	0.003271745				36								
114	EF023	table, exam	4737.727	Office Visits	0.010538571								125		125		125

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Phrenic Nerve Stimulation System – Tab 6

In September 2022, the CPT Editorial Panel created 8 new Category I CPT codes to describe insertion, repositioning, removal, and removal and replacement of a phrenic nerve stimulator system. The CPT Editorial Panel added 4 additional new Category I codes to describe activation, interrogation, and programming of a phrenic nerve stimulator system. The new codes will replace 13 Category III codes, 0424T-0436T. The new codes treat moderate to severe Central Sleep Apnea (CSA) for patients with concomitant conditions such as heart failure with reduced ejection fraction and are expected to have low utilization. The 12 new Category I codes were surveyed for the January 2023 RUC meeting.

For these services, a phrenic nerve stimulation system includes a pulse generator, one stimulation lead (electrode), and in some cases a sensing lead. To place a pulse generator, a submuscular or subcutaneous "pocket" is created in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. Then, if needed, a sensing lead is placed transvenously into the azygos vein. CPT codes 33276-33288 include vessel catheterization, as well as all image guidance.

Programming of the phrenic nerve stimulator system is typically performed one month after implantation by an electrophysiologist or a sleep medicine physician. CPT codes 93150-93153 are for interrogation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode select-ability, output modulation, cycling, impedance, and patient compliance measurements (eg, hours of therapy, sleeping position, and sleep/awake activity). For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Given the low utilization of these services, the specialty societies used a targeted and random survey approach to secure the survey threshold minimum (ie, 30 responses). Despite the efforts to meet the survey minimum, the specialty societies did not receive 30 responses for any codes in the family. The 12 new codes were created to provide comprehensive reporting of the family when needed.

33276 ***Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s]) including vessel catheterization, all imaging guidance, and pulse generator initial analysis with diagnostic mode activation when performed***
The RUC reviewed the survey results from 28 electrophysiologists and cardiologists and recommends a work RVU of 9.50 based on the survey 25th percentile which appropriately accounts for the physician work required to perform this service. The RUC recommends 40 minutes of pre-service evaluation time, 3 minutes positioning time, 6 minutes scrub/dress/wait time, 120 minutes intra-service time, and 25 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99214 office visit, and 253 minutes total time. For this procedure, patients are not under general anesthesia because they must participate during the procedure, therefore, 14 minutes of time for observing anesthesia care was removed as only 1 minute to apply topical anesthetic is needed. The RUC agreed that pre-service package is appropriate given the typical patient is complicated and presents with heart failure with reduced Ejection Fraction and subsequent CSA. Further, the procedure is complex because lead placement is in the brachiocephalic or pericardiophrenic vein and there is risk of vascular or cardiac damage. The specialty societies indicated, and the RUC agreed, that a half-day discharge management and an office visit are typical to ensure the device is implanted properly.

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For this procedure, the patient is under moderate sedation and venous access is made in order to place the stimulation lead into the right brachiocephalic or left pericardiophrenic vein. The placement of the lead requires significant caution to not lacerate the surrounding vessels. The stimulation lead is carefully repositioned if needed and then stimulation and impedance characteristics are completed using a phrenic nerve stimulation system analyzer. The patient is aroused and asked for feedback as to how closely the simulation represents a normal breath. The lead is stabilized and connected to the implantable pulse generator. A subcutaneous pocket is created in the pectoral region and the pulse generator is inserted and the incision is closed.

To support the recommended work RVU of 9.50, the RUC compared the surveyed code to key reference service codes 33270 *Insertion or replacement of permanent subcutaneous implantable defibrillator system, with subcutaneous electrode, including defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters, when performed* (work RVU = 9.10, 39 minutes pre-service, 90 minutes intra-service and 232 minutes total time) and 33208 *Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular* (work RVU = 8.52, 40 minutes pre-service, 60 minutes intra-service and 231 minutes total time). The reference codes are ideal comparators given that both codes are for the insertion of an implantable device. Given the similar work of the procedures, the surveyed code is valued appropriately due to the higher intra-service time and total time, albeit the lower intensity compared to the reference codes. For additional support, the RUC compared the surveyed code to CPT Code 64581 *Open implantation of neurostimulator electrode array; sacral nerve (transforaminal placement)* (work RVU= 12.20, intra-service time of 120 minutes, total time of 269 minutes) and noted that both services involve an identical amount of intra-service time, similar total times and the same number and level of post-operative visit codes. Both services describe the insertion of a nerve stimulation device, though the reference code is a more intense procedure to perform, justifying a lower value for the surveyed code.

The RUC concluded that CPT code 33276 should be valued at the 25th percentile work RVU as supported by the survey given the relativity within the code family, even though the survey threshold was not met. **The RUC recommends a work RVU of 9.50 for CPT code 33276.**

33277 ***Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 24 electrophysiologists and cardiologists and recommends a work RVU of 5.43 based on the survey 25th percentile which maintains relativity within the family. The RUC recommends 120 minutes intra-service and total time for this add-on code.

For this procedure, the patient is undergoing a subcutaneous implantation of a phrenic nerve stimulator system and requires the placement of an additional transvenous sensing lead. The additional sensing lead is carefully positioned into the azygos vein using transvenous implantation techniques. Once placed, the lead is tested using a neurostimulator analyzer to ensure proper function. The lead is stabilized using suture sleeves and connected to the implantable pulse generator.

To support the recommended work RVU of 5.43, the RUC compared the surveyed code to key reference service codes 93592 *Percutaneous transcatheter closure of paravalvular leak; each additional occlusion device (List separately in addition to code for primary procedure)* (work RVU = 8.00, 60 minutes intra-service and total time) and 93609 *Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia (List separately in addition to code for primary procedure)* (work RVU

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= 4.99, 90 minutes intra-service and total time). The codes appropriately bracket the surveyed code work RVU given that the surveyed code has a higher intra-service time and a lower relative intensity when compared to the key reference services.

For additional support, the RUC compared the surveyed code to CPT code 93613 *Intracardiac electrophysiologic 3-dimensional mapping (List separately in addition to code for primary procedure)* (work RVU = 5.23, 90 minutes intra-service and total time). This similar cardiology procedure supports the surveyed code's relativity within the MFS as both services have similar work RVUs, intra-service time, and intensity. **The RUC recommends a work RVU of 5.43 for CPT code 33277.**

33278 ***Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; system, including pulse generator and lead(s)***
The RUC reviewed the survey results from 24 electrophysiologists and cardiologists and recommends a work RVU of 9.55 based on the survey 25th percentile, which maintains relativity within the family. The RUC recommends 40 minutes of pre-service evaluation time, 3 minutes positioning time, 6 minutes scrub/dress/wait time, 120 minutes intra-service time, and 28 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99213 office visit, and 239 minutes total time. For this procedure, patients do not participate so they are under general anesthesia to mitigate the potential risk of vessel perforation. The RUC determined that the pre-service package was appropriate because the typical patient is complicated and presents with heart failure with reduced ejection fraction and subsequent CSA. Further, removal procedures are exceedingly complex given that lead extraction is in the brachiocephalic or pericardiophrenic vein and there is risk of vascular or cardiac damage. Survey respondents indicated, and the RUC concurred, that a half-day discharge management and an office visit are typical to ensure the removal was successful.

For this procedure, the typical patient includes one lead removal. The patient is under general anesthesia. The implanted pulse generator and lead are carefully freed from surrounding tissue using fluoroscopic guidance. If it is not possible to remove and disconnect the device and lead using fluoroscopic guidance, then standard extraction techniques are used. Once the device and lead can be removed and hemodynamic stability is verified, the incision is closed.

To support the recommended work RVU, the RUC compared the surveyed code to key reference service codes 33235 *Removal of transvenous pacemaker electrode(s); dual lead system* (work RVU = 9.90, 50 minutes pre-service, 170 minutes intra-service and 390 minutes total time) and 33234 *Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular* (work RVU = 7.66, 50 minutes pre-service, 150 minutes intra-service and 292 minutes total time). The reference codes are ideal comparators given that both codes are for the removal of an implantable device with leads. Given the similar work of the procedures, the surveyed code is valued appropriately due the higher overall intensity to remove a phrenic nerve stimulator, albeit the lower intra-service and total time compared the reference codes. **The RUC recommends a work RVU of 9.55 for CPT code 33278.**

33279 ***Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; transvenous stimulation or sensing lead(s) only***
The RUC reviewed the survey results from 24 electrophysiologists and cardiologists and recommends a work RVU of 5.42 based on a crosswalk to CPT code 33272 *Removal of subcutaneous implantable defibrillator electrode* (work RVU = 5.42, 39 minutes pre-service, 45 minutes intra-service time, and 151 minutes total time) which maintains relativity within the family. The RUC recommends 40 minutes of pre-service evaluation

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time, 3 minutes positioning time, 6 minutes scrub/dress/wait time, 120 minutes intra-service time, and 28 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99213 office visit, and 239 minutes total time. For this procedure, patients do not participate so they are under general anesthesia to mitigate the potential risk of vessel perforation. The RUC determined that the pre-service package is appropriate because the typical patient is complicated and presents with heart failure with reduced ejection fraction and subsequent CSA. Further, removal procedures are exceedingly complex given that lead extraction is in the azygos vein and there is risk of vascular or cardiac damage. The typical patient refers to the removal of the stimulation lead. Survey respondents indicated, and the RUC concurred, that a half-day discharge management and an office visit are typical to ensure the removal was successful.

This is a unique code within the family and is expected to be rarely performed. The rarity is due to the procedure only being performed in instances when only the lead requires extraction. For this lead only removal procedure, the patient is under general anesthesia. The lead is carefully freed from the surrounding tissue using fluoroscopic guidance. If it is not possible to remove the lead using fluoroscopic guidance, then standard extraction techniques are used. Once the lead can be removed and hemodynamic stability is verified, the incision is closed.

To support the recommended work RVU, the RUC compared the surveyed code to key reference service codes 33234 *Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular* (work RVU = 7.66, 50 minutes pre-service, 150 minutes intra-service and 292 minutes total time) and 33235 *Removal of transvenous pacemaker electrode(s); dual lead system* (work RVU = 9.90, 50 minutes pre-service, 170 minutes intra-service and 390 minutes total time). The reference codes are ideal comparators given that both codes are for the removal of an implantable device lead system. Given the similar work of the procedures, the surveyed code is valued appropriately since it requires less intra-service and total time. Although, the intensity of the work involved in the surveyed code is similar to that of the key reference services supporting the recommended work RVU. Additionally, the surveyed code is valued appropriately lower than family code 33278 given the lower intensity to only remove one lead. The RUC concluded that CPT code 33279 should be valued based on a direct work RVU crosswalk to CPT code 33272 and agreed the crosswalk value below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 5.42 for CPT code 33279.**

33280 ***Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; pulse generator only***

The RUC reviewed the survey results from 24 electrophysiologists and cardiologists and recommends a work RVU of 3.04 based on a crosswalk to CPT code 33241 *Removal of implantable defibrillator pulse generator only* (work RVU = 3.04, 35 minutes pre-service, 60 minutes intra-service, and 171 minutes total time) which maintains relativity within the family. The RUC recommends 18 minutes of pre-service evaluation time, 1 minute positioning time, 6 minutes scrub/dress/wait time, 60 minutes intra-service time, and 28 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99213 office visit, and 155 minutes total time. For this procedure, patients do not participate so they are under general anesthesia to mitigate the potential risk of vessel perforation. The RUC determined that the pre-service package is appropriate because the typical patient is complicated and presents with heart failure with reduced ejection fraction and subsequent CSA. Further, removal of the pulse generator is somewhat more straightforward than lead extraction making this procedure less complicated than others in the code family. Survey respondents indicated, and the RUC concurred, that a half-day discharge management and an office visit are typical to ensure the removal was successful.

This is a unique code within the family as it is expected to be rarely performed. The rarity is due to the procedure only being performed in instances when the currently implanted lead could not be removed at the same time as the pulse generator. For this pulse generator removal only

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procedure, the patient is under general anesthesia. The pulse generator is carefully freed from the surrounding tissue. Once the device is able be removed and hemodynamic stability is verified, the incision is closed.

To support the recommended work RVU of 3.04, the RUC compared the surveyed code to key reference service codes 33223 *Relocation of skin pocket for implantable defibrillator* (work RVU = 6.30, 48 minutes pre-service, 90 minutes intra-service and 230 minutes total time) and 33218 *Repair of single transvenous electrode, permanent pacemaker or implantable defibrillator* (work RVU = 5.82, 50 minutes pre-service, 90 minutes intra-service and 246 minutes total time). The reference codes are ideal comparators since both codes are for the relocation and repair of an implantable device. Given the similar work of the procedures, the surveyed code is valued appropriately lower than the reference codes due to the lower intra-service time, total time, and relative intensity. The RUC concluded that CPT code 33280 should be valued based on a direct work RVU crosswalk to CPT code 33241 and agreed the crosswalk value below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 3.04 for CPT code 33280.**

33281 ***Repositioning of phrenic nerve stimulator transvenous lead(s)***
The RUC reviewed the survey results from 25 electrophysiologists and cardiologists and recommends a work RVU of 6.00 based on the survey 25th percentile which maintains relativity within the family. The RUC recommends 40 minutes of pre-service evaluation time, 3 minutes positioning time, 6 minutes scrub/dress/wait time, 110 minutes intra-service time, and 28 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99214 office visit, and 246 minutes total time. For this procedure, patients are not under general anesthesia because they must participate during the procedure, therefore, 14 minutes of time for observing anesthesia care was removed as only 1 minute to apply topical anesthetic is needed. The RUC determined that the pre-service package is appropriate because the typical patient is complicated and presents with heart failure with reduced ejection fraction and subsequent CSA. Further, repositioning leads are exceedingly complex given that lead manipulation is in the brachiocephalic or pericardiophrenic vein and the subsequent surrounding cardiac tissue is delicate. Survey respondents indicated, and the RUC concurred, that a half-day discharge management and an office visit are typical to ensure the repositioning was successful.

For this repositioning procedure, the patient is under moderate sedation. The implanted pulse generator and lead are disconnected, and the lead is freed from the surrounding tissue using fluoroscopic guidance. If it is not possible to free and disconnect the lead from the implanted pulse generator using fluoroscopic guidance, then standard extraction techniques are used. The original lead is repositioned to a more satisfactory location within the left pericardiophrenic or the right brachiocephalic vein and analyzed. The patient is aroused and asked for feedback as to how closely the simulation represents a normal breath. Once the lead is repositioned, re-connected to the pulse generator, and hemodynamic stability is verified, the incision is closed.

To support the recommended work RVU of 6.00, the RUC compared the surveyed code to key reference service codes 33215 *Repositioning of previously implanted transvenous pacemaker or implantable defibrillator (right atrial or right ventricular) electrode* (work RVU = 4.92, 20 minutes pre-service, 60 minutes intra-service and 179 minutes total time) and 33208 *Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular* (work RVU = 8.52, 40 minutes pre-service, 60 minutes intra-service and 231 minutes total time). The reference codes are ideal comparators given that both codes are for the replacement and/or repositioning of an implantable device. Given the similar work of the procedures, the surveyed code is valued appropriately due to the significantly higher intra-service time and total time, albeit the low intensity compared to the reference codes. **The RUC recommends a work RVU of 6.00 for CPT code 33281.**

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33287 ***Removal and replacement of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming when performed; pulse generator***
The RUC reviewed the survey results from 26 electrophysiologists and cardiologists and recommends a work RVU of 6.05 based on the survey 25th percentile which maintains relativity within the family. The RUC recommends 18 minutes of pre-service evaluation time, 1 minute positioning time, 6 minutes scrub/dress/wait time, 70 minutes intra-service time, and 23 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99214 office visit, and 177 minutes total time. For this procedure, patients are not under general anesthesia because they may participate during the procedure. The RUC determined that the pre-service package is appropriate because the typical patient is complicated and presents with heart failure with reduced ejection fraction and subsequent CSA. Further, removal and replacement of the pulse generator is somewhat more straightforward than lead extraction making this procedure less complicated than others in the code family. Survey respondents indicated, and the RUC concurred, that a same day discharge and an office visit are typical to ensure the removal and replacement was successful.

For this pulse generator only removal and replacement service, the patient is under moderate sedation. The pulse generator is carefully freed from the surrounding tissue. Once the device is removed, the pocket is assessed, and a new pulse generator is implanted. The leads are reconnected, hemodynamic stability is verified, and the incision is closed.

To support the recommended work RVU of 6.05, the RUC compared the surveyed code to key references codes 33223 *Relocation of skin pocket for implantable defibrillator* (work RVU = 6.30, 48 minutes pre-service, 90 minutes intra-service and 230 minutes total time) and 33218 *Repair of single transvenous electrode, permanent pacemaker or implantable defibrillator* (work RVU = 5.82, 50 minutes pre-service, 90 minutes intra-service and 246 minutes total time). The reference codes are ideal comparators given that both codes are for the relocation and repair of an implantable device. Given the similar work of the procedures, the surveyed code is valued appropriately between the reference codes due to the lower intra-service time, total time, and higher relative intensity. For additional support, the RUC compared the surveyed code to MPC code 33207 *Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular* (work RVU = 7.80, 60 minutes intra-service, 234 minutes total time). The surveyed code is valued appropriately lower when compared to the MPC code given the lower total time and intensity, albeit the slightly higher intra-service time. **The RUC recommends a work RVU of 6.05 for CPT code 33287.**

33288 ***Removal and replacement of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming when performed; transvenous stimulation or sensing lead***
The RUC reviewed the survey results from 24 electrophysiologists and cardiologists and recommends a work RVU of 8.51 based on the survey 25th percentile which maintains relativity within the family. The RUC recommends 40 minutes of pre-service evaluation time, 3 minutes positioning time, 6 minutes scrub/dress/wait time, 120 minutes intra-service time, and 28 minutes immediate post-service time, 0.5-99238 discharge visit, 1-99214 office visit, and 246 minutes total time. For this procedure, patients are not under general anesthesia because they must participate during the procedure, therefore, 14 minutes of time for observing anesthesia care was removed as only 1 minute to apply topical anesthetic is needed. The RUC determined that the pre-service package is appropriate because the typical patient is complicated and presents with heart failure with reduced ejection fraction and subsequent CSA. Further, removal and repositioning leads are exceedingly complex given that lead manipulation is in the brachiocephalic or pericardiophrenic vein and the subsequent surrounding cardiac tissue is delicate. Survey respondents indicated, and the RUC concurred, that a half-day discharge management and an office visit are typical to ensure the removal and replacement was successful.

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For this lead only removal and replacement procedure, the patient is under moderate sedation. The lead is carefully freed from the surrounding tissue using fluoroscopic guidance. If it is not possible to remove and disconnect the lead from the implanted pulse generator using fluoroscopic guidance, then standard extraction techniques are used. The lead is then carefully removed, and replacement with a new lead begins. The replacement of the lead requires significant caution as to not lacerate the surrounding vessels. The stimulation lead is carefully repositioned if needed and then stimulation and impedance characteristics are completed using a phrenic nerve stimulation system analyzer. The patient is aroused and asked for feedback as to how closely the simulation represents a normal breath. The lead is stabilized and connected to the implantable pulse generator. Once hemodynamic stability is verified, the incision is closed.

To support the recommended work RVU, the RUC compared the surveyed code to key references codes 33235 *Removal of transvenous pacemaker electrode(s); dual lead system* (work RVU = 9.90, 50 minutes pre-service, 170 minutes intra-service and 390 minutes total time) and 61886 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays* (work RVU = 9.93, 50 minutes pre-service, 100 minutes intra-service and 385 minutes total time). The reference codes are ideal comparators since both codes are for the removal and insertion of an implantable device with leads. **The RUC recommends a work RVU of 8.51 for CPT code 33288.**

93150 ***Therapy activation of implanted phrenic nerve stimulator system including all interrogation and programming***
The RUC reviewed the survey results from 21 electrophysiologists and recommends a work RVU of 0.85 based on the survey 25th percentile which maintains relativity within the interrogation and programming family. The RUC recommends 10 minutes of pre-service evaluation time, 20 minutes intra-service time, 8 minutes immediate post-service time, and 38 minutes total time.

For this service, the phrenic nerve stimulator system is programmed for the first time post implantation. During implantation, the device is turned on and captures data for approximately 30 days until the initial programming visit. Evaluation parameters include respiratory rate, pulse amplitude, pulse duration, selection of sensing vector, battery status, electrode selection, timing of stimulation impedance, and patient compliance measurements for the implanted lead(s). The parameters are used to configure the initial settings and the patient is educated about interaction with the system. Any concomitant devices are paired, and all stimulation settings are evaluated for accuracy.

To support the recommended work RVU of 0.85, the RUC compared the surveyed code to top key references code 93281 *Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system* (work RVU = 0.85, 15 minutes intra-service and 32 minutes total time). Key reference service 93281 is an ideal comparison given that it is also for programming of an implanted device. The surveyed code is similarly valued due to the higher intra-service and total time, albeit lower intensity to perform the service.

For additional support, the RUC compared the surveyed code to MPC code 95971 *Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [Hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple spinal cord or peripheral nerve (eg, sacral nerve) neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional* (work RUV = 0.78, 20 minutes intra-service and 33

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minutes total time) and noted that both services have identical intra-service time, whereas the survey code typically involves 5 more minutes of total time. **The RUC recommends a work RVU of 0.85 for CPT code 93150.**

93151 ***Interrogation and programming (minimum one parameter) of implanted phrenic nerve stimulator system***
The RUC reviewed the survey results from 20 electrophysiologists and recommends a work RVU of 0.80 based on the survey 25th percentile, which maintains relativity within the interrogation and programming family. The RUC recommends 10 minutes of pre-service evaluation time, 20 minutes intra-service time, 6 minutes immediate post-service time, and 36 minutes total time.

For this service, the phrenic nerve stimulator system has previously undergone device programming. The device is evaluated for the following parameters: respiratory rate, pulse amplitude, pulse duration, selection of sensing vector, battery status, electrode selection, timing of stimulation impedance, and patient compliance measurements for the implanted lead(s). Based on the data and patient input, at least one of the parameters is adjusted for optimal device results.

To support the recommended work RVU of 0.80, the RUC compared the surveyed code to key reference codes 93280 *Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system* (work RVU = 0.77, 15 minutes intra-service and 32 minutes total time) and 93281 *Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system* (work RVU = 0.85, 15 minutes intra-service and 32 minutes total time). These codes are optimal comparators given that they are both for the programming of an implanted device. The surveyed code work RVU is appropriately bracketed by the key reference services as it has higher intra-service and total time, although relatively lower intensity to perform the service.

For additional support, the RUC compared the surveyed code to MPC codes 95971 *Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [Hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple spinal cord or peripheral nerve (eg, sacral nerve) neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional* (work RUV = 0.78, 20 minutes intra-service and 33 minutes total time) and noted that both services have similar intra-service time and similar total time, supporting the surveyed code work RVU of 0.80. **The RUC recommends a work RVU of 0.80 for CPT code 93151.**

93152 ***Interrogation and programming of implanted phrenic nerve stimulator system during polysomnography***
The RUC reviewed the survey results from 19 electrophysiologists and recommends a work RVU of 1.82 based on a crosswalk to CPT code 71275 (work RVU = 1.82, 25 minutes intra-service and 35 minutes total time) which maintains relativity within the interrogation and programming family. The RUC recommends 10 minutes of pre-service evaluation time, 25 minutes intra-service time, 10 minutes immediate post-service time, and 45 minutes total time.

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For this service, the phrenic nerve stimulator system has previously undergone device programming. This service is typically reported during polysomnography (ie, sleep study) to optimize the device for the patient. The service is only reported once for the entire sleep study. During the study, continuous evaluation is performed to change parameters (ie, respiratory rate, pulse amplitude, pulse duration, and patient arousal) based on the findings. The settings are then adjusted with the patient laying in three different positions and then one final programming adjustment is made to the device to improve performance. This service gathers a much larger amount of data to be interpreted and is therefore more intense and complex than the interrogation and programming codes in this family.

To support the recommended work RVU of 1.82, the RUC compared the surveyed code to MPC codes 92005 *Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; comprehensive, new patient, 1 or more visits* (work RVU = 1.82, 25 minutes intra-service and 40 minutes total time) and 74178 *Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions* (work RVU = 2.01, 30 minutes intra-service and 40 minutes total time). The surveyed code is valued appropriately when compared to MPC code 92005 given that the intra-service time is identical and the surveyed code has similar intensity. When compared to MPC code 74178, the surveyed code is valued appropriately lower given the lower intra-service time and relative intensity. The RUC concluded that CPT code 93152 should be valued based on a direct work RVU crosswalk to CPT code 71275 and agreed the crosswalk value below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 1.82 for CPT code 93152.**

93153 ***Interrogation, without programming, of implanted phrenic nerve stimulator system***
The RUC reviewed the survey results from 20 electrophysiologists and recommends a work RVU of 0.43 based on a crosswalk to CPT code 93288 *Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system, or leadless pacemaker system* (work RVU = 0.43, 10 minutes intra-service and 22 minutes total time). The crosswalk is a similar service to the surveyed code and maintains relativity within the interrogation and programming family. The RUC recommends 7 minutes of pre-service evaluation time, 13 minutes intra-service time, 5 minutes immediate post-service time, and 25 minutes total time.

For this service, the phrenic nerve stimulator system has previously undergone device programming. The device is interrogated to evaluate the following parameters: respiratory rate, pulse amplitude, pulse duration, selection of sensing vector, battery status, electrode selection, timing of stimulation impedance, and patient compliance measurements for the implanted lead(s). Based on the findings, none of the parameters are adjusted.

To support the recommended work RVU the RUC compared the surveyed code to top key references code 93280 *Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system* (work RVU = 0.77, 15 minutes intra-service and 32 minutes total time). The surveyed code is valued appropriately lower than the key reference services given the lower intra-service time, total time, and intensity.

For additional support, the RUC compared the surveyed code to CPT code 93924 *Noninvasive physiologic studies of lower extremity arteries, at rest and following treadmill stress testing, (ie, bidirectional Doppler waveform or volume plethysmography recording and analysis at rest with ankle/brachial indices immediately after and at timed intervals following performance of a standardized protocol on a motorized treadmill plus*

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recording of time of onset of claudication or other symptoms, maximal walking time, and time to recovery) complete bilateral study (work RVU = 0.50, 13 minutes intra-service and 20 minutes total time). The surveyed code is valued appropriately lower when compared to code 93924 given that they have similar times, however, the surveyed code is significantly less intense to perform. The RUC concluded that CPT code 93153 should be valued based on a direct work RVU crosswalk to CPT code 93288 and agreed the crosswalk value below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 0.43 for CPT code 93153.**

Practice Expense
The Practice Expense (PE) Subcommittee reviewed the direct practice expense inputs and made several modifications. For the 090-global codes, the supply input SA048 *pack, minimum multi-specialty visit* was reduced to one for codes 33278 and 33279 as there is now only one post-operative visit not two, and SA054, *pack, post-op incision care (suture)* was removed for all the codes in the series as it is not typical for the removal codes. Additionally, the equipment input EF031 *table, power* was switched to EF023 *table, exam*.

For the XXX-global interrogation and programming codes, the pre-service times were adjusted to add 3 minutes for CA011, *provide education/obtain consent* to CPT codes 93150, 93151, and 93153. For CPT code 93152, it was noted that the code is duplicative of the sleep study so SA048 *pack, minimum multi-specialty visit* and the minutes for EF023 *table, exam* were removed. Further, a new equipment item, *phrenic nerve stimulator programmer with wand,* was added to each code respectively. **The RUC recommends the direct practice expense inputs as modified by the PE Subcommittee.**

New Technology
CPT codes 33276, 33277, 33278, 33279, 33280, 33281, 33287, 33288, 93150, 93151, 93152, and 93153 will be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation, patient population, and utilization assumptions.

RUC Database Flag
The RUC and specialty societies agreed that CPT codes 33276, 33277, 33278, 33279, 33280, 33281, 33287, 33288, 93150, 93151, 93152, and 93153 should be marked as "Do not use to validate physician work" in the RUC database given the low survey responses.

RAW Flag
The RUC recommends flagging CPT codes 33276, 33277, 33278, 33279, 33280, 33281, 33287, 33288, 93150, 93151, 93152 and 93153 since the survey responses were below 30. These services will be reviewed by the Relativity Assessment Workgroup in three years. At that time the specialty societies will submit an action plan indicating whether these services should be resurveyed or referred to the CPT Editorial Panel for deletion or revision to a Category III code.

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CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Cardiovascular System **Heart and Pericardium** **Pacemaker or Implantable Defibrillator**				
#33274		*Transcatheter insertion or replacement of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography) and device evaluation (eg, interrogation or programming), when performed*		
#33275		*Transcatheter removal of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography), when performed* *(Do not report 33275 in conjunction with 33274)* *(Do not report 33274, 33275 in conjunction with femoral venography [75820], fluoroscopy [76000, 77002], ultrasound guidance for vascular access [76937], right ventriculography [93566])* *(Do not report 33274, 33275 in conjunction with 93451, 93453, 93456, 93457, 93460, 93461, 93593, 93594, 93596, 93597, 93598, unless complete right heart catheterization is performed for indications distinct from the leadless pacemaker procedure)* (Do not report 33274, 33275 in conjunction with dual chamber leadless pacemaker codes 0795T, 0796T, 0797T, 0798T, 0799T, 0800T, 0801T, 0802T, 0803T) (Do not report 33274, 33275 when the right ventricular single chamber leadless pacemaker is part of a complete dual chamber leadless pacemaker system) *(For subsequent leadless pacemaker device evaluation, see 93279, 93286, 93288, 93294, 93296,* 0804T) *(For insertion, replacement, repositioning, and removal of pacemaker systems with leads, see 33202, 33203, 33206, 33207, 33208, 33212, 33213, 33214, 33215, 33216, 33217, 33218, 33220, 33221, 33227, 33228, 33229, 33233, 33234, 33235, 33236, 33237)* (For dual chamber leadless pacemaker, see 0795T, 0796T, 0797T, 0798T, 0799T, 0800T, 0801T, 0802T, 0803T) (For insertion or replacement of a leadless pacemaker into the right ventricle as part of a complete dual chamber leadless pacemaker system, use 0797T) (For removal of right ventricular pacemaker component of a complete dual chamber leadless pacemaker system, use 0800T)		

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Phrenic Nerve Stimulation System (Blue Heading)

An insertion of a phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead and is reported with 33276. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. Rarely, a separate sensing lead may be needed to augment system function and, when performed at time of system insertion, is reported with 33277. This sensing lead is placed transvenously into the azygos vein. Initial system placement includes initiation of diagnostic mode and associated system evaluation. Codes 33276, 33277, 33278, 33279, 33280, 33281, 33287, 33288 include vessel catheterization, and all imaging guidance required for the procedure when performed. For therapeutic activation of the phrenic nerve stimulation system, see 93150, 93151, 93152, 93153.

●33276	K1	Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s]) including vessel catheterization, all imaging guidance, and pulse generator initial analysis with diagnostic mode activation when performed (Do not report 33276 in conjunction with 93150, 93151, 93152, 93153)	090	9.50
✚●33277	K2	Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code for primary procedure) (Use 33277 in conjunction with 33276, 33287) (For insertion of a phrenic nerve sensing lead other than at initial insertion of the phrenic nerve stimulator system, use 33999)	ZZZ	5.43
●33278	K3	Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; system, including pulse generator and lead(s)	090	9.55
●33279	K4	transvenous stimulation or sensing lead(s) only (Use 33279 once for removal of one or more lead[s])	090	5.42
●33280	K5	pulse generator only (Do not report 33278, 33279, 33280 in conjunction with 33276, 33277, 33281, 33287, 33288)	090	3.04
●33281	K6	Repositioning of phrenic nerve stimulator transvenous lead(s) (Report 33281 only once per patient per day)	090	6.00

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		(Do not report 33281 in conjunction with 33276, 33277)		
●33287	K7	Removal and replacement of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming when performed; pulse generator (Do not report 33287 in conjunction with 33276, 33278)	090	6.05
●33288	K8	transvenous stimulation or sensing lead (Use 33288 once for removal of one or more lead[s]) (Do not report 33288 in conjunction with 33277, 33279, 33281)	090	8.51
Cardiovascular **Implantable, Insertable, and Wearable Cardiac Device Evaluations** **Phrenic Nerve Stimulation System (Blue Heading)** Phrenic nerve stimulation system therapy activation (93150) is performed once (after 30 days from implantation to allow for lead stabilization). Activation includes device evaluation and programming services: rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selection output modulation, cycling, impedance, and patient compliance measurements (eg, hours of therapy, sleeping position, and activity [sleep activity, awake activity, time in a sleep position]). Subsequent interrogation only (93153) or interrogation and programming (93151, 93152) may be performed to evaluate device function and incrementally optimize performance. For patients that require programming during a polysomnogram, report 93152 once, regardless of how many programming changes are made over the course of the polysomnogram.				
●93150	K9	Therapy activation of implanted phrenic nerve stimulator system including all interrogation and programming (Do not report 93150 in conjunction with 33276, 33277, 33278, 33279, 33280, 33281, 93151, 93152, 93153)	XXX	0.85
●93151	K10	Interrogation and programming (minimum one parameter) of implanted phrenic nerve stimulator system (Do not report 93151 in conjunction with 93150, 93152, 93153) (For interrogation without programming, use 93153)	XXX	0.80

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●93152	K11	Interrogation and programming of implanted phrenic nerve stimulator system during polysomnography (Do not report 93152 in conjunction with 33276, 93150, 93151, 93153) (For polysomnography, see 95808, 95810, 95811, 95782, 95783)	XXX	1.82
●93153	K12	Interrogation, without programming, of implanted phrenic nerve stimulator system (Do not report 93153 in conjunction with 33276, 93150, 93151, 93152)	XXX	0.43

Neurology and Neuromuscular Procedures
Sleep Medicine Testing

95808 *Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist*

95810 *age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist*

95811 *age 6 years or older, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bilevel ventilation, attended by a technologist*

#95782 *younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist*

#95783 *younger than 6 years, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bi-level ventilation, attended by a technologist*

(For interrogation and programming of a phrenic nerve stimulator system during a polysomnogram, use 93152)

Category III Codes
~~Phrenic Nerve Stimulation System~~

~~A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery), one stimulation lead (electrode), and one sensing lead (electrode). Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein.~~

~~If replacing less than a complete system, report 0425T, 0426T, and/or 0427T (for sensing lead, stimulation lead or pulse generator respectively). If all three components are replaced, report only 0424T in conjunction with codes for removal of each of the components (0428T, 0429T, 0430T).~~

~~Codes 0424T-0433T include vessel catheterization, all image guidance required for the procedure, and interrogation and programming, when performed. Interrogation device evaluation and programming device evaluation include parameters of rate, pulse amplitude, pulse duration,~~

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~~configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements. For patients that require programming during an overnight sleep study, report 0436T once, regardless of how many programming changes are made during the sleep study.~~

~~0424T Insertion or replacement of neurostimulator system for treatment of central sleep apnea; complete system (transvenous placement of right or left stimulation lead, sensing lead, implantable pulse generator)~~

~~0425T sensing lead only~~

~~0426T stimulation lead only~~

~~0427T pulse generator only~~

~~(Do not report 0425T, 0426T, 0427T in conjunction with 0424T)~~

(0424T, 0425T, 0426T, 0427T have been deleted)

~~(For replacement of phrenic nerve stimulator system, use 33287)~~

(For insertion of a phrenic nerve stimulator transvenous sensing lead, use 33277)

(For removal and replacement of phrenic nerve stimulator transvenous stimulation or sensing lead[s], use 33288)

(For removal and replacement of phrenic nerve stimulator pulse generator, use 33287)

~~0428T Removal of neurostimulator system for treatment of central sleep apnea; pulse generator only~~

~~0429T sensing lead only~~

~~0430T stimulation lead only~~

~~(Report 0429T, 0430T once for each transvenous sensing or stimulation lead removed)~~

~~(For removal of the entire system, report 0428T for pulse generator removal plus 0429T or 0430T for each transvenous lead removal)~~

(0428T, 0429T, 0430T have been deleted)

(For removal of phrenic nerve stimulator pulse generator, use 33280)

(For removal of phrenic nerve stimulator sensing or stimulation lead[s], use 33279)

~~(For removal of phrenic nerve stimulator stimulation lead, use 33279)~~

~~0431T Removal and replacement of neurostimulator system for treatment of central sleep apnea, pulse generator only~~

~~(For removal and replacement of the pulse generator plus all three leads, report 0424T in conjunction with 0428T, 0429T, 0430T)~~

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(0431T has been deleted)

(For removal and replacement of phrenic nerve stimulator pulse generator, use 33287)

~~0432T Repositioning of neurostimulator system for treatment of central sleep apnea; stimulation lead only~~

~~0433T sensing lead only~~

~~(Do not report 0432T, 0433T in conjunction with 0424T, 0425T, 0426T, 0427T)~~

(0432T, 0433T have been deleted)

(For repositioning of phrenic nerve stimulator transvenous lead[s], use 33281)

~~0434T Interrogation device evaluation implanted neurostimulator pulse generator system for central sleep apnea~~

(0434T has been deleted)

(For interrogation device evaluation of implanted phrenic nerve stimulator system, use 93153)

~~0435T Programming device evaluation of implanted neurostimulator pulse generator system for central sleep apnea; single session~~

~~0436T during sleep study~~

~~(Do not report 0434T, 0435T, 0436T in conjunction with 0424T, 0425T, 0426T, 0427T, 0428T, 0429T, 0430T, 0431T, 0432T, 0433T)~~

~~(Do not report 0436T in conjunction with 0435T)~~

~~(Report 0436T once per sleep study)~~

(0435T, 0436T have been deleted)

(For interrogation and programming of implanted phrenic nerve stimulator system, use 93151)

(For interrogation and programming of implanted phrenic nerve stimulator system during a polysomnography, use 93152)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33276 Tracking Number K1 Original Specialty Recommended RVU: **10.75**
Presented Recommended RVU: **9.50**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **9.50**

CPT Descriptor: Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s]) including vessel catheterization, all imaging guidance, and pulse generator initial analysis with diagnostic mode activation when performed (Do not report 33276 in conjunction with 93150, 93151, 93152, 93153)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: a 65-year-old male has a history of excessive daytime sleepiness and insomnia. the patient recently underwent a polysomnogram and was diagnosed with central sleep apnea with an apnea hypopnea index of 50 events/hour.

Percentage of Survey Respondents who found Vignette to be Typical: 89%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 100% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 54% , Overnight stay-less than 24 hours 46% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Identify additional equipment that may be necessary in the event of a pericardiphrenic vein stenosis. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Assess patient's airway and respiratory status to evaluate the type of intravenous sedation that is required and safe. Review the need for patient to take deep breaths through a restricted airway at times. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues. Ensure all technical personnel have been familiarized with the phrenic nerve stimulator implantation technique and are fully familiar with all required equipment. Supervise selection of all equipment, including leads and generator, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under conscious sedation. Local anesthesia is administered.

Description of Intra-Service Work: Venous access is made into the subclavian or cephalic vein via two separate access sites. A subcutaneous pocket is created in the pectoral region using blunt dissection. A guiding sheath is placed in the superior vena cava and the directed to the left brachiocephalic vein. A non-selective contrast injection is performed to identify the ostia of the left pericardiophrenic vein. Once identified, a subselect sheath is placed through the guiding sheath and then a coronary guidewire is used to try to identify the left pericardiophrenic vein. Contrast injection is performed at different fluoroscopy angles in order to identify the left pericardiophrenic vein. Once identified and cannulated with a coronary angiography wire, contrast injection is performed to determine the caliber of the pericardiophrenic vein and if it is large enough to accommodate the pacing lead. The initial coronary angiography is exchanged for a stiffer wire to facilitate advancing the lead to the left pericardiophrenic vein. If the stimulation lead cannot be placed in left pericardiophrenic vein the guiding sheath is exchanged for a short introducer sheath in the right subclavian vein. An alternate stimulation lead is is placed into the right brachiocephalic vein using standard transvenous implantation techniques. Once the stimulation lead is in position, adequate stimulation and impedance characteristics are confirmed using a phrenic nerve stimulation system analyzer. The patient is aroused and is asked for feedback as to how closely the simulation represents a normal breath. They are also asked if there is any discomfort associated with stimulation. The stimulation lead is repositioned if needed to ensure adequate long-term stimulation of the nerve. The lead is stabilized using suture sleeves, and is connected to the

implantable pulse generator. At this point, the need for a sensing lead is determined. The leads are connected to the pulse generator. Device and leads are inserted into the pocket and the incision is closed.

Description of Post-Service Work: Ensure vital signs are stable and normal upon arrival to recovery area. Write postoperative orders. Communicate with family and referring physicians. Review results of procedure with patient when sedation wears off. Generate procedure note and send to referring providers. Review postoperative PA and lateral chest X ray for lead position. Check the incision and pocket for bleeding and hematoman prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotic prophylaxis). Hold extensive discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. Explain process of device activation that occurs 1 month post implant. The patient returns to the office in 2-4 weeks for device site wound check.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	HRS, ACC					
CPT Code:	33276					
Sample Size:	573	**Resp N:**	28			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	1.00	**3.00**	6.00	20.00
Survey RVW:	2.00	9.50	**10.75**	14.00	35.00
Pre-Service Evaluation Time:			**48.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**16.00**		
Intra-Service Time:	10.00	120.00	**120.00**	180.00	240.00

Immediate Post Service-Time:	**25.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**80.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **2.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	33276	**Recommended Physician Work RVU: 9.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**40.00**	**40.00**	**0.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**20.00**	**-14.00**
Intra-Service Time:		**120.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**25.00**	**28.00**	**-3.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**40.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33270	090	9.10	**RUC Time**

CPT Descriptor Insertion or replacement of permanent subcutaneous implantable defibrillator system, with subcutaneous electrode, including defibrillation threshold evaluation, induction of arrhythmia, evaluation of sensing for arrhythmia termination, and programming or reprogramming of sensing or therapeutic parameters, when performed

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33208	090	8.52	**RUC Time**

CPT Descriptor Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
54437	090	11.50	**RUC Time**	54

CPT Descriptor 1 Repair of traumatic corporeal tear(s)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
57240	090	10.08	**RUC Time**	9,026

CPT Descriptor 2 Anterior colporrhaphy, repair of cystocele with or without repair of urethrocele, including cystourethroscopy, when performed

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 7 **% of respondents:** 25.0 **%**

Number of respondents who choose 2nd Key Reference Code: 6 **% of respondents:** 21.4 **%**

TIME ESTIMATES (Median)

	CPT Code: 33276	Top Key Reference CPT Code: 33270	2nd Key Reference CPT Code: **33208**
Median Pre-Service Time	49.00	39.00	55.00
Median Intra-Service Time	120.00	90.00	60.00
Median Immediate Post-service Time	25.00	25.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	40.00
Median Discharge Day Management Time	19.0	38.00	38.00
Median Office Visit Time	40.0	40.00	23.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**253.00**	**232.00**	**246.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	14%	14%	72%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	0%	100%
Physical effort required	0%	14%	86%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	14%	86%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	17%	67%	16%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	0%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	17%	83%
Physical effort required	0%	33%	67%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	17%	33%	50%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33276

The societies convened a panel of physicians to review the survey data. Code 33276 will be used to report insertion of a phrenic nerve stimulation system. As described above, the panel reviewed the pre-service time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures with 3 minutes removed to comport with the survey.

The key reference service is 33270, insertion or replacement of a subcutaneous ICD system. This comparison is helpful as it also involves insertion and placement device hardware and leads. 86% of key reference respondents found surveyed code 33276 to be more or much more intense/complex than 33270.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen twice in the office during the 90-day global period. That experience comports with that of the panel.

The societies **recommend the survey 25th wRVU of 9.50 with times of 49/120/25, plus one 99214 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0424T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologist How often? Rarely

Specialty Cardiologist How often? Rarely

Specialty Neurologist How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 241
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of these procedures performed in the last full calendar year (2021) per the manufacturer.

Specialty Electrophysiologist Frequency 200 Percentage 82.98 %

Specialty Cardiologist Frequency 21 Percentage 8.71 %

Specialty Neurologist Frequency 20 Percentage 8.29 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 133
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the 241 procedures performed in 2021 were Medicare patients.

Specialty Electrophysiologist Frequency 107 Percentage 80.45 %

Specialty Cardiologist Frequency 14 Percentage 10.52 %

Specialty Neurologist Frequency 12 Percentage 9.02 %

Do many physicians perform this service across the United States? No

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33270

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33277 Tracking Number K2 Original Specialty Recommended RVU: **7.49**
Presented Recommended RVU: **5.43**
Global Period: ZZZ Current Work RVU: **N/A** RUC Recommended RVU: **5.43**

CPT Descriptor: Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code for primary procedure) (Use 33277 in conjunction with 33276, 33287) (For insertion of a phrenic nerve sensing lead other than at initial insertion of the phrenic nerve stimulator system, use 33999)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old male has a history of excessive daytime sleepiness and insomnia. The patient recently underwent a polysomnogram and was diagnosed with central sleep apnea with an apnea hypopnea index of 50 events/hour. A phrenic nerve stimulator system is recommended. During system implantation, an additional sensing lead is determined to be necessary to optimize system function. [Note: this is an add-on service. only consider the additional work of placing a sensing lead.]

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: The patient is undergoing a subcutaneous implantation of a neurostimulator system, and requires the additional placement of a sensing lead. A guiding sheath is advanced to the superior vena cava. Utilizing contrast injections from different fluoroscopic views, a subselect sheath and a stiff guidewire, the azygous vein is cannulated. In a telescoping manner, the subselect and then guideing sheath are advanced over the guidewire into the azgous vein. The subselect sheath and guidewire are removed. A bipolar coronary sinus lead is placed over a coronary guidewire into the guiding sheath. The coronary guidewire is advanced to the intercostal vein at the level of the dome of the diaphragm and the lead is advanced over a guidewire. Once the sensing lead is placed, the lead is stabilized using suture sleeves. The lead is stabilized using suture sleeves and is connected to the implantable pulse generator.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	HRS, ACC					
CPT Code:	33277					
Sample Size:	573	**Resp N:**	24			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	3.00	10.00
Survey RVW:	2.00	5.43	**7.49**	9.00	20.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	60.00	**120.00**	180.00	360.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	33277	**Recommended Physician Work RVU: 5.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**120.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93592	ZZZ	8.00	**RUC Time**

CPT Descriptor Percutaneous transcatheter closure of paravalvular leak; each additional occlusion device (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93609	ZZZ	4.99	**RUC Time**

CPT Descriptor Percutaneous transcatheter closure of paravalvular leak; each additional occlusion device (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
34709	ZZZ	6.50	**RUC Time**	3,632

CPT Descriptor 1 Placement of extension prosthesis(es) distal to the common iliac artery(ies) or proximal to the renal artery(ies) for endovascular repair of infrarenal abdominal aortic or iliac aneurysm, false aneurysm, dissection, penetrating ulcer, including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, and treatment zone angioplasty/stenting, when performed, per vessel treated (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
34715	ZZZ	6.00	**RUC Time**	206

CPT Descriptor 2 Open axillary/subclavian artery exposure for delivery of endovascular prosthesis by infraclavicular or supraclavicular incision, unilateral (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 7 **% of respondents:** 29.1 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 16.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 33277	Top Key Reference CPT Code: 93592	2nd Key Reference CPT Code: **93609**
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	120.00	60.00	90.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**120.00**	**60.00**	**90.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	29%	29%	42%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	43%	57%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	29%	71%
Physical effort required	0%	43%	57%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	43%	57%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	50%	25%	25%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	50%	50%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	50%	50%
Physical effort required	0%	75%	25%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	75%	25%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, these patients cannot be operated on under general anesthesia because they must participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33277

The societies convened a panel of physicians to review the survey data. Code 33277 will be used to report insertion of an additional phrenic stimulator lead as an add-on service with no preservice or post-service time.

The key reference service is 93592, transcatheter closure of a paravavular leak. This comparison is helpful as it also involves a cardiac service where a significant portion of the underlying procedure is repeated. While procedurally similar, this is a longer, less intense service. 71% of key reference respondents found surveyed code 33277 to be more or much more intense/complex than 93592.

The societies **recommend the survey 25th percentile wRVU of 5.43 with times of 0/120/0.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0425T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologists How often? Sometimes

Specialty Cardiologists How often? Sometimes

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 9
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed in the last full calendar year (2021) per the manufacturer.

Specialty Electrophysiologists Frequency 7 Percentage 77.77 %

Specialty Cardiologists Frequency 1 Percentage 11.11 %

Specialty Neurologists Frequency 1 Percentage 11.11 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 5 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Electrophysiologists Frequency 4 Percentage 80.00 %

Specialty Cardiologists Frequency 1 Percentage 20.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment
Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33270

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33278 Tracking Number K3 Original Specialty Recommended RVU: **10.51**
Presented Recommended RVU: **9.55**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **9.55**

CPT Descriptor: Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; system, including pulse generator and lead(s)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old male has a history of central sleep apnea treated successfully with a phrenic nerve stimulator system. After a recent skin infection, the patient develops bacteremia that persists with signs of pocket infection; complete removal of the system is recommended.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 100% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 42% , Overnight stay-less than 24 hours 50% , Overnight stay-more than 24 hours 8%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Identify additional equipment that may be necessary in the event of a pericardiphrenic vein stenosis. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues, and lead extraction equipment. Ensure all technical personnel have been familiarized with the lead extraction procedure and are fully familiar with all required equipment. Supervise selection of all equipment, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under anesthesia.

Description of Intra-Service Work: An incision is made over the previously implanted pulse generator. The device and leads are freed from the surrounding tissue and hemostasis is achieved. The lead is disconnected from the pulse generator and the pulse generator is removed. The suture collars of the leads are freed from surrounding tissue. A stylet or stiff guidewire is inserted into the lead and gentle traction is applied under fluoroscopic guidance. If the lead is unable to be removed with manual traction under fluoroscopic guidance, then a locking stylet is inserted into the lead. Next, a manual rotational extraction sheath or a laser sheath is advanced over the lead and standard lead extraction techniques are used to remove the lead. Once the lead is removed and hemodynamic stability is verified, the incision is closed.

Description of Post-Service Work: Check the incision and pocket for bleeding, hematoma, and cellulitis prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotics). Hold extensive discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. The patient returns to the office in 2-4 weeks for device site wound check and counseling on next steps with disease management and any future device procedures.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023		
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy		
Specialty Society(ies):	HRS, ACC		
CPT Code:	33278		
Sample Size:	573	**Resp N:**	24
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	2.00	5.00
Survey RVW:	2.00	9.55	**10.51**	12.10	25.00
Pre-Service Evaluation Time:			**55.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**20.00**		
Intra-Service Time:	10.00	90.00	**120.00**	150.00	200.00

Immediate Post Service-Time:	**29.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	33278	**Recommended Physician Work RVU: 9.55**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**40.00**	**40.00**	**0.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**20.00**	**-14.00**
Intra-Service Time:		**120.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**28.00**	**28.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33235	090	9.90	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); dual lead system

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33234	090	7.66	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
54437	090	11.50	**RUC Time**	54

CPT Descriptor 1 Repair of traumatic corporeal tear(s)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
57240	090	10.08	**RUC Time**	9,026

CPT Descriptor 2 Anterior colporrhaphy, repair of cystocele with or without repair of urethrocele, including cystourethroscopy, when performed

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 18 **% of respondents:** 75.0 **%**

Number of respondents who choose 2nd Key Reference Code: 2 **% of respondents:** 8.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 33278	Top Key Reference CPT Code: 33235	2nd Key Reference CPT Code: **33234**
Median Pre-Service Time	49.00	50.00	50.00
Median Intra-Service Time	120.00	170.00	150.00
Median Immediate Post-service Time	28.00	60.00	60.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	0.00	0.00
Median Office Visit Time	23.0	110.00	32.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**239.00**	**390.00**	**292.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	44%	22%	34%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	6%	50%	44%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	50%	50%
Physical effort required	0%	56%	44%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	50%	50%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	0%	50%	50%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	0%	100%
Physical effort required	0%	50%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	0%	100%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33278

The societies convened a panel of physicians to review the survey data. Code 33278 will be used to report removal of a phrenic nerve stimulation system. As described above, the panel reviewed the preservice time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures.

The key reference service is 33235, removal of transvenous pacemaker electrodes. This comparison is helpful as it also involves removal of device leads. While procedurally similar, this is a longer, less intense service. 86% of key reference respondents found surveyed code 33276 to be more or much more intense/complex than 33270.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen twice in the office during the 90-day global period. However, the panel agreed that since the system is removed the patient would not be expected to return for two office visits to undergo stimulation titration.

The societies **recommend the survey 25th percentile wRVU of 9.55 with times of 49/120/28, plus one 99213 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0428T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologists How often? Rarely

Specialty Cardiologists How often? Rarely

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 3
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed in the last full calendar year (2021) per the manufacturer.

Specialty Electrophysiologists Frequency 3 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Electrophysiologists Frequency 2 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33235

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33279 Tracking Number K4 Original Specialty Recommended RVU: **9.71**
Presented Recommended RVU: **5.42**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **5.42**

CPT Descriptor: Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; transvenous stimulation or sensing lead(s) only
(use 33279 once for removal of one or more lead[s])

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old male has a prior history of central sleep apnea and phrenic nerve stimulator system previously had removal of the pulse generator for radiation therapy. He now presents with bacteremia and infection of the abandoned stimulation lead; complete lead removal is recommended.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 96% , In the ASC 4%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 48% , Overnight stay-less than 24 hours 44% , Overnight stay-more than 24 hours 8%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Identify additional equipment that may be necessary in the event of a pericardiphrenic vein stenosis. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Assess patient's airway and respiratory status to evaluate the type of intravenous sedation and anesthesia that is required and safe. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues, and lead extraction equipment. Ensure all technical personnel have been familiarized with the lead extraction procedure and are fully familiar with all required equipment. Supervise selection of all equipment, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under anesthesia.

Description of Intra-Service Work: An incision is made over the previously implanted pulse generator. The leads are freed from the surrounding tissue and hemostasis is achieved. The lead is disconnected from the pulse generator. The suture collars of the leads are freed from surrounding tissue. A stylet or stiff guidewire is inserted into the lead and gentle traction is applied under fluoroscopic guidance. If the lead is unable to be removed with manual traction under fluoroscopic guidance, then a locking stylet is inserted into the lead. Next, a manual rotational extraction sheath or a laser sheath is advanced over the lead and standard lead extraction techniques are used to remove the lead. Once the lead is removed and hemodynamic stability is verified, the incision is closed.

Description of Post-Service Work: Check the incision and pocket for bleeding, hematoma, and cellulitis prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotics). Hold extensive discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. The patient returns to the office in 2-4 weeks for device site wound check and counseling on next steps with disease management and any future device procedures.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023		
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy		
Specialty Society(ies):	HRS, ACC		
CPT Code:	33279		
Sample Size:	573	**Resp N:**	24
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	1.00	5.00
Survey RVW:	2.00	7.66	**9.71**	10.88	20.00
Pre-Service Evaluation Time:			**55.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**20.00**		
Intra-Service Time:	10.00	90.00	**120.00**	120.00	195.00

Immediate Post Service-Time:	**28.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	33279	**Recommended Physician Work RVU: 5.42**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**40.00**	**40.00**	**0.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**20.00**	**-14.00**
Intra-Service Time:		**120.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**28.00**	**28.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33234	090	7.66	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33235	090	9.90	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); dual lead system

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
50590	090	9.77	**RUC Time**	54,658

CPT Descriptor 1 Lithotripsy, extracorporeal shock wave

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
14060	090	9.23	**RUC Time**	90,113

CPT Descriptor 2 Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 9 **% of respondents:** 37.5 **%**

Number of respondents who choose 2nd Key Reference Code: 9 **% of respondents:** 37.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 33279	Top Key Reference CPT Code: 33234	2nd Key Reference CPT Code: **33235**
Median Pre-Service Time	49.00	50.00	50.00
Median Intra-Service Time	120.00	150.00	170.00
Median Immediate Post-service Time	28.00	60.00	60.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	0.00	0.00
Median Office Visit Time	23.0	32.00	110.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**239.00**	**292.00**	**390.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	33%	34%	33%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	44%	56%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	44%	56%
Physical effort required	0%	44%	56%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	44%	56%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	45%	33%	22%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	11%	34%	55%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	45%	55%
Physical effort required	0%	67%	33%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	56%	44%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33279

The societies convened a panel of physicians to review the survey data. Code 33279 will be used to report removal of a phrenic nerve stimulation lead. As described above, the panel reviewed the preservice time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures.

The key reference service is 33234, removal of a pacemaker system. This comparison is helpful as it also involves removal of implanted stimulation hardware. 67% of key reference respondents found surveyed code 33279 to be more or much more intense/complex than 33234.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen twice in the office during the 90-day global period. However, the panel agreed that since the electrode is removed the patient would not be expected to return for two office visits to undergo stimulation titration.

The societies **recommend a crosswalk to CPT code 33272 wRVU of 5.42 with times of 49/120/28, plus one 99213 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0429T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologist	How often? Rarely
Specialty Cardiologists	How often? Rarely
Specialty Neurologists	How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 0
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure has not been performed at any point in the last 3 years per the manufacturer.

Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure has not been performed at any point in the last 3 years per the manufacturer.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency 0	Percentage	%

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33234

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33280 Tracking Number K5 Original Specialty Recommended RVU: **6.90**
Presented Recommended RVU: **3.04**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **3.04**

CPT Descriptor: Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; pulse generator only
(Do not report 33278, 33279, 33280 in conjunction with 33276, 33277, 33281, 33287, 33288)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67-year-old male with previously placed phrenic nerve stimulation system requires radiation therapy. Existing generator is in the planned path of therapy beam; therefore, the pulse generator removal is required.

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 92% , In the ASC 8%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 68% , Overnight stay-less than 24 hours 32% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Assess patient's airway and respiratory status to evaluate the type of intravenous sedation and anesthesia that is required and safe. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues. Ensure all technical personnel have been familiarized with the procedure and are fully familiar with all required equipment. Supervise selection of all equipment, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under conscious sedation. Local anesthesia is administered.

Description of Intra-Service Work: An incision is made over the previously implanted pulse generator. The device and leads are freed from the surrounding tissue and hemostasis is achieved. The lead is disconnected from the pulse generator and the pulse generator is removed. Once the device is removed and hemodynamic stability is verified, the incision is closed

Description of Post-Service Work: Check the incision and pocket for bleeding, hematoma, and cellulitis prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotics). Hold extensive discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. The patient returns to the office in 2-4 weeks for device site wound check and counseling on next steps with disease management and any future device procedures.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	HRS, ACC					
CPT Code:	33280					
Sample Size:	573	**Resp N:**	24			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	1.00	5.00
Survey RVW:	2.00	6.00	**6.90**	10.00	19.43
Pre-Service Evaluation Time:			**50.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**18.00**		
Intra-Service Time:	10.00	30.00	**60.00**	113.00	180.00

Immediate Post Service-Time:	**30.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

2-FAC Diff Pat/Straightfor Proc(no sedation/anes)

CPT Code:	33280	**Recommended Physician Work RVU: 3.04**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**18.00**	**18.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**6.00**	**0.00**
Intra-Service Time:		**60.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**28.00**	**28.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	0.00	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	19.00	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	23.00	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33223	090	6.30	**RUC Time**

CPT Descriptor Relocation of skin pocket for implantable defibrillator

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33218	090	5.82	**RUC Time**

CPT Descriptor Repair of single transvenous electrode, permanent pacemaker or implantable defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
26113	090	7.13	**RUC Time**	1,832

CPT Descriptor 1 Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); 1.5 cm or greater

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52630	090	6.55	**RUC Time**	5,906

CPT Descriptor 2 Transurethral resection; residual or regrowth of obstructive prostate tissue including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included)

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 7 **% of respondents:** 29.1 **%**

Number of respondents who choose 2nd Key Reference Code: 5 **% of respondents:** 20.8 **%**

TIME ESTIMATES (Median)

	CPT Code: 33280	Top Key Reference CPT Code: 33223	2nd Key Reference CPT Code: **33218**
Median Pre-Service Time	25.00	48.00	50.00
Median Intra-Service Time	60.00	90.00	90.00
Median Immediate Post-service Time	28.00	60.00	60.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	0.00	0.00
Median Office Visit Time	23.0	32.00	46.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**155.00**	**230.00**	**246.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	86%	14%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	100%	0%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	100%	0%
Physical effort required	0%	86%	14%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	100%	0%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	20%	20%	20%	40%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	60%	40%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	60%	40%
Physical effort required	0%	60%	40%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	20%	40%	40%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33280

The societies convened a panel of physicians to review the survey data. Code 33280 will be used to report removal of a phrenic nerve stimulation pulse generator. As described above, the panel reviewed the preservice time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures.

The key reference service is 33223, relocation of skin pocket for an ICD. This comparison is helpful as it also involves removal of implanted stimulation hardware. 36% of key reference respondents found surveyed code 33280 to be of similar intensity/complexity to 33223.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen twice in the office during the 90-day global period. Since the generator is removed the patient would not be expected to return for two office visits to undergo stimulation titration.

The societies **recommend a crosswalk to CPT code 33241 wRVU of 3.04 with times of 25/60/28, plus one 99213 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0428T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologist How often? Rarely

Specialty Cardiologists How often? Rarely

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 3
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed in the last full calendar year (2021) per the manufacturer.

Specialty Electrophysiologists Frequency 3 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Electrophysiologists Frequency 2 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33281 Tracking Number K6 Original Specialty Recommended RVU: **9.00**
Presented Recommended RVU: **6.00**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **6.00**

CPT Descriptor: Repositioning of phrenic nerve stimulator transvenous lead(s) (Report 33281 only once per patient per day) (Do not report 33281 in conjunction with 33276, 33277)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67-year-old male has a phrenic nerve stimulator system for central sleep apnea. When the patient suffered a fall, the lead(s) changed position, which is limiting the effectiveness of the therapy and the lead needs to be repositioned.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 96% , In the ASC 4%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 58% , Overnight stay-less than 24 hours 38% , Overnight stay-more than 24 hours 4%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Identify additional equipment that may be necessary in the event of a pericardiphrenic vein stenosis. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Assess patient's airway and respiratory status to evaluate the type of intravenous sedation that is required and safe. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues. Ensure all technical personnel have been familiarized with the phrenic nerve stimulator implantation technique and are fully familiar with all required equipment. Supervise selection of all equipment, including leads and generator, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under conscious sedation. Local anesthesia is administered.

Description of Intra-Service Work: An incision is made over the previously implanted pulse generator. The device and leads are freed from the surrounding tissue and hemostasis is achieved. The lead is disconnected from the pulse generator. The suture collars of the leads are freed from surrounding tissue. A stylet or stiff guidewire is inserted into the lead and gentle traction is applied under fluoroscopic guidance. The lead is respositioned to a similar location in the same pericardiophrenic vein. If adequate pacing threshold or stability cannot be attained, the a new pacing lead is placed in the right brachiocephalic vein. Once the lead is in position, adequate stimulation and impedance characteristics are confirmed using a neurostimulation system analyzer. The patient is aroused and is asked for feedback as to how closely the simulation represents a normal breath. They are also asked if there is any discomfort associated with stimulation. The lead is stabilized using suture sleeves and is connected to the implantable pulse generator. Both the lead and implantable pulse generator are placed in the subcutaneous pocket and the incision is closed.

Description of Post-Service Work: Review postoperative PA and lateral chest X ray for lead position. Check the incision and pocket for bleeding, hematoma, and cellulitis prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotics). Hold extensive discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. The patient returns to the office in 2-4 weeks for device site wound check and counseling on next steps with device re-activation.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	HRS, ACC					
CPT Code:	33281					
Sample Size:	573	**Resp N:**	25			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	2.00	5.00
Survey RVW:	2.00	6.00	**9.00**	12.00	30.00
Pre-Service Evaluation Time:			**50.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**20.00**		
Intra-Service Time:	10.00	70.00	**110.00**	150.00	210.00

Immediate Post Service-Time:	**30.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	33281	**Recommended Physician Work RVU: 6.00**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**40.00**	**40.00**	**0.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**20.00**	**-14.00**
Intra-Service Time:		**110.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**28.00**	**28.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**40.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33215	090	4.92	**RUC Time**

CPT Descriptor Repositioning of previously implanted transvenous pacemaker or implantable defibrillator (right atrial or right ventricular) electrode

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33208	090	8.52	**RUC Time**

CPT Descriptor Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial and ventricular

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
14060	090	9.23	**RUC Time**	90,113

CPT Descriptor 1 Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
54530	090	8.46	**RUC Time**	1,190

CPT Descriptor 2 Orchiectomy, radical, for tumor; inguinal approach

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 9 **% of respondents:** 36.0 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 16.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 33281	Top Key Reference CPT Code: 33215	2nd Key Reference CPT Code: **33208**
Median Pre-Service Time	49.00	20.00	50.00
Median Intra-Service Time	110.00	60.00	60.00
Median Immediate Post-service Time	28.00	25.00	20.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	20.00	40.00
Median Discharge Day Management Time	19.0	38.00	38.00
Median Office Visit Time	40.0	16.00	23.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**246.00**	**179.00**	**231.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	11%	0%	34%	33%	22%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	22%	22%	56%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	11%	34%	55%
Physical effort required	11%	45%	44%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	22%	34%	44%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	25%	50%	25%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	25%	75%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	25%	75%
Physical effort required	0%	25%	75%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	25%	75%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 91314 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33281

The societies convened a panel of physicians to review the survey data. Code 91313 will be used to report repositioning of a phrenic nerve stimulation lead. As described above, the panel reviewed the preservice time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures.

The key reference service is 33215, repositioning of a previously placed transvenous PM or ICD electrode. This comparison is helpful as it is also a lead repositioning service of a different technology. 55% of key reference respondents found surveyed code 33281 to be of somewhat more or much more intensity/complexity than 33215.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen twice in the office during the 90-day global period. The panel agreed, as repositioning a lead means the programming and stimulation titration will have to begin anew.

The societies **recommend the survey 25th percentile wRVU of 6.00 with times of 49/110/28, plus one 99214 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0432T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiology How often? Rarely

Specialty Cardiologists How often? Rarely

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 10
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed in the last full calendar year (2021) per the manufacturer.

Specialty Electrophysiologists Frequency 8 Percentage 80.00 %

Specialty Cardiologists Frequency 2 Percentage 20.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 6 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Electrophysiologists Frequency 6 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33215

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33287 Tracking Number K7 Original Specialty Recommended RVU: **7.83**
Presented Recommended RVU: **6.05**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **6.05**

CPT Descriptor: Removal and replacement of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming when performed; pulse generator
(Do not report 33287 in conjunction with 33276, 33278)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old male has a history of central sleep apnea treated successfully with a phrenic nerve stimulator system. The device has now reached battery depletion and requires removal of the current generator and replacement with a new generator.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 88% , In the ASC 12%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 65% , Overnight stay-less than 24 hours 35% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Identify additional equipment that may be necessary in the event of a pericardiphrenic vein stenosis. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Assess patient's airway and respiratory status to evaluate the type of intravenous sedation and anesthesia that is required and safe. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues. Ensure all technical personnel have been familiarized with the procedure and are fully familiar with all required equipment. Supervise selection of all equipment, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under conscious sedation. Local anesthesia is administered.

Description of Intra-Service Work: An incision is made over the previously implanted pulse generator. The device and leads are freed from the surrounding tissue and hemostasis is achieved. The lead is disconnected from the pulse generator and the pulse generator is removed. The pocket is assesed for suitability to receive a new generator. A new generator is implanted, the leads are reconnected, and the incision is closed.

Description of Post-Service Work: Check the incision and pocket for bleeding, hematoma, and cellulitis prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotics). Hold extensive discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. The patient returns to the office in 2-4 weeks for device site wound check and counseling on next steps with device re-activation.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	HRS, ACC					
CPT Code:	33287					
Sample Size:	573	**Resp N:**	26			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	1.00	6.00
Survey RVW:	2.00	6.05	**7.83**	11.63	22.00
Pre-Service Evaluation Time:			**50.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**20.00**		
Intra-Service Time:	10.00	53.00	**70.00**	120.00	200.00

Immediate Post Service-Time:	**23.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

2-FAC Diff Pat/Straightfor Proc(no sedation/anes)

CPT Code:	33287	**Recommended Physician Work RVU: 6.05**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**18.00**	**18.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**6.00**	**0.00**
Intra-Service Time:		**70.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**23.00**	**28.00**	**-5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**40.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33223	090	6.30	**RUC Time**

CPT Descriptor Relocation of skin pocket for implantable defibrillator

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33218	090	5.82	**RUC Time**

CPT Descriptor Repair of single transvenous electrode, permanent pacemaker or implantable defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
54530	090	8.46	**RUC Time**	

CPT Descriptor 1 Orchiectomy, radical, for tumor; inguinal approach

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
33207	090	7.80	**RUC Time**	

CPT Descriptor 2 Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 6 **% of respondents:** 23.0 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 15.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 33287	Top Key Reference CPT Code: 33223	2nd Key Reference CPT Code: **33218**
Median Pre-Service Time	25.00	48.00	50.00
Median Intra-Service Time	70.00	90.00	90.00
Median Immediate Post-service Time	23.00	60.00	60.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	0.00	0.00
Median Office Visit Time	40.0	32.00	46.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**177.00**	**230.00**	**246.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	17%	66%	17%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	83%	17%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	67%	33%
Physical effort required	0%	50%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	83%	17%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	25%	75%	0%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	25%	75%	0%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	100%	0%
Physical effort required	0%	100%	0%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	100%	0%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33287

The societies convened a panel of physicians to review the survey data. Code 33287 will be used to report removal and replacement of a phrenic nerve stimulation pulse generator. As described above, the panel reviewed the preservice time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures.

The key reference service is 33223, relocation of skin pocket for an ICD. This comparison is helpful as it also involves moving implanted device hardware of a different technology. 66% of key reference respondents found surveyed code 33287 to be of similar intensity/complexity to 33223.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen once in the office during the 90-day global period. The panel agreed, as programming settings are less affected by replacement of the generator than by movement of leads.

The societies **recommend the survey 25th percentile wRVU of 6.05 with times of 25/70/23, plus one 99214 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0431T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologists How often? Sometimes

Specialty Cardiologists How often? Sometimes

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 23
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed in the last full calendar year (2021) per the manufacturer.

Specialty Electrophysiologists Frequency 19 Percentage 82.60 %

Specialty Cardiologsits Frequency 4 Percentage 17.39 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 13 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Electrophysiologists Frequency 11 Percentage 84.61 %

Specialty Cardiologists Frequency 2 Percentage 15.38 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33288 Tracking Number K8 Original Specialty Recommended RVU: **10.13**
Presented Recommended RVU: **8.51**
Global Period: 090 Current Work RVU: **N/A** RUC Recommended RVU: **8.51**

CPT Descriptor: Removal and replacement of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming when performed; transvenous stimulation or sensing lead
(Do not report 33288 in conjunction with 33277, 33279, 33281)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old male has a history of central sleep apnea treated successfully with a phrenic nerve stimulator system. At recent device check, the stimulation lead was found to have fractured and is no longer functioning. Removal of the lead and replacement with a new lead is recommended to restore normal system function.

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 96% , In the ASC 4%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 52% , Overnight stay-less than 24 hours 39% , Overnight stay-more than 24 hours 9%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Description of Pre-Service Work: Review patient's history, physical exam, noninvasive diagnostic studies, and tests to plan procedure and equipment needs. Identify additional equipment that may be necessary in the event of a pericardiphrenic vein stenosis. Discuss procedure details, including alternatives and risks, with patient and/or family. Obtain informed consent. Assess patient's airway and respiratory status to evaluate the type of intravenous sedation and anesthesia that is required and safe. Radiological: Check interventional suite to ensure proper function and configuration of imaging equipment, including compliance with all radiation safety issues, and lead extraction equipment. Ensure all technical personnel have been familiarized with the lead extraction procedure and are fully familiar with all required equipment. Supervise selection of all equipment, and verify all needed equipment is available. Don radiation protection. Supervise proper positioning of patient. The patient is prepped and placed under conscious sedation. Local anesthesia is administered.

Description of Intra-Service Work: An incision is made over the previously implanted pulse generator. The device and leads are freed from the surrounding tissue and hemostasis is achieved. The lead is disconnected from the pulse generator. The suture collars of the leads are freed from surrounding tissue. A stylet or stiff guidewire is inserted into the lead and gentle traction is applied under fluoroscopic guidance. If the lead is unable to be removed with manual traction under fluoroscopic guidance, then a locking stylet is inserted into the lead. Next, a manual rotational extraction sheath or a laser sheath is advanced over the lead and standard lead extraction techniques are used to remove the lead. Next, a new guiding sheath is brought to the field placed into the venous system. A new lead is brought to the field and advanced to the target vessel, either the left pericardiphrenic vein or the right brachiocephalic vein. Once the lead is in position, adequate stimulation and impedance characteristics are confirmed using a neurostimulation system analyzer. The patient is aroused and is asked for feedback as to how closely the simulation represents a normal breath. They are also asked if there is any discomfort associated with stimulation. The lead is stabilized using suture sleeves and is connected to a new implantable pulse generator. Both the lead and implantable pulse generator are placed in the subcutaneous pocket and the incision is closed.

Description of Post-Service Work: Review postoperative PA and lateral chest X ray for lead position. Check the incision and pocket for bleeding, hematoma, and cellulits prior to discharge. Manage discharge day, including communication with PCP, patient and/or family, and staff and prescribe any appropriate medications (i.e. antibiotics). Hold extensive

discussions with patient about timing of follow-up visits, activity restrictions and keeping the incision clean and dry, and reporting signs of infection. The patient returns to the office in 2-4 weeks for device site wound check and counseling on next steps with device re-activation.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	HRS, ACC					
CPT Code:	33288					
Sample Size:	573	**Resp N:**	24			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs.					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	1.00	5.00
Survey RVW:	1.00	8.51	**10.13**	13.13	25.00
Pre-Service Evaluation Time:			**50.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**20.00**		
Intra-Service Time:	10.00	90.00	**120.00**	153.00	240.00

Immediate Post Service-Time:	**30.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**40.00**	99231x **0.00** 99232x **1.00** 99233x **0.00**
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	33288	**Recommended Physician Work RVU: 8.51**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**40.00**	**40.00**	**0.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**20.00**	**-14.00**
Intra-Service Time:		**120.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**28.00**	**28.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**40.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33235	090	9.90	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); dual lead system

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
61886	090	9.93	**RUC Time**

CPT Descriptor Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
54437	090	11.50	**RUC Time**	54

CPT Descriptor 1 Repair of traumatic corporeal tear(s)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
57240	090	10.08	**RUC Time**	9,026

CPT Descriptor 2 Anterior colporrhaphy, repair of cystocele with or without repair of urethrocele, including cystourethroscopy, when performed

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 5 **% of respondents:** 20.8 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 16.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 33288	Top Key Reference CPT Code: 33235	2nd Key Reference CPT Code: **61886**
Median Pre-Service Time	49.00	50.00	50.00
Median Intra-Service Time	120.00	170.00	100.00
Median Immediate Post-service Time	28.00	60.00	25.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	80.00
Median Discharge Day Management Time	19.0	0.00	38.00
Median Office Visit Time	40.0	110.00	92.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**256.00**	**390.00**	**385.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	0%	80%	20%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	0%	100%
Physical effort required	0%	0%	100%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	0%	100%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	25%	25%	50%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	25%	75%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	25%	75%
Physical effort required	0%	25%	75%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	25%	75%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, with the exception of 33278 and 33279, these patients cannot be operated on under general anesthesia because they must/may participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and added 1 minute for administration of topical anesthesia for a total adjustment of minus 14 for some codes. For other codes we recommend preservice package 2 for difficult patient/straightforward procedure with no anesthesia care. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

33288

The societies convened a panel of physicians to review the survey data. Code 33288 will be used to report repositioning of a phrenic nerve stimulation lead. As described above, the panel reviewed the preservice time and selected package 4 for a difficult procedure with modifications to reflect the use of moderate sedation and post-service package 8B for complex moderate sedation procedures.

The key reference service is 33235, removal of transvenous PM electrode. 100% of key reference respondents found surveyed code 33288 to be of somewhat more or much more intensity/complexity than 33235.

Survey respondents indicated the patient is seen the same day in the hospital in a visit separate from immediate post-service work. Respondents also indicated the patient will be seen twice in the office during the 90-day global period. The panel agreed, as replacing a lead means the programming and stimulation titration will have to begin anew.

The societies **recommend the survey 25th percentile wRVU of 8.51 with times of 49/110/28, plus one 99214 and one half-day discharge visit for patients discharged the same day as a procedure.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0428T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologists How often? Rarely

Specialty Cardiologists How often? Rarely

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 0
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure has not been performed at any point in the last 3 years per the manufacturer.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This procedure has not been performed at any point in the last 3 years per the manufacturer.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33235

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93150 Tracking Number K9 Original Specialty Recommended RVU: **1.20**
Presented Recommended RVU: **0.85**
Global Period: XXX Current Work RVU: **N/A** RUC Recommended RVU: **0.85**

CPT Descriptor: Therapy activation of implanted phrenic nerve stimulator system including all interrogation and programming (Do not report 93150 in conjunction with 33276, 33277, 33278, 33279, 33280, 33281, 93151, 93152, 93153)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66-year-old male recently had a phrenic nerve stimulator system implanted. The patient returns to the clinic for initial activation of therapy.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: History for phrenic nerve stimulator indications and changes in symptoms or development of new symptoms are reviewed. Prior records of the phrenic nerve stimulator implantation, including device hardware and prior assessments of capture and sensing are reviewed.

Description of Intra-Service Work: The neurostimulator system is programmed for the first time after being implanted to initiate therapy, to evaluate parameters of respiratory rate, pulse amplitude, pulse duration, selection of sensing vector, battery status, electrode selection, timing of stimulation impedance and patient compliance measurements for 6 leads.

Historical data collected during monitoring mode before activation, query of patient sleep patterns/habits in supine, left lateral and right lateral positions, and waveforms stored by neurostimulator are used to program initial settings. The patient is educated about the system and how to optimally interact with the system. If the patient has a concomitant device, testing for interaction is also performed during the visit prior to starting therapy. All possible stimulation settings are evaluated during the initial programming session. The device data is utilized to determine the pacing configuration and stimulation frequency.

Description of Post-Service Work: Results of the device interrogation are discussed, and any programming changes to the device are explained. Subsequent monitoring and potential adjustments are discussed with patient to ensure the patient understands the importance of maintaining routine follow-up. A final report is prepared and signed and communicated with primary physicians, patient and/or family.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	ACC, HRS					
CPT Code:	93150					
Sample Size:	1150	**Resp N:**	21			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs and AASM members at random					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**1.00**	3.00	15.00
Survey RVW:	0.77	0.85	**1.20**	2.00	4.00
Pre-Service Evaluation Time:			**10.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	15.00	**20.00**	35.00	60.00

Immediate Post Service-Time:	**8.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93150	**Recommended Physician Work RVU: 0.85**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**10.00**	**0.00**	**10.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**8.00**	**0.00**	**8.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93281	XXX	0.85	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99215	XXX	2.80	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95819	XXX	1.08	**RUC Time**	162,443

CPT Descriptor 1 Electroencephalogram (EEG); including recording awake and asleep

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99202	XXX	0.93	**RUC Time**	2,193,780

CPT Descriptor 2 Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 15-29 minutes of total time is spent on the date of the encounter

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 10 **% of respondents:** 47.6 **%**

Number of respondents who choose 2nd Key Reference Code: 4 **% of respondents:** 19.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93150	Top Key Reference CPT Code: 93281	2nd Key Reference CPT Code: **99215**
Median Pre-Service Time	10.00	7.00	10.00
Median Intra-Service Time	20.00	15.00	45.00
Median Immediate Post-service Time	8.00	10.00	15.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**38.00**	**32.00**	**70.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	10%	40%	40%	10%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	10%	50%	40%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	30%	30%	40%

Physical effort required	10%	60%	30%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	10%	40%	50%

Survey Code Compared to 2nd Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	50%	50%	0%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	25%	50%	25%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	0%	25%	75%
Physical effort required	0%	50%	50%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	25%	75%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer

than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, these patients cannot be operated on under general anesthesia because they must participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and adding 1 minute for administration of topical anesthesia. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

93150

The societies convened a panel of physicians to review the survey data. Code 93150 will be used to report the therapy activation of implanted phrenic nerve stimulator system including all interrogation and programming. This takes place about a month after implantation. During that interim time the device is in monitoring mode. The first activation programming includes many steps by clinical staff and interaction by the physician. The survey median times for pre-service time was 10 minutes and the median post-service time was 8 minutes.

The key reference service is 93281, programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system. This comparison is helpful as it also programming of an implanted device. 50% of key reference respondents found surveyed code 93150 to be more or much more intense/complex than 93281. The median intra-service time of surveyed code 93150 was 33% higher than the KRS 93281 and the total time was 18.75% higher.

The societies **recommend the survey 25th percentile wRVU of 0.85 with times of 10/20/8.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) N/A

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Sleep Medicine Physician How often? Rarely

Specialty Electrophysiologist How often? Rarely

Specialty Neurology How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 142
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed during the most recent 12 month period per the manufacturer.

Specialty Sleep Medicine Frequency 99 Percentage 69.71 %

Specialty Electrophysiologist Frequency 43 Percentage 30.28 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 78 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Sleep Medicine Doctor Frequency 55 Percentage 70.51 %

Specialty Electrophysiologists Frequency 23 Percentage 29.48 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93281

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93151 Tracking Number K10 Original Specialty Recommended RVU: **1.00**
Presented Recommended RVU: **0.80**
Global Period: XXX Current Work RVU: **N/A** RUC Recommended RVU: **0.80**

CPT Descriptor: Interrogation and programming (minimum one parameter) of implanted phrenic nerve stimulator system (Do not report 93151 in conjunction with 93150, 93152, 93153) (For interrogation without programming, use 93153)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68-year-old male has central sleep apnea and a phrenic nerve stimulator system for sleep apnea was previously implanted and activated. The device programming needs to be adjusted due to recent new symptoms.

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: History for phrenic nerve stimulator indications and changes in symptoms or development of new symptoms are reviewed. Prior records of the phrenic nerve stimulator activation, including device hardware and prior assessments of capture, sensing and programming are reviewed.

Description of Intra-Service Work: The patient had previously undergone implantation of a neurostimulator system, and the system has previously been programmed. From the supine, left lateral, and right lateral positions, the implantable pulse generator is interrogated to evaluate various parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selection, output modulation, impedance, timing of stimulation and patient compliance measurements. The patient is queried for input and feedback on personal perceptions about the system settings. At least one of these parameters is changed to provide optimal results. The device data is utilized to determine the pacing configuration and stimulation frequency.

Description of Post-Service Work: Results of the device interrogation are discussed, and any programming changes to the device are explained. Subsequent monitoring and potential adjustments are discussed with patient to ensure the patient understands the importance of maintaining routine follow-up. A final report is prepared and signed and communicated with primary physicians, patient and/or family.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023		
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy		
Specialty Society(ies):	ACC, HRS		
CPT Code:	93151		
Sample Size:	1150	**Resp N:**	20
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs and AASM members at random		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**1.00**	6.00	18.00
Survey RVW:	0.75	0.80	**1.00**	1.93	4.00
Pre-Service Evaluation Time:			**10.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	7.00	15.00	**20.00**	32.00	45.00

Immediate Post Service-Time:	**6.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93151	**Recommended Physician Work RVU: 0.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**10.00**	**0.00**	**10.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**6.00**	**0.00**	**6.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93280	XXX	0.77	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93281	XXX	0.85	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95819	XXX	1.08	**RUC Time**	202,028

CPT Descriptor 1 Electroencephalogram (EEG); including recording awake and asleep

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99202	XXX	0.93	**RUC Time**	2,490,658

CPT Descriptor 2 Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 15-29 minutes of total time is spent on the date of the encounter.

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 8 **% of respondents:** 40.0 **%**

Number of respondents who choose 2nd Key Reference Code: 7 **% of respondents:** 35.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93151	Top Key Reference CPT Code: 93280	2nd Key Reference CPT Code: **93281**
Median Pre-Service Time	10.00	7.00	7.00
Median Intra-Service Time	20.00	15.00	15.00
Median Immediate Post-service Time	6.00	10.00	10.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**36.00**	**32.00**	**32.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	12%	37%	50%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	25%	25%	50%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	12%	63%	25%

Physical effort required	0%	88%	12%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	25%	38%	37%

Survey Code Compared to 2nd Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	29%	57%	14%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	29%	71%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	0%	57%	43%
Physical effort required	0%	71%	29%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	57%	43%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer

than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, these patients cannot be operated on under general anesthesia because they must participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and adding 1 minute for administration of topical anesthesia. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

93151

The societies convened a panel of physicians to review the survey data. Code 93151 will be used to report the interrogation and programming of implanted phrenic nerve stimulator system after initial programming to adjust for optimal results based on device and patient feedback. During this visit the stimulation will be increased and titrated to maximize effectiveness. The survey median times for pre-service time was 10 minutes, intra-service time was 20 minutes, and post-service time was 6 minutes.

The key reference service is 93280, programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system. This comparison is helpful as it also programming of an implanted device. 50% of key reference respondents found surveyed code 93151 to be more or much more intense/complex than 93280. The median intra-service time of surveyed code 93151 was 33% higher than the KRS 93280 and the total time was 12.5% higher.

The societies **recommend the survey 25th percentile wRVU of 0.80 with times of 10/20/6.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed)

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologist How often? Sometimes

Specialty Sleep Medicine Doctor How often? Sometimes

Specialty Neurologist How often? Sometimes

Estimate the number of times this service might be provided nationally in a one-year period? 912
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed during the most recent full calendar year (2021) per the manufacturer.

Specialty Sleep Medicine Doctor Frequency 639 Percentage 70.06 %

Specialty Cardiologists Frequency 273 Percentage 29.93 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 502
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Sleep Medicine Doctor Frequency 351 Percentage 69.92 %

Specialty Electrophysiologists Frequency 151 Percentage 30.07 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment
Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93280

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93152 Tracking Number K11 Original Specialty Recommended RVU: **2.25**
Presented Recommended RVU: **1.82**
Global Period: XXX Current Work RVU: **N/A** RUC Recommended RVU: **1.82**

CPT Descriptor: Interrogation and programming of implanted phrenic nerve stimulator system during a polysomnography (Do not report 93152 in conjunction with 33276, 93150, 93151, 93153) (For polysomnography, see 95808, 95810, 95811, 95782, 95783)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66-year old male with a previously implanted phrenic nerve stimulation system requires evaluation while sleeping to confirm therapy efficacy and optimize programming during a polysomnography.

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: History for phrenic nerve stimulator indications and changes in symptoms or development of new symptoms are reviewed. Prior records of the phrenic nerve stimulator activation, including device hardware and prior assessments of capture, sensing and programming are reviewed.

Description of Intra-Service Work: The patient had previously undergone implantation of a neurostimulator system, and the system has previously been activated. During a sleep study, a programmer uses continuous evaluation to change parameters based on output during the attended sleep study to optimize respiratory rate, pulse amplitude, pulse duration, and patient arousal threshold. Data captured after patient is awakened at set intervals to adjust settings in 3 positions (supine, left lateral, and right lateral) or based on the apnea hypopnea index (AHI). One programming adjustment is made based on the position where the patient was still having events. Interpretation of neurostimulator data is performed at the same time that the PSG is interpreted. The device data is utilized to determine the pacing configuration and stimulation frequency that provides maximal physiologic diaphragm movement throughout the night in all sleeping positions.

Description of Post-Service Work: Results of the device interrogation are discussed, and any programming changes to the device are explained. Subsequent monitoring and potential adjustments are discussed with patient to ensure the patient understands the importance of maintaining routine follow-up. A final report is prepared and signed and communicated with primary physicians, patient and/or family.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	ACC, HRS					
CPT Code:	93152					
Sample Size:	1150	**Resp N:**	19			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs and AASM members at random					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	2.00	3.00
Survey RVW:	0.77	2.25	**2.70**	2.85	5.00
Pre-Service Evaluation Time:			**10.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	0.00	16.00	**25.00**	45.00	120.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93152	**Recommended Physician Work RVU: 1.82**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**10.00**	**0.00**	**10.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**10.00**
Intra-Service Time:		**25.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
95810	XXX	2.50	**RUC Time**

CPT Descriptor Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99215	XXX	2.80	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
72158	XXX	2.29	**RUC Time**	244,364

CPT Descriptor 1 Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
74178	XXX	2.01	**RUC Time**	534,971

CPT Descriptor 2 Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 14 **% of respondents:** 73.6 **%**

Number of respondents who choose 2nd Key Reference Code: 2 **% of respondents:** 10.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93152	Top Key Reference CPT Code: 95810	2nd Key Reference CPT Code: **99215**
Median Pre-Service Time	10.00	15.00	10.00
Median Intra-Service Time	25.00	37.00	45.00
Median Immediate Post-service Time	10.00	15.00	15.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**45.00**	**67.00**	**70.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	14%	57%	29%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	7%	14%	79%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	36%	64%
Physical effort required	0%	50%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	29%	71%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	50%	50%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	50%	50%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	50%	50%
Physical effort required	0%	50%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	50%	50%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are

contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, these patients cannot be operated on under general anesthesia because they must participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and adding 1 minute for administration of topical anesthesia. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.

93152

The societies convened a panel of physicians to review the survey data. Code 93152 will be used to report the interrogation and programming of implanted phrenic nerve stimulator system during an attended sleep study to optimize the device for the patient. The survey median times for pre-service time was 10 minutes, intra-service time was 25 minutes, and post-service time was 10 minutes.

The key reference service is 95810, polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist. This comparison is helpful as it describes a sleep study, of which the survey code would be added on to when needed. 86% of key reference respondents found surveyed code 93152 to be more or much more intense/complex than 95810.

The societies **recommend a crosswalk to the value of CPT code 71275 wRVU of 1.82 with survey times of 10/25/10.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   ☐ Multiple codes are used to maintain consistency with similar codes.
   ☐ Historical precedents.
   ☒ Other reason (please explain) Phrenic stimulator programming is performed during polysomnography to optimize parameters.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario. 95811 XXX 2.60 15/35/15

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed)

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Electrophysiologists How often? Sometimes

Specialty Sleep Medicine Doctor How often? Sometimes

Specialty Neuro How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 114
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is the number of procedures performed during the most recent full calendar year (2021) per the manufacturer.

Specialty Sleep Medicine Doctor Frequency 80 Percentage 70.17 %

Specialty Electrophysiologist Frequency 34 Percentage 29.82 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 63 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Sleep Medicine Doctor Frequency 44 Percentage 69.84 %

Specialty Electrophysiologist Frequency 19 Percentage 30.15 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 95810

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93153 Tracking Number K12 Original Specialty Recommended RVU: **0.72**
Presented Recommended RVU: **0.43**
Global Period: XXX Current Work RVU: **N/A** RUC Recommended RVU: **0.43**

CPT Descriptor: Interrogation, without programming of implanted phrenic nerve stimulator system
(Do not report 93153 in conjunction with 33276, 93150, 93151, 93152)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68-year-old male has central sleep apnea and an implantable phrenic nerve stimulator system. The patient comes to clinic to check battery status and overall device function.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: History for phrenic nerve stimulator indications and changes in symptoms or development of new symptoms are reviewed. Prior records of the phrenic nerve stimulator activation, including device hardware and prior assessments of capture, sensing and programming are reviewed.

Description of Intra-Service Work: The patient had previously undergone implantation of a neurostimulator system, and the system has previously been programmed. The system is interrogated to evaluate parameters of rate, pulse amplitude, pulse duration; configuration of waveform, battery status; electrode selection, output modulation, impedance and patient compliance measurements. No changes are made to the previously programmed parameters.

Description of Post-Service Work: Results of the device interrogation are discussed. Subsequent monitoring and potential adjustments are discussed with patient to ensure the patient understands the importance of maintaining routine follow-up. A final report is prepared and signed and communicated with primary physicians, patient and/or family.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. David Slotwiner, Dr. Mark Schoenfeld, Dr. Sanjaya Gupta, Dr. Richard Wright, Dr. Ed Tuohy					
Specialty Society(ies):	ACC, HRS					
CPT Code:	93153					
Sample Size:	1150	**Resp N:**	20			
Description of Sample:	Targeted list provided by manufacturer Remede of doctors who have performed the service combined with a random sample of ACC and HRS members who identify as EPs and AASM members at random					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**0.00**	2.00	18.00
Survey RVW:	0.40	0.72	**0.80**	1.20	4.00
Pre-Service Evaluation Time:			**7.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	10.00	**13.00**	20.00	40.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93153	**Recommended Physician Work RVU: 0.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**7.00**	**0.00**	**7.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**13.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93280	XXX	0.77	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99213	XXX	1.30	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93015	XXX	0.75	**RUC Time**	999,644

CPT Descriptor 1 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99212	XXX	0.70	**RUC Time**	10,729,531

CPT Descriptor 2 Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 13 **% of respondents:** 65.0 **%**

Number of respondents who choose 2nd Key Reference Code: 3 **% of respondents:** 15.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93153	Top Key Reference CPT Code: 93280	2nd Key Reference CPT Code: **99213**
Median Pre-Service Time	7.00	7.00	5.00
Median Intra-Service Time	13.00	15.00	20.00
Median Immediate Post-service Time	5.00	10.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**25.00**	**32.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	23%	62%	15%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	31%	54%	15%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	15%	62%	23%
Physical effort required	8%	85%	8%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	15%	62%	23%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	33%	33%	33%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	33%	67%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	33%	67%
Physical effort required	0%	67%	33%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	33%	67%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Introduction

The twelve codes that comprise Tab 6 are the result of the transition of Category III codes 0424T-0436T to Category I codes. This technology is used to treat moderate to severe central sleep apnea and is anticipated to be utilized in fewer than 5000 patients per year. When sleep disordered breathing is caused by CSA, positive pressure airway masks are contraindicated in Heart Failure with reduced Ejection Fraction (HFrEF) patients. In these patients, implantable phrenic nerve stimulation can be considered for symptomatic relief.

A phrenic nerve stimulation system includes a pulse generator (containing electronics and a battery) and one stimulation lead (electrode). In some cases, a sensing lead may need to be placed on the initial insertion. Pulse generators are placed in a submuscular or subcutaneous "pocket" in the pectoral region. The stimulation lead is placed transvenously into the right brachiocephalic vein or left pericardiophrenic vein. The sensing lead is placed transvenously into the azygos vein. Codes 33276-33288 include vessel catheterization, as well as all image guidance required for the procedure.

The phrenic nerve stimulator system is initially programmed at a separate time one month after implantation. That work can be performed either by an electrophysiologist or a sleep medicine physician. The new codes, 93150-93153, for interrogation device evaluation and programming device evaluation which include parameters of rate, pulse amplitude, pulse duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance, and patient compliance measurements (e.g. hours of therapy, sleeping position, and activity {sleep activity, awake activity, time in a sleep position}. For patients that require programming during an overnight sleep study, 93152 is only reported once, regardless of how many programming changes are made over the course of the sleep study.

Preservice/Postservice Times for Hardware Services

For the implantation and related services in the 30000 series of codes, we recommend modifying preservice package 4. The preservice evaluation and positioning of these patients requires the same tier of time and attention that any major surgery service requires. However, these patients cannot be operated on under general anesthesia because they must participate during the procedure. Therefore, we have removed 15 minutes of time for observing anesthesia care and adding 1 minute for administration of topical anesthesia. Moderate sedation will be separately billed by the operator or a separate physician. For post-service time, we recommend Package 8B with time removed in some instances when the survey was modestly lower than the standard.

Survey Challenges

Phrenic nerve stimulation technology is a relatively new technology, receiving FDA approval in 2017. However, with limited indications, no more than a few hundred have been performed in any given year since then and few clinicians have significant familiarity with the technology. As indicated in the SOR, we obtained and used a vendor list of trained operators in addition to random survey pools. Despite that approach and multiple rounds of targeted email solicitations and reminders, we failed to receive 30 responses for any codes in this family. In practice, only initial system implantation code 33276 and pulse generator code 33287 will be reported at any meaningful volumes, with the other codes being extremely rare and created by CPT for comprehensiveness. We recognize that shortcoming, but present recommendations nonetheless based on the survey.
survey.

93153

The societies convened a panel of physicians to review the survey data. Code 93153 will be used to report the interrogation without programming of implanted phrenic nerve stimulator system. The survey median times for pre-service time was 7 minutes, intra-service time was 13 minutes, and post-service time was 5 minutes.

The key reference service is 93280, programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system. 62% of key reference respondents found surveyed code 93152 to be identical in intensity/complexity as 93280 with 15% finding it more or much more intense/complex.

The societies **recommend a crosswalk to the work of CPT code 93288 at 0.43 with survey times of 7/13/5.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed)

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Sleep Medicine Doctors How often? Sometimes

Specialty Electrophysiologists How often? Sometimes

Specialty Neurologists How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 43
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This was the total performed during the most recent full calendar year (2021) per the manufacturer's data.

Specialty Sleep Medicine doctors Frequency 30 Percentage 69.76 %

Specialty electrophysiologists Frequency 13 Percentage 30.23 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 24 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 55% of the procedures performed in 2021 were on Medicare patients.

Specialty Sleep Medicine Doctors Frequency 17 Percentage 70.83 %

Specialty Electrophyisiologists Frequency 7 Percentage 29.16 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93280

SS Rec Summary

ISSUE: Phrenic Nerve Stimulation System

TAB: 6

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33270	Insertion or replacement of permanent subcutaneous	90	2014	7	0.055	0.039			9.10			232	33	1	5			90			25						1.0		1									
2nd REF	33208	Insertion of new or replacement of permanent pacemaker with	90	2005	6	0.059	0.037			8.52			231	10	15	15			60			30				1		1.0		1								
CURRENT	0424T	Insertion or replacement of neurostimulator system for				-	-						0																								
SVY	33276	Insertion of phrenic nerve stimulator system (pulse	90		28	0.025	0.028	2.00	9.50	10.75	14.00	35.00	382	48	15	16	10	120	120	180	240	25				1		1.0		2				0	1	3	6	20
SVY	33276	Targeted	90		20	0.024	0.026	4.00	9.88	10.75	14.25	35.00	411	55	15	20	60	120	180	180	240	28				1		1.0		1.5					0	2	4	10	20
SVY	33276	Random	90		8	0.025	0.029	2.00	9.26	11.00	12.50	15.00	377	31	20	13	10	105	120	120	150	20			1			1.0		2					0	0	0	2	3
REC	33276	Insertion of phrenic nerve stimulator system (pulse generator and stimulating	90			0.048	0.038			9.50			253	40	3	6			120			25						0.5		1								

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	93592	Percutaneous transcatheter closure of paravalvular leak;	ZZZ	2016	7	0.133	0.133			8.00			60						60																				
2nd REF	93609	Intraventricular and/or intra-atrial mapping of tachycardia site(s)	ZZZ	2002	4	0.055	0.055			4.99			90						90																				
CURRENT	0425T	Insertion or replacement of neurostimulator system for				-	-						0																										
SVY	33277	Insertion of phrenic nerve stimulator transvenous sensing	ZZZ		24	0.062	0.062	2.00	5.43	7.49	9.00	20.00	120	0	0	0	10	60	120	180	360	0													0	0	0	3	10
SVY	33277	Targeted	ZZZ		17	0.067	0.067	3.00	6.10	8.00	9.00	20.00	120	0	0	0	25	90	120	180	360	0													0	0	1	4	10
SVY	33277	Random	ZZZ		7	0.092	0.092	2.00	5.00	5.50	6.00	12.50	60	0	0	0	10	38	60	120	240	0													0	0	0	1	2
SVY	33277	Performance rate=0	ZZZ		13	0.068	0.068	2.00	5.50	6.10	9.00	12.51	90	0	0	0	10	45	90	150	360	0													0	0	0	0	0
SVY	33277	Performance rate>0	ZZZ		11	0.044	0.044	3.00	5.60	7.98	10.75	20.00	180	0	0	0	45	100	180	180	240	0													1	2	4	5	10
REC	33277	Insertion of phrenic nerve stimulator transvenous sensing lead (list separately in addition	ZZZ			0.045	0.045			5.43			120						120																				

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33235	Removal of transvenous pacemaker electrode(s); dual	90	1994	18	0.019	0.025			9.90			390	50					170			60								2								
2nd REF	33234	Removal of transvenous pacemaker electrode(s); single	90	1996	2	0.028	0.026			7.66			292	50					150			60								2								
CURRENT	0428T	Removal of neurostimulator system for treatment of central				-	-						0																										
SVY	33278	Removal of phrenic nerve stimulator including vessel	90		24	0.025	0.028	2.00	9.55	10.51	12.10	25.00	380	55	15	20	10	90	120	150	200	29				1		1.0		1	1				0	0	0	2	5
SVY	33278	Targeted	90		17	0.036	0.030	3.00	9.70	10.51	12.00	25.00	346	60	15	20	40	90	120	180	200	30				1		1.0		1					0	0	0	2	5
SVY	33278	Random	90		7	0.010	0.025	2.00	8.80	10.00	13.75	15.00	402	42	15	15	10	90	120	120	150	20			1			1		2					0	0	0	0	2
SVY	33278	Performance rate=0	90		15	0.018	0.027	2.00	9.40	10.00	12.00	20.00	373	45	15	20	10	105	120	135	180	0			1			1		1	1				0	0	0	0	0
SVY	33278	Performance rate>0	90		9	0.025	0.027	3.00	10.50	11.00	12.39	25.00	401	60	30	20	60	90	120	150	200	30				1		1.0		1	1				1	1	2	4	5
REC	33278	Removal of phrenic nerve stimulator including vessel catheterization, all imaging	90			0.053	0.040			9.55			239	40	3	6			120			28						0.5		1								

SS Rec Summary

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33234	Removal of transvenous pacemaker electrode(s); single	90	1996	9	0.028	0.026			7.66			292	50					150			60										2							
2nd REF	33235	Removal of transvenous pacemaker electrode(s); dual	90	1994	9	0.019	0.025			9.90			390	50					170			60								2									
CURRENT	0429T	Removal of neurostimulator system for treatment of central				-	-						0																									
SVY	33279	Removal of phrenic nerve stimulator including vessel	90		24	0.018	0.026	2.00	7.66	9.71	10.88	20.00	379	55	15	20	10	90	120	120	195	28			1		1.0			1	1				0	0	0	1	5
SVY	33279	Targeted	90		17	0.031	0.029	4.00	8.10	9.90	12.00	20.00	346	60	15	20	30	90	120	120	195	30			1		1.0				1				0	0	0	1	5
SVY	33279	Random	90		7	0.004	0.023	2.00	7.63	9.00	10.00	12.50	392	32	15	15	10	90	120	120	135	20			1			1		2					0	0	0	0	2
SVY	33279	Performance rate=0	90		15	0.008	0.024	2.00	7.63	9.00	9.95	20.00	378	50	15	20	10	95	120	120	180	0			1			1		1	1				0	0	0	0	0
SVY	33279	Performance rate>0	90		9	0.032	0.029	6.00	10.00	10.50	12.50	20.00	363	60	15	20	60	90	120	120	195	30			1		1.0			1					1	1	1	4	5
REC	33279	Removal of phrenic nerve stimulator including vessel catheterization, all imaging	90			0.018	0.023			5.42			239	40	3	6			120			28					0.5			1									
XWALK	33272	Removal of subcutaneous implantable defibrillator	90			0.054	0.036			5.42			151	33	1	5			45			25					0.5			1									

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33223	Relocation of skin pocket for implantable defibrillator	90	1994	7	0.032	0.027			6.30			230	48					90			60										2							
2nd REF	33218	Repair of single transvenous electrode, permanent pacemaker	90	1994	5	0.016	0.024			5.82			246	50					90			60									2							
CURRENT	0428T	Removal of neurostimulator system for treatment of central				-	-						0																									
SVY	33280	Removal of phrenic nerve stimulator including vessel	90		24	0.016	0.025	2.00	6.00	6.90	10.00	19.43	274	50	15	18	10	30	60	113	180	30			1		1.0			1					0	0	0	1	5
SVY	33280	Targeted	90		17	0.018	0.025	2.00	6.00	7.00	10.01	19.43	276	50	15	20	20	30	60	90	180	30			1		1.0			1					0	0	0	1	5
SVY	33280	Random	90		7	-0.026	0.020	2.00	5.53	6.30	9.26	12.30	313	30	15	15	10	25	60	115	120	20			1			1.0		2					0	0	0	0	2
SVY	33280	Performance rate=0	90		15	-0.012	0.021	2.00	5.50	6.30	7.76	17.00	303	50	15	20	10	30	60	100	180	25			1			1		1					0	0	0	0	0
SVY	33280	Performance rate>0	90		9	0.052	0.034	2.00	7.00	10.01	12.30	19.73	296	60	15	15	20	60	75	120	180	30			1		1.0			1					1	1	2	2	5
REC	33280	Removal of phrenic nerve stimulator including vessel catheterization, all imaging	90			0.005	0.020			3.04			155	18	1	6			60			28					0.5			1									
XWALK	33241	Removal of implantable defibrillator pulse generator only	90			0.007	0.018			3.04			171	35					60			60										1							

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33215	Repositioning of previously implanted transvenous	90	2002	9	0.023	0.027			4.92			179	20					60			25				1	1.0			1									
2nd REF	33208	Insertion of new or replacement of permanent pacemaker with	90	2005	4	0.059	0.037			8.52			231	10	15	15			60			30			1		1.0			1									
CURRENT	0432T	Repositioning of neurostimulator system for treatment of central				-	-						0																									
SVY	33281	Repositioning of phrenic nerve stimulator transvenous lead(s)	90		25	0.014	0.025	2.00	6.00	9.00	12.00	30.00	366	50	15	20	10	70	110	150	210	30			1		1.0			1	1				0	0	0	2	5
SVY	33281	Targeted	90		18	0.031	0.029	4.00	6.01	8.75	12.38	30.00	306	50	15	20	30	75	90	173	210	30			1		1.0			1					0	0	1	2	5
SVY	33281	Random	90		7	0.003	0.023	2.00	6.46	9.00	9.63	12.50	397	37	15	15	10	85	120	120	150	20			1			1		2					0	0	0	0	2
SVY	33281	Performance rate=0	90		14	0.010	0.024	2.00	6.43	8.25	9.19	12.51	347	48	15	20	10	63	100	120	180	23			1		1.0			1	1				0	0	0	0	0
SVY	33281	Performance rate>0	90		11	0.020	0.027	4.00	6.03	10.50	12.63	30.00	393	50	15	20	60	90	120	180	210	30			1			1		1	1				1	1	2	3	5
REC	33281	Repositioning of phrenic nerve stimulator transvenous lead(s) (report 33281 only once per	90			0.020	0.024			6.00			246	40	3	6			110			28					0.5			1									

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33223	Relocation of skin pocket for implantable defibrillator	90	1994	6	0.032	0.027			6.30			230	48					90			60										2							

SS Rec Summary

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
2nd REF	33218	Repair of single transvenous electrode, permanent pacemaker	90	1994	4	0.016	0.024			5.82			246	50					90			60							2								
CURRENT	0431T	Removal and replacement of neurostimulator system for				-	-						0																									
SVY	33287	Removal and replacement of phrenic nerve stimulator	90		26	0.029	0.028	2.00	6.05	7.83	11.63	22.00	279	50	15	20	10	53	70	120	200	23				1		1.0				1		0	0	0	1	6
SVY	33287	Targeted	90		19	0.026	0.027	2.00	6.18	7.66	12.00	22.00	281	50	15	20	20	60	70	120	200	25				1		1.0				1		0	0	0	1	6
SVY	33287	Random	90		7	0.013	0.027	2.00	5.98	8.00	9.88	13.00	298	30	15	15	10	33	60	115	120	20				1		1.0			2				0	0	0	0	2
SVY	33287	Performance rate=0	90		14	0.026	0.028	2.00	6.04	8.50	10.88	22.00	304	50	15	20	10	34	80	120	200	23			1			1.0				1		0	0	0	0	0
SVY	33287	Performance rate>0	90		10	0.024	0.027	2.00	6.96	7.33	11.75	15.00	272	48	10	19	35	60	68	98	183	26				1		1.0				1		1	1	2	4	6
REC	33287	Removal and replacement of phrenic nerve stimulator including vessel catheterization,	90			0.042	0.034			6.05			177	18	1	6			70			23						0.5			1							
MPC	33207	Insertion of new or replacement of permanent pacemaker with	90	2007		0.047	0.033			7.80			234	10	13	20			60			30				1		1.0				1						

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	33235	Removal of transvenous pacemaker electrode(s); dual	90	1994	5	0.019	0.025			9.90			390	50					170			60							2								
2nd REF	61886	Insertion or replacement of cranial neurostimulator pulse	90	1999	4	0.003	0.026			9.93			385	50					100			25				2		1.0				4						
CURRENT	0428T	Removal of neurostimulator system for treatment of central				-	-						0																									
SVY	33288	Removal and replacement of phrenic nerve stimulator	90		24	0.017	0.026	1.00	8.51	10.13	13.13	25.00	391	50	15	20	10	90	120	153	240	30				1		1.0				1	1	0	0	0	1	5
SVY	33288	Targeted	90		17	0.046	0.034	1.00	8.65	12.00	15.00	25.00	351	50	15	20	60	90	120	180	240	30				1		1.0				1		0	0	0	1	5
SVY	33288	Random	90		7	0.012	0.026	2.00	7.74	10.00	11.25	18.00	392	32	15	15	10	80	120	120	160	20				1			1			2		0	0	0	0	2
SVY	33288	Performance rate=0	90		16	0.012	0.025	2.00	9.40	10.13	12.13	20.00	409	58	15	20	10	88	120	153	180	23				1			1		1	1		0	0	0	0	0
SVY	33288	Performance rate>0	90		8	0.028	0.029	1.00	6.00	11.25	16.58	25.00	391	55	20	15	60	98	130	158	240	30				1		1.0			1	1		1	1	2	4	5
REC	33288	Removal and replacement of phrenic nerve stimulator including vessel catheterization,	90			0.039	0.033			8.51			256	40	3	6			120			28						0.5			1							

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	93281	Programming device evaluation (in person) with iterative	XXX	2016	10	0.031	0.027			0.85			32	7					15			10																
2nd REF	99215	Office or other outpatient visit for the evaluation and	XXX	2019	4	0.040	0.040			2.80			70	10					45			15																
CURRENT	0435T	Programming device evaluation of implanted neurostimulator				-	-						0																									
SVY	93150	Therapy activation of implanted phrenic nerve stimulator system	XXX		21	0.040	0.032	0.77	0.85	1.20	2.00	4.00	38	10			10	15	20	35	60	8												0	0	1	3	15
SVY	93150	Targeted	XXX		11	0.049	0.040	0.82	1.35	1.80	2.75	4.00	45	10			15	20	30	50	60	5												0	1	3	4	15
SVY	93150	Random	XXX		10	0.028	0.025	0.77	0.85	0.85	0.93	3.00	34	10			10	14	15	19	35	9												0	0	0	1	4
REC	93150	Therapy activation of implanted phrenic nerve stimulator system including all interrogation and	XXX			0.022	0.022			0.85			38	10					20			8																
MPC	95971	Electronic analysis of implanted neurostimulator pulse	XXX	2015		0.024	0.024			0.78			33	8					20			5																

SS Rec Summary

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	93280	Programming device evaluation (in person) with iterative	XXX	2016	8	0.026	0.024			0.77			32	7					15			10																
2nd REF	93281	Programming device evaluation (in person) with iterative	XXX	2016	7	0.031	0.027			0.85			32	7					15			10																
CURRENT	0435T	Programming device evaluation of implanted neurostimulator				-	-						0																									
SVY	93151	Interrogation and programming (minimum one parameter) of	XXX		20	0.032	0.028	0.75	0.80	1.00	1.93	4.00	36	10			7	15	20	32	45	6													0	0	1	6	18
SVY	93151	Targeted	XXX		11	0.031	0.028	0.75	1.00	1.10	2.15	4.00	40	10			7	18	25	40	45	5													0	1	3	8	18
SVY	93151	Random	XXX		9	0.030	0.026	0.77	0.80	0.85	0.85	2.00	33	10			10	14	15	20	35	8													0	0	0	1	8
REC	93151	Interrogation and programming (minimum one parameter) of implanted phrenic nerve	XXX			0.022	0.022	0.80					36	10					20			6																
MPC	95971	Electronic analysis of implanted neurostimulator pulse	XXX	2015		0.024	0.024	0.78					33	8					20			5																

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	95810	Polysomnography; age 6 years or older, sleep staging with 4 or	XXX	2010	14	0.050	0.038			2.50			66.5	15					37			15																
2nd REF	99215	Office or other outpatient visit for the evaluation and	XXX	2019	2	0.040	0.040			2.80			70	10					45			15																
CURRENT	0436T	Programming device evaluation of implanted neurostimulator				-	-						0																									
SVY	93152	Interrogation and programming of implanted phrenic nerve	XXX		19	0.090	0.060	0.77	2.25	2.70	2.85	5.00	45	10			0	16	25	45	120	10													0	0	0	2	3
SVY	93152	Targeted	XXX		11	0.079	0.060	1.00	2.50	2.70	2.95	5.00	45	5			0	16	30	45	60	10													0	0	2	3	3
SVY	93152	Random	XXX		8	0.088	0.055	0.77	1.95	2.55	2.75	3.55	46	12			14	16	23	53	120	11													0	0	0	1	2
SVY	93152	Performance rate=0	XXX		11	0.082	0.056	0.77	2.15	2.50	2.70	2.90	45	10			12	18	25	38	120	10													0	0	0	0	0
SVY	93152	Performance rate>0	XXX		8	0.079	0.055	1.00	2.53	2.90	3.21	5.00	53	8			0	13	30	49	120	15													1	2	2	3	3
REC	93152	Interrogation and programming of implanted phrenic nerve stimulator system during a	XXX			0.055	0.040	1.82					45	10					25			10																
XWALK	71275	Computed tomographic angiography, chest	XXX			0.064	0.052	1.82					35	5					25			5																
MPC	92005	Ophthalmological services: medical examination and	XXX	2007		0.059	0.046	1.82					40	5					25			10																
MPC	74178	Computed tomography, abdomen and pelvis; without	XXX	2010		0.060	0.050	2.01					40	5					30			5																

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	93280	Programming device evaluation (in person) with iterative	XXX	2016	13	0.026	0.024			0.77			32	7					15			10																
2nd REF	99213	Office or other outpatient visit for the evaluation and	XXX	2019	3	0.043	0.043			1.30			30	5					20			5																
CURRENT	0434T	Interrogation device evaluation implanted neurostimulator pulse				-	-						0																									
SVY	93153	Interrogation, without programming of implanted	XXX		20	0.041	0.032	0.40	0.72	0.80	1.20	4.00	25	7			5	10	13	20	40	5													0	0	0	2	18
SVY	93153	Targeted	XXX		11	0.039	0.033	0.50	0.79	1.00	1.75	4.00	30	5			5	10	20	25	40	5													0	0	1	3	18
SVY	93153	Random	XXX		9	0.050	0.035	0.40	0.65	0.77	0.80	2.00	22	7			5	6	10	14	30	5													0	0	0	1	2
SVY	93153	Performance rate=0	XXX		11	0.052	0.037	0.40	0.68	0.77	0.83	2.50	21	6			5	8	10	25	40	5													0	0	0	0	0
SVY	93153	Performance rate>0	XXX		9	0.038	0.031	0.50	0.80	1.10	2.00	4.00	35	7			6	10	20	20	30	8													1	1	2	5	18
REC	93153	Interrogation, without programming of implanted phrenic nerve stimulator system	XXX			0.012	0.017	0.43					25	7					13			5																
XWALK	93288	Interrogation device evaluation (in person) with analysis, review	XXX			0.016	0.020	0.43					22	5					10			7																
MPC	93924	Noninvasive physiologic studies of lower extremity arteries, at	XXX	2010		0.026	0.025	0.50					20	3					13			4																

ISSUE: Phrenic Nerve Stimulation System

TAB: 6

Median wRVUs

Source	CPT	DESC	Global	IWPUT	Work Per Unit Time	RVW	Total Time	PRE-TIME			INTRA-TIME					IMMD	FAC-inpt or obs/disch							Office				
								EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	91	92	33	32	31	38	39	15	14	13	12	11
	33276	Insert phrenic system	90	0.059	0.042	10.75	253	40	3	6			120			25				0		0.5			1	0		
	33277	Insert phrenic sensing lead	ZZZ	0.062	0.062	7.49	120						120															
	33278	Remove phrenic system	90	0.061	0.044	10.51	239	40	3	6			120			28				0		0.5			0	1		
	33279	Remove phrenic lead only	90	0.054	0.041	9.71	239	40	3	6			120			28				0		0.5			0	1		
	33280	Remove generator only	90	0.061	0.039	6.90	179	40	3	6			60			28				0		0.5				1		
	33281	Reposition lead(s)	90	0.047	0.037	9.00	246	40	3	6			110			28				0		0.5			1	0		
	33287	Remove and replace generator	90	0.059	0.039	7.83	201	40	3	6			70			23				0		0.5			1	0		
	33288	Remove and replace lead	90	0.053	0.040	10.13	256	40	3	6			120			28				0		0.5			1	0		

Comparison Hierarcy

Source	CPT	DESC	Global	IWPUT	Work Per Unit Time	RVW	Total Time	PRE-TIME			INTRA-TIME					IMMD	FAC-inpt or obs/disch							Office				
								EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	91	92	33	32	31	38	39	15	14	13	12	11
	33270	Insertion SICD system	90	0.055	0.039	9.10	232	33	1	5			90			25						1.0			1			
	33271	Insert SICD electrode	90	0.056	0.037	7.50	202	33	1	5			60			25						1.0			1			
	33241+33244	Remove AICD system (33244+half 33241)	90	0.050	0.039	15.26	396	67.5					210			30											5.5	
XWALK	33272	Remove SICD electrode only	90	0.054	0.036	5.42	151	33	1	5			45			25						0.5				1		
XWALK	33241	Remove AICD generator only	90	0.007	0.018	3.04	171	35					60			60											1	
	33273	Reposition SICD lead only	90	0.039	0.032	6.50	202	33	1	5			60			25						1.0			1			
	33262	Remove and replace SICD generator	90	0.056	0.039	5.81	150	10	3	15			60			20						0.5				1		
	33271+33272	Remove and replace SICD electrode (33271+half 33272)	90	0.056	0.037	10.21	278	49.5	1.5	7.5			83			37.5						1.3			1	0.5		

25th-percentile wRVUs

Source	CPT	DESC	Global	IWPUT	Work Per Unit Time	RVW	Total Time	PRE-TIME			INTRA-TIME					IMMD	FAC-inpt or obs/disch							Office				
								EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	91	92	33	32	31	38	39	15	14	13	12	11
	33276	Insert phrenic system	90	0.048	0.038	9.50	253	40	3	6			120			25				0		0.5			1	0		
	33277	Insert phrenic sensing lead	ZZZ	0.045	0.045	5.43	120						120															
	33278	Remove phrenic system	90	0.053	0.040	9.55	239	40	3	6			120			28				0		0.5			0	1		
	33279	Remove phrenic lead only	90	0.037	0.032	7.66	239	40	3	6			120			28				0		0.5			0	1		
	33280	Remove generator only	90	0.046	0.034	6.00	179	40	3	6			60			28				0		0.5				1		
	33281	Reposition lead(s)	90	0.020	0.024	6.00	246	40	3	6			110			28				0		0.5			1	0		
	33287	Remove and replace generator	90	0.034	0.030	6.05	201	40	3	6			70			23				0		0.5			1	0		
	33288	Remove and replace lead	90	0.039	0.033	8.51	256	40	3	6			120			28				0		0.5			1	0		

WPUT Rank	IWPUT Rank			IWPUT	WPUT	Intratime	RVW MED	RVW COMP	Intratime	WPUT	IWPUT			IWPUT Rank	WPUT Rank
3	4	33276	Insert phrenic system	0.059	0.042	120	10.75	9.10	90	0.039	0.055	Insertion SICD system	33270	4	1
1	1	33277	Insert phrenic sensing lead (ZZZ code)	0.062	0.062	120	7.49	7.50	60	0.037	0.056	Insert SICD electrode* (090 code)	33271	1	4
2	2	33278	Remove phrenic system	0.061	0.044	120	10.51	15.26	210	0.039	0.050	Remove AICD system (33244+half 33241)	33241+332	6	1
4	6	33279	Remove phrenic lead only	0.054	0.041	120	9.71	5.42	45	0.036	0.054	Remove SICD electrode only	33272	5	6
6	2	33280	Remove generator only	0.061	0.039	60	6.90	3.04	60	0.018	0.007	Remove AICD generator only	33241	8	8
7	8	33281	Reposition lead(s)	0.047	0.037	110	9.00	6.50	60	0.032	0.039	Reposition SICD lead only	33273	7	7
6	4	33287	Remove and replace generator	0.059	0.039	70	7.83	5.81	60	0.039	0.056	Remove and replace SICD generator	33262	1	1
5	7	33288	Remove and replace lead	0.053	0.040	120	10.13	10.21	82.5	0.037	0.056	Remove and replace SICD electrode (33271+half 332	33271+332	1	4

				IWPUT	WPUT	Intratime	RVW 25th	RVW COMP	Intratime	WPUT	IWPUT			IWPUT Rank	WPUT Rank
3	2	33276	Insert phrenic system	0.048	0.038	120	9.50	9.10	90	0.039	0.055	Insertion SICD system	33270	4	1
1	4	33277	Insert phrenic sensing lead (ZZZ code)	0.045	0.045	120	5.43	7.50	60	0.037	0.056	Insert SICD electrode* (090 code)	33271	1	4
2	1	33278	Remove phrenic system	0.053	0.040	120	9.55	15.26	210	0.039	0.050	Remove AICD system (33244+half 33241)	33241+332	6	1
6	6	33279	Remove phrenic lead only	0.037	0.032	120	7.66	5.42	45	0.036	0.054	Remove SICD electrode only	33272	5	6
4	3	33280	Remove generator only	0.046	0.034	60	6.00	3.04	60	0.018	0.007	Remove AICD generator only	33241	8	8
8	8	33281	Reposition lead(s)	0.020	0.024	110	6.00	6.50	60	0.032	0.039	Reposition SICD lead only	33273	7	7
7	7	33287	Remove and replace generator	0.034	0.030	70	6.05	5.81	60	0.039	0.056	Remove and replace SICD generator	33262	1	1
5	5	33288	Remove and replace lead	0.039	0.033	120	8.51	10.21	82.5	0.037	0.056	Remove and replace SICD electrode (33271+half 332	33271+332	1	4

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
33276	Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s]) including vessel catheterization, all imaging guidance, and pulse generator initial analysis with diagnostic mode activation when performed (Do not report 33276 in conjunction with 93150, 93151, 93152, 93153)	090
33277	Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code for primary procedure) (Use 33277 in conjunction with 33276, 33287) (For insertion of a phrenic nerve sensing lead other than at initial insertion of the phrenic nerve stimulator system, use 33999)	ZZZ
33278	Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming, when performed; system, including pulse generator and lead(s)	090
33279	transvenous stimulation or sensing lead(s) only (Use 33279 once for removal of one or more lead[s])	090
33280	pulse generator only (Do not report 33278, 33279, 33280 in conjunction with 33276, 33277, 33281, 33287, 33288)	090
33281	Repositioning of phrenic nerve stimulator transvenous lead(s) (Report 33281 only once per patient per day) (Do not report 33281 in conjunction with 33276, 33277)	090
33287	Removal and replacement of phrenic nerve stimulator including vessel catheterization, all imaging guidance, and interrogation and programming when performed; pulse generator (Do not report 33287 in conjunction with 33276, 33278)	090
33288	transvenous stimulation or sensing lead (Use 33288 once for removal of one or more lead[s]) (Do not report 33288 in conjunction with 33277, 33279, 33281)	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette	
33276	A 65-year-old male has a history of excessive daytime sleepiness and insomnia. The patient recently underwent a polysomnogram and was diagnosed with central sleep apnea with an apnea hypopnea index of 50 events/hour.	090
33277	A 65-year-old male has a history of excessive daytime sleepiness and insomnia. The patient recently underwent a polysomnogram and was diagnosed with central sleep	ZZZ

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

	apnea with an apnea hypopnea index of 50 events/hour. A phrenic nerve stimulator system is recommended. During system implantation, an additional sensing lead is determined to be necessary to optimize system function. [Note: This is an add-on service. Only consider the additional work of placing a sensing lead.]	
33278	A 65-year-old male has a history of central sleep apnea treated successfully with a phrenic nerve stimulator system. After a recent skin infection, the patient develops bacteremia that persists with signs of pocket infection; complete removal of the system is recommended.	090
33279	A 65-year-old male has a prior history of central sleep apnea and phrenic nerve stimulator system previously had removal of the pulse generator for radiation therapy. He now presents with bacteremia and infection of the abandoned stimulation lead; complete lead removal is recommended.	090
33280	A 67-year-old male with previously placed phrenic nerve stimulation system requires radiation therapy. Existing generator is in the planned path of therapy beam; therefore, the pulse generator removal is required.	090
33281	A 67-year-old male has a phrenic nerve stimulator system for central sleep apnea. When the patient suffered a fall, the lead(s) changed position, which is limiting the effectiveness of the therapy and the lead needs to be repositioned.	090
33287	A 65-year-old male has a history of central sleep apnea treated successfully with a phrenic nerve stimulator system. The device has now reached battery depletion and requires removal of the current generator and replacement with a new generator.	090
33288	A 65-year-old male has a history of central sleep apnea treated successfully with a phrenic nerve stimulator system. At recent device check, the stimulation lead was found to have fractured and is no longer functioning. Removal of the lead and replacement with a new lead is recommended to restore normal system function.	090

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The societies utilized a consensus panel process to develop recommended inputs.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   The new codes are compared to code 33212 for pacemaker generator insertion. It seemed appropriate to compare to another 90-day global code where a device is implanted into a patient. With the exception of 33277, all inputs are clinical staff standards for 90-day globals that will be adjusted as needed pending discussion of number and level of visits by the RUC. 33277 is a facility-based ZZZ code that has no inputs.

3. Is this code(s) typically reported with an E/M service?

   No

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

n/a

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No.

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

No

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

No

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

Clinical staff standards for coordinating 90-day facility procedures: diagnostic/referral forms, pre-surgery services, scheduling, consent, phone calls and prescriptions

   b. Service period (includes pre, intra and post):

The standard 6 minutes has been applied for these inpatient procedures for one half discharge day management related services when the patient is discharged the same day as the procedure, as indicated by the survey.

   c. Post-service period:

Standard post-op office visit clinical staff time. We will adjust these, if necessary, as needed after discussion of number and level of post-op visits by the full RUC during discussions of physician work.

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

n/a

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

n/a

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

12. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

n/a

14. Are you recommending a PE supply pack for this recommendation? **Yes** or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

Established pack SA048

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

n/a

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

n/a

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

c. Does the computer include code specific software that is typically used to provide the service(s)?

No

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

EF023 exam table: Office visit formula

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:

n/a

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

n/a

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition to those revisions, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

-Post-op visits: Standard inputs for post op visits. Number/level of visits adjusted to 1 Level 4 visits when a total system is intact, 1 Level 3 visit when hardware was removed but not replaced. Can adjust further pending RUC discussion.
-SA054 was removed from each 090 service as most patients receive dissolvable stitches and will not require a suture kit in their post-op visit
-SA048 is 1 for each 090 service, reflecting the societies discussed recommendations that the patient is only seen once in the office post-op.
-EF031 power table was changed to EF023 exam table

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
93150	Therapy activation of implanted phrenic nerve stimulator system including all interrogation and programming (Do not report 93150 in conjunction with 33276, 33277, 33278, 33279, 33280, 33281, 93151, 93152, 93153)	XXX
93151	Interrogation and programming (minimum one parameter) of implanted phrenic nerve stimulator system (Do not report 93151 in conjunction with 93150, 93152, 93153) (For interrogation without programming, use 93153)	XXX
93152	Interrogation and programming of implanted phrenic nerve stimulator system during polysomnography (Do not report 93152 in conjunction with 33276, 93150, 93151, 93153) (For polysomnography, see 95808, 95810, 95811, 95782, 95783)	XXX
93153	Interrogation, without programming, of implanted phrenic nerve stimulator system (Do not report 93153 in conjunction with 33276, 93150, 93151, 93152)	XXX

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette	
93150	A 66-year-old male recently had a phrenic nerve stimulator system implanted. The patient returns to the clinic for initial activation of therapy.	XXX
93151	A 68-year-old male has central sleep apnea and a phrenic nerve stimulator system for sleep apnea was previously implanted and activated. The device programming needs to be adjusted due to recent new symptoms.	XXX
93152	A 66-year-old male with a previously implanted phrenic nerve stimulation system requires evaluation while sleeping to confirm therapy efficacy and optimize programming during a polysomnography.	XXX
93153	A 68-year-old male has central sleep apnea and an implantable phrenic nerve stimulator system. The patient comes to clinic to check battery status and overall device function.	XXX

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

The societies utilized a consensus panel process to develop recommended inputs, comparing these new interrogation/programming services to other services where programming/interrogation occurs. We spoke with members who have been involved in early adoption of the technology. Finally, we obtained clinical staff training materials to better understand the workflow.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

93279 is similar to 93150-93152 in that a patient comes to the office for a device interrogation programming. Each of the phrenic nerve stimulator programming codes are different, but 93279 is useful for comparison to all. 95811 is a sleep study that will be performed in tandem with 93152. We include it here to ensure there are not duplicate expenses. 93288 is similar to 93153 in that a patient comes to the office for a device interrogation without any programming.

3. Is this code(s) typically reported with an E/M service?
Is this code(s) typically reported with the E/M service in the nonfacility?
(Please see the *Billed Together* tab in the RUC Database)

We anticipate these services will be billed with an E/M service some of the time, but it is unclear if it will be typical. Category III claims data are not instructive.

4. What specialty is the dominant provider in the nonfacility?
What percent of the time does the dominant provider provide the service(s) in the nonfacility?
Is the dominant provider in the nonfacility different than for the global?
(Please see the *Billed Together* tab in the RUC Database)

These are new codes for young technology. Right now many cardiac electrophysiologists who implant the devices also execute the initiation programming (93150) a month after implant while sleep physicians perform the interrogation and programming interrogation services (93151-93153). It is expected that sleep physicians will perform the vast majority of all four services.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

n/a

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

No

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

No

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

n/a

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

93150: 5
93151: 5
93152: 0
93153: 5

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

    b. Service period (includes pre, intra and post):

For 93150, 93151, and 93153 clinical staff greet the patient, obtain vitals, educate and consent the patient, prepare the room, perform the device programming/interrogation, clean the room, and complete post-procedure forms.
For 93152 clinical staff only perform the device interrogation programming and completion of post-procedure forms because that work is already captured by the sleep study service.

    c. Post-service period:

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
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Clinical staff time for each of these services is unrelated to physician work time. The below table shows the specific tasks performed by the tech is specified in vendor training materials for the initiation/activation (93150), interrogation and programming (93151), interrogation and programming during sleep study (93152), and interrogation-only services (93153). Consultation with members physicians who perform these services and comparison to vendor training materials lead to the clinical staff minute recommendations included at the bottom of the table and in the PE spreadsheet as CA021.

	93150	93151	93152	93153
Lead impedance tested	X	X	X	X
Battery status and diagnostics reviewed	X	X	X	X
Test all electrode pairs for stimulation/comfort and select best	X			
Position calibrated	X		X	
Stimulation settings programmed by position	X		X	
Respiratory rate assessed and programmed	X		X	
Programming of weekly/nightly titration	X			
Therapy start/stop time programmed and DST	X	X	X	
Pitch programmed with marker confirmation	X		X	
Activity level programmed	X			
Set suspension windows	X		X	
Set sleep latency			X	
Testing of best electrode pair only		X		X
Determine arousal threshold with stimulation			X	
Determine sleep onset patterns with stimulation			X	
Program stimulation parameters by hour of sleep			X	
Determine efficacy by position			X	
Real time titration			X	
CA021 clinical staff time	60	45	75	20

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

n/a

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

n/a

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

n/a

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

n/a

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

Yes, each code includes a multi-specialty visit pack, SA048.

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

Two invoices are included that display a price for a phrenic nerve stimulator with wand. We recommend $3008 as the average of those two prices.

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

5 years

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

No

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

-EF023 exam table: default formula for 93150, 93151, and 93153 -NEW phrenic nerve stimulator programmer with wand: default formula

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

n/a

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

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-line 148: EF023 went from 75 to 0 as the exam table is already accounted for in the underlying sleep study

	A	B	D	E	F	G	H	I	J	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**	
2						**33212**		**0424T**		**33276**	
3		***RUC Collaboration Website***				Insertion of pacemaker pulse generator only; with existing single lead		Insertion or replacement of neurostimulator system for treatment of central sleep		Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s])	
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**						
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**					**090**				**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 59.72**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**119.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ -**	**$ 46.41**	**$ -**	**$ -**	**$ -**	**$ 54.15**
13		**PRE-SERVICE PERIOD**									
14		**Start: Following visit when decision for surgery/procedure made**									
15	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455		5				5
16	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455		20				20
17	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455		8				8
18	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455		20				20
19	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455		7				7
20	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455						
21	CA007	Review patient clinical extant information and questionnaire	L037D	RN/LPN/MTA	0.455						
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455						
23			L037D	RN/LPN/MTA	0.455						
26		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
29		**End: When patient enters office/facility for surgery/procedure**									
30		**SERVICE PERIOD**									
31		**Start: When patient enters office/facility for surgery/procedure:**									
32		**Pre-Service (of service period)**									
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are	L037D	RN/LPN/MTA	0.455						
34	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455						
35	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455						
36	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455						
37	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455						
38	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455						
39	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455						
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L037D	RN/LPN/MTA	0.455						
41	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455						
42			L037D	RN/LPN/MTA	0.455						
45		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
48		**Intra-service (of service period)**									
49	CA018	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455						
50	CA019	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455						
51	CA020	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455						
52	CA021	Perform procedure/service---NOT directly related to physician work time	L037D	RN/LPN/MTA	0.455						
55			L037D	RN/LPN/MTA	0.455						
56		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
59		**Post-Service (of service period)**									
60	CA022	Monitor patient following procedure/service, multitasking 1:4	L037D	RN/LPN/MTA	0.455						
61	CA023	Monitor patient following procedure/service, no multitasking	L037D	RN/LPN/MTA	0.455						
62	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455						
63	CA025	Clean scope	L037D	RN/LPN/MTA	0.455						
64	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455						
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D	RN/LPN/MTA	0.455						
66	CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D	RN/LPN/MTA	0.455						
67	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455						
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,	L037D	RN/LPN/MTA	0.455						
69	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455						
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to	L037D	RN/LPN/MTA	0.455						
71	CA033	Perform regulatory mandated quality assurance activity (service period)	L037D	RN/LPN/MTA	0.455						
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry	L037D	RN/LPN/MTA	0.455						
73	CA035	Review home care instructions, coordinate visits/prescriptions	L037D	RN/LPN/MTA	0.455						
74	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**	**6**	**n/a**		**n/a**	**6**
75			L037D	RN/LPN/MTA	0.455						
78		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
81		**End: Patient leaves office/facility**									
82		**POST-SERVICE PERIOD**									
83		**Start: Patient leaves office/facility**									
84	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455						
85	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455						
86		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
87		99211 16 minutes	16								
88		99212 27 minutes	27								
89		99213 36 minutes	36				1				
90		99214 53 minutes	53								1
91		99215 63 minutes	63								
92	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
93			L037D	RN/LPN/MTA	0.455						
96		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
99		**End: with last office visit before end of global period**									

	A	B	D	E	F	G	H	I	J	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**	
2						**33212**		**0424T**		**33276**	
3		***RUC Collaboration Website***									
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**	Insertion of pacemaker pulse generator only; with existing single lead		Insertion or replacement of neurostimulator system for treatment of central sleep		Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s])	
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**					**090**				**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 59.72**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**119.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
100	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**							
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ -**	**$ 14.66**	**$ -**	**$ -**	**$ -**	**$ 5.02**
102	SA048	pack, minimum multi-specialty visit	5.02	pack			2				1
103	SA054	pack, post-op incision care (suture)	4.62	pack			1				
104											
105											
106											
107											
108		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*									
110	**Equipment**	**EQUIPMENT**	**Purchase**	**Equipment**	**Cost Per**						
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ -**	**$ 0.94**	**$ -**	**$ -**	**$ -**	**$ 0.56**
112	EF023	table, exam	4737.727	Office Visits	0.010538571		36.0				53.0
113	EF031	table, power	5906.76	Office Visits	0.015674926		36.0				
114											
115											
116											
117											
118		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*									
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1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**	
2						**33212**		**0424T**		**33276**	
3		***RUC Collaboration Website***									
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**	Insertion of pacemaker pulse generator only; with existing single lead		Insertion or replacement of neurostimulator system for treatment of central sleep		Insertion of phrenic nerve stimulator system (pulse generator and stimulating lead[s])	
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**					**090**				**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 59.72**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**119.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
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1	**RUC Practice Expense Spreadsheet**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**CURI**
2				**33212**		**0425T**		**33277**			**33212**		**042**
3		***RUC Collaboration Website***		Insertion of pacemaker pulse generator only; with existing single lead		Insertion or replacement of neurostimulator system for treatment of central sleep		Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code			Insertion of pacemaker pulse generator only; with existing single lead		Remo neurost system for of centr apnea
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**											
5		**LOCATION**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**			**090**				**ZZZ**			**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ 62.01**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**102.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**36.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**		**$ -**	**$ 46.41**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ 46.41**	**$ -**
13		**PRE-SERVICE PERIOD**											
14		**Start: Following visit when decision for surgery/procedure made**											
15	CA001	Complete pre-service diagnostic and referral forms			5							5	
16	CA002	Coordinate pre-surgery services (including test results)			20							20	
17	CA003	Schedule space and equipment in facility			8							8	
18	CA004	Provide pre-service education/obtain consent			20							20	
19	CA005	Complete pre-procedure phone calls and prescription			7							7	
20	CA006	Confirm availability of prior images/studies											
21	CA007	Review patient clinical extant information and questionnaire											
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)											
23													
26		*Other activity: please include short clinical description here and type*											
29		**End: When patient enters office/facility for surgery/procedure**											
30		**SERVICE PERIOD**											
31		**Start: When patient enters office/facility for surgery/procedure:**											
32		**Pre-Service (of service period)**											
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are											
34	CA010	Obtain vital signs											
35	CA011	Provide education/obtain consent											
36	CA012	Review requisition, assess for special needs											
37	CA013	Prepare room, equipment and supplies											
38	CA014	Confirm order, protocol exam											
39	CA015	Setup scope (nonfacility setting only)											
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient											
41	CA017	Sedate/apply anesthesia											
42													
45		*Other activity: please include short clinical description here and type*											
48		**Intra-service (of service period)**											
49	CA018	Assist physician or other qualified healthcare professional---directly											
50	CA019	Assist physician or other qualified healthcare professional---directly											
51	CA020	Assist physician or other qualified healthcare professional---directly											
52	CA021	Perform procedure/service---NOT directly related to physician work time											
55													
56		*Other activity: please include short clinical description here and type*											
59		**Post-Service (of service period)**											
60	CA022	Monitor patient following procedure/service, multitasking 1:4											
61	CA023	Monitor patient following procedure/service, no multitasking											
62	CA024	Clean room/equipment by clinical staff											
63	CA025	Clean scope											
64	CA026	Clean surgical instrument package											
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions											
66	CA028	Review/read post-procedure x-ray, lab and pathology reports											
67	CA029	Check dressings, catheters, wounds											
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,											
69	CA031	Review examination with interpreting MD/DO											
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to											
71	CA033	Perform regulatory mandated quality assurance activity (service period)											
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry											
73	CA035	Review home care instructions, coordinate visits/prescriptions											
74	CA036	Discharge day management		**n/a**	**6**	**n/a**		**n/a**			**n/a**	**6**	**n/a**
75													
78		*Other activity: please include short clinical description here and type*											
81		**End: Patient leaves office/facility**											
82		**POST-SERVICE PERIOD**											
83		**Start: Patient leaves office/facility**											
84	CA037	Conduct patient communications											
85	CA038	Coordinate post-procedure services											
86		***Office visits: List Number and Level of Office Visits***		**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**		**# visits**	**# visits**	**# visits**
87		99211 16 minutes											
88		99212 27 minutes											
89		99213 36 minutes			1							1	
90		99214 53 minutes											
91		99215 63 minutes											
92	CA039	Post-operative visits (total time)		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**36.0**	**0.0**
93													
96		*Other activity: please include short clinical description here and type*											
99		**End: with last office visit before end of global period**											

	A	B	M	N	O	P	Q	R	S	T	U	V	W
1	**RUC Practice Expense Spreadsheet**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**CURI**
2				**33212**		**0425T**		**33277**			**33212**		**042**
3		***RUC Collaboration Website***		Insertion of pacemaker pulse generator only; with existing single lead		Insertion or replacement of neurostimulator system for treatment of central sleep		Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code			Insertion of pacemaker pulse generator only; with existing single lead		Remo neurost system for of centr apnea
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**											
5		**LOCATION**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**			**090**				**ZZZ**			**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ 62.01**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**102.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**36.0**	**0.0**
100	**Supply Code**	**MEDICAL SUPPLIES**											
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**		**$ -**	**$ 14.66**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ 14.66**	**$ -**
102	SA048	pack, minimum multi-specialty visit			2							2	
103	SA054	pack, post-op incision care (suture)			1							1	
104													
105													
106													
107													
108		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*											
110	**Equipment**	**EQUIPMENT**											
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**		**$ -**	**$ 0.94**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ 0.94**	**$ -**
112	EF023	table, exam			36.0							36.0	
113	EF031	table, power			36.0							36.0	
114													
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118		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*											
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1	**RUC Practice Expense Spreadsheet**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**CURI**
2				**33212**		**0425T**		**33277**			**33212**		**042**
3		***RUC Collaboration Website***		Insertion of pacemaker pulse generator only; with existing single lead		Insertion or replacement of neurostimulator system for treatment of central sleep		Insertion of phrenic nerve stimulator transvenous sensing lead (List separately in addition to code			Insertion of pacemaker pulse generator only; with existing single lead		Remo neurost system for of centr apnea
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**											
5		**LOCATION**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**			**090**				**ZZZ**			**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ 62.01**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**102.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**36.0**	**0.0**
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1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**28T**	**33278**			**33212**		**0429T**		**33279**		
3		***RUC Collaboration Website***	val of	Removal of phrenic					Removal of		Removal of phrenic		
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**	imulator treatment al sleep ; pulse	nerve stimulator including vessel catheterization, all imaging guidance,			Insertion of pacemaker pulse generator only; with existing single lead		neurostimulator system for treatment of central sleep apnea; sensing lead		nerve stimulator including vessel catheterization, all imaging guidance,		
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**			**090**			**090**				**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ 51.81**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**	
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**102.0**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ -**	**$ -**	**$ 46.41**		**$ -**	**$ 46.41**	**$ -**	**$ -**	**$ -**	**$ 46.41**	
13		**PRE-SERVICE PERIOD**											
14		**Start: Following visit when decision for surgery/procedure made**											
15	CA001	Complete pre-service diagnostic and referral forms			5			5				5	
16	CA002	Coordinate pre-surgery services (including test results)			20			20				20	
17	CA003	Schedule space and equipment in facility			8			8				8	
18	CA004	Provide pre-service education/obtain consent			20			20				20	
19	CA005	Complete pre-procedure phone calls and prescription			7			7				7	
20	CA006	Confirm availability of prior images/studies											
21	CA007	Review patient clinical extant information and questionnaire											
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)											
23													
26		*Other activity: please include short clinical description here and type*											
29		**End: When patient enters office/facility for surgery/procedure**											
30		**SERVICE PERIOD**											
31		**Start: When patient enters office/facility for surgery/procedure:**											
32		**Pre-Service (of service period)**											
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are											
34	CA010	Obtain vital signs											
35	CA011	Provide education/obtain consent											
36	CA012	Review requisition, assess for special needs											
37	CA013	Prepare room, equipment and supplies											
38	CA014	Confirm order, protocol exam											
39	CA015	Setup scope (nonfacility setting only)											
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient											
41	CA017	Sedate/apply anesthesia											
42													
45		*Other activity: please include short clinical description here and type*											
48		**Intra-service (of service period)**											
49	CA018	Assist physician or other qualified healthcare professional---directly											
50	CA019	Assist physician or other qualified healthcare professional---directly											
51	CA020	Assist physician or other qualified healthcare professional---directly											
52	CA021	Perform procedure/service---NOT directly related to physician work time											
55													
56		*Other activity: please include short clinical description here and type*											
59		**Post-Service (of service period)**											
60	CA022	Monitor patient following procedure/service, multitasking 1:4											
61	CA023	Monitor patient following procedure/service, no multitasking											
62	CA024	Clean room/equipment by clinical staff											
63	CA025	Clean scope											
64	CA026	Clean surgical instrument package											
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions											
66	CA028	Review/read post-procedure x-ray, lab and pathology reports											
67	CA029	Check dressings, catheters, wounds											
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,											
69	CA031	Review examination with interpreting MD/DO											
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to											
71	CA033	Perform regulatory mandated quality assurance activity (service period)											
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry											
73	CA035	Review home care instructions, coordinate visits/prescriptions											
74	CA036	Discharge day management		**n/a**	**6**		**n/a**	**6**	**n/a**		**n/a**	**6**	
75													
78		*Other activity: please include short clinical description here and type*											
81		**End: Patient leaves office/facility**											
82		**POST-SERVICE PERIOD**											
83		**Start: Patient leaves office/facility**											
84	CA037	Conduct patient communications											
85	CA038	Coordinate post-procedure services											
86		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**		**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	
87		99211 16 minutes											
88		99212 27 minutes											
89		99213 36 minutes			1			1				1	
90		99214 53 minutes											
91		99215 63 minutes											
92	CA039	Post-operative visits (total time)	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
93													
96		*Other activity: please include short clinical description here and type*											
99		**End: with last office visit before end of global period**											

	A	B	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**28T**	**33278**			**33212**		**0429T**		**33279**		
3		***RUC Collaboration Website***	val of	Removal of phrenic					Removal of		Removal of phrenic		
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**	imulator treatment al sleep ; pulse	nerve stimulator including vessel catheterization, all imaging guidance,			Insertion of pacemaker pulse generator only; with existing single lead		neurostimulator system for treatment of central sleep apnea; sensing lead		nerve stimulator including vessel catheterization, all imaging guidance,		
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**			**090**			**090**				**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ 51.81**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**	
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**102.0**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
100	**Supply Code**	**MEDICAL SUPPLIES**											
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ -**	**$ 5.02**		**$ -**	**$ 14.66**	**$ -**	**$ -**	**$ -**	**$ 5.02**	
102	SA048	pack, minimum multi-specialty visit			1			2				1	
103	SA054	pack, post-op incision care (suture)						1					
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108		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*											
110	**Equipment**	**EQUIPMENT**											
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ -**	**$ 0.38**		**$ -**	**$ 0.94**	**$ -**	**$ -**	**$ -**	**$ 0.38**	
112	EF023	table, exam			36.0			36.0				36.0	
113	EF031	table, power						36.0					
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115													
116													
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118		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*											
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1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**28T**	**33278**			**33212**		**0429T**		**33279**		
3		***RUC Collaboration Website***	val of	Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance,			Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; sensing lead		Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance,		
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**	imulator treatment al sleep ; pulse										
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**			**090**			**090**				**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ 51.81**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**	
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**102.0**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
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1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**CURI**
2			**33212**		**0428T**		**33280**			**33212**		**043**
3		***RUC Collaboration Website***	Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; pulse		Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance,			Insertion of pacemaker pulse generator only; with existing single lead		Reposit neurost system fo of centr apnea; st
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**										
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**		**090**				**090**			**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**		**$ -**	**$ 62.01**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**		**0.0**	**102.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ -**	**$ 46.41**	**$ -**	**$ -**	**$ -**	**$ 46.41**		**$ -**	**$ 46.41**	**$ -**
13		**PRE-SERVICE PERIOD**										
14		**Start: Following visit when decision for surgery/procedure made**										
15	CA001	Complete pre-service diagnostic and referral forms		5				5			5	
16	CA002	Coordinate pre-surgery services (including test results)		20				20			20	
17	CA003	Schedule space and equipment in facility		8				8			8	
18	CA004	Provide pre-service education/obtain consent		20				20			20	
19	CA005	Complete pre-procedure phone calls and prescription		7				7			7	
20	CA006	Confirm availability of prior images/studies										
21	CA007	Review patient clinical extant information and questionnaire										
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)										
23												
26		*Other activity: please include short clinical description here and type*										
29		**End: When patient enters office/facility for surgery/procedure**										
30		**SERVICE PERIOD**										
31		**Start: When patient enters office/facility for surgery/procedure:**										
32		**Pre-Service (of service period)**										
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are										
34	CA010	Obtain vital signs										
35	CA011	Provide education/obtain consent										
36	CA012	Review requisition, assess for special needs										
37	CA013	Prepare room, equipment and supplies										
38	CA014	Confirm order, protocol exam										
39	CA015	Setup scope (nonfacility setting only)										
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient										
41	CA017	Sedate/apply anesthesia										
42												
45		*Other activity: please include short clinical description here and type*										
48		**Intra-service (of service period)**										
49	CA018	Assist physician or other qualified healthcare professional---directly										
50	CA019	Assist physician or other qualified healthcare professional---directly										
51	CA020	Assist physician or other qualified healthcare professional---directly										
52	CA021	Perform procedure/service---NOT directly related to physician work time										
55												
56		*Other activity: please include short clinical description here and type*										
59		**Post-Service (of service period)**										
60	CA022	Monitor patient following procedure/service, multitasking 1:4										
61	CA023	Monitor patient following procedure/service, no multitasking										
62	CA024	Clean room/equipment by clinical staff										
63	CA025	Clean scope										
64	CA026	Clean surgical instrument package										
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions										
66	CA028	Review/read post-procedure x-ray, lab and pathology reports										
67	CA029	Check dressings, catheters, wounds										
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,										
69	CA031	Review examination with interpreting MD/DO										
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to										
71	CA033	Perform regulatory mandated quality assurance activity (service period)										
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry										
73	CA035	Review home care instructions, coordinate visits/prescriptions										
74	CA036	Discharge day management	**n/a**	**6**	**n/a**		**n/a**	**6**		**n/a**	**6**	**n/a**
75												
78		*Other activity: please include short clinical description here and type*										
81		**End: Patient leaves office/facility**										
82		**POST-SERVICE PERIOD**										
83		**Start: Patient leaves office/facility**										
84	CA037	Conduct patient communications										
85	CA038	Coordinate post-procedure services										
86		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**		**# visits**	**# visits**	**# visits**
87		99211 16 minutes										
88		99212 27 minutes										
89		99213 36 minutes		1				1			1	
90		99214 53 minutes										
91		99215 63 minutes										
92	CA039	Post-operative visits (total time)	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**
93												
96		*Other activity: please include short clinical description here and type*										
99		**End: with last office visit before end of global period**										

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1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**CURI**
2			**33212**		**0428T**		**33280**			**33212**		**043**
3		***RUC Collaboration Website***	Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; pulse		Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance,			Insertion of pacemaker pulse generator only; with existing single lead		Reposit neurost system fo of centr apnea; st
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**										
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**		**090**				**090**			**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**		**$ -**	**$ 62.01**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**		**0.0**	**102.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**
100	**Supply Code**	**MEDICAL SUPPLIES**										
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ 14.66**	**$ -**	**$ -**	**$ -**	**$ 5.02**		**$ -**	**$ 14.66**	**$ -**
102	SA048	pack, minimum multi-specialty visit		2				1			2	
103	SA054	pack, post-op incision care (suture)		1							1	
104												
105												
106												
107												
108		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*										
110	**Equipment**	**EQUIPMENT**										
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ 0.94**	**$ -**	**$ -**	**$ -**	**$ 0.38**		**$ -**	**$ 0.94**	**$ -**
112	EF023	table, exam		36.0				36.0			36.0	
113	EF031	table, power		36.0							36.0	
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118		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*										
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1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**CURI**
2			**33212**		**0428T**		**33280**			**33212**		**043**
3		***RUC Collaboration Website***	Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; pulse		Removal of phrenic nerve stimulator including vessel catheterization, all imaging guidance,			Insertion of pacemaker pulse generator only; with existing single lead		Reposit neurost system fo of centr apnea; st
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**										
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**		**090**				**090**			**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**		**$ -**	**$ 62.01**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**		**0.0**	**102.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**		**0.0**	**36.0**	**0.0**
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1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**32T**	**33281**			**33212**		**0431T**		**33287**		
3		***RUC Collaboration Website***	oning of imulator treatment al sleep imulation	Repositioning of phrenic nerve stimulator transvenous lead(s) (Report 33281 only			Insertion of pacemaker pulse generator only; with existing single lead		Removal and replacement of neurostimulator system for treatment of central sleep		Removal and replacement of phrenic nerve stimulator including vessel		
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**											
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**			**090**			**090**				**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ 59.72**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**	
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**119.0**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**53.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ -**	**$ -**	**$ 54.15**		**$ -**	**$ 46.41**	**$ -**	**$ -**	**$ -**	**$ 46.41**	
13		**PRE-SERVICE PERIOD**											
14		**Start: Following visit when decision for surgery/procedure made**											
15	CA001	Complete pre-service diagnostic and referral forms			5			5				5	
16	CA002	Coordinate pre-surgery services (including test results)			20			20				20	
17	CA003	Schedule space and equipment in facility			8			8				8	
18	CA004	Provide pre-service education/obtain consent			20			20				20	
19	CA005	Complete pre-procedure phone calls and prescription			7			7				7	
20	CA006	Confirm availability of prior images/studies											
21	CA007	Review patient clinical extant information and questionnaire											
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)											
23													
26		*Other activity: please include short clinical description here and type*											
29		**End: When patient enters office/facility for surgery/procedure**											
30		**SERVICE PERIOD**											
31		**Start: When patient enters office/facility for surgery/procedure:**											
32		**Pre-Service (of service period)**											
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are											
34	CA010	Obtain vital signs											
35	CA011	Provide education/obtain consent											
36	CA012	Review requisition, assess for special needs											
37	CA013	Prepare room, equipment and supplies											
38	CA014	Confirm order, protocol exam											
39	CA015	Setup scope (nonfacility setting only)											
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient											
41	CA017	Sedate/apply anesthesia											
42													
45		*Other activity: please include short clinical description here and type*											
48		**Intra-service (of service period)**											
49	CA018	Assist physician or other qualified healthcare professional---directly											
50	CA019	Assist physician or other qualified healthcare professional---directly											
51	CA020	Assist physician or other qualified healthcare professional---directly											
52	CA021	Perform procedure/service---NOT directly related to physician work time											
55													
56		*Other activity: please include short clinical description here and type*											
59		**Post-Service (of service period)**											
60	CA022	Monitor patient following procedure/service, multitasking 1:4											
61	CA023	Monitor patient following procedure/service, no multitasking											
62	CA024	Clean room/equipment by clinical staff											
63	CA025	Clean scope											
64	CA026	Clean surgical instrument package											
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions											
66	CA028	Review/read post-procedure x-ray, lab and pathology reports											
67	CA029	Check dressings, catheters, wounds											
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,											
69	CA031	Review examination with interpreting MD/DO											
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to											
71	CA033	Perform regulatory mandated quality assurance activity (service period)											
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry											
73	CA035	Review home care instructions, coordinate visits/prescriptions											
74	CA036	Discharge day management		**n/a**	**6**		**n/a**	**6**	**n/a**		**n/a**	**6**	
75													
78		*Other activity: please include short clinical description here and type*											
81		**End: Patient leaves office/facility**											
82		**POST-SERVICE PERIOD**											
83		**Start: Patient leaves office/facility**											
84	CA037	Conduct patient communications											
85	CA038	Coordinate post-procedure services											
86		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**		**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	
87		99211 16 minutes											
88		99212 27 minutes											
89		99213 36 minutes						1				1	
90		99214 53 minutes			1								
91		99215 63 minutes											
92	CA039	Post-operative visits (total time)	**0.0**	**0.0**	**53.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
93													
96		*Other activity: please include short clinical description here and type*											
99		**End: with last office visit before end of global period**											

	A	B	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**32T**	**33281**			**33212**		**0431T**		**33287**		
3		***RUC Collaboration Website***	oning of imulator treatment al sleep imulation	Repositioning of phrenic nerve stimulator transvenous lead(s) (Report 33281 only			Insertion of pacemaker pulse generator only; with existing single lead		Removal and replacement of neurostimulator system for treatment of central sleep		Removal and replacement of phrenic nerve stimulator including vessel		
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**											
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**			**090**			**090**				**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ 59.72**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**	
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**119.0**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**53.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
100	**Supply Code**	**MEDICAL SUPPLIES**											
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ -**	**$ 5.02**		**$ -**	**$ 14.66**	**$ -**	**$ -**	**$ -**	**$ 5.02**	
102	SA048	pack, minimum multi-specialty visit			1			2				1	
103	SA054	pack, post-op incision care (suture)						1					
104													
105													
106													
107													
108		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*											
110	**Equipment**	**EQUIPMENT**											
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ -**	**$ 0.56**		**$ -**	**$ 0.94**	**$ -**	**$ -**	**$ -**	**$ 0.38**	
112	EF023	table, exam			53.0			36.0				36.0	
113	EF031	table, power						36.0					
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115													
116													
117													
118		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*											
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1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**32T**	**33281**			**33212**		**0431T**		**33287**		
3		***RUC Collaboration Website***	oning of imulator treatment al sleep imulation	Repositioning of phrenic nerve stimulator transvenous lead(s) (Report 33281 only			Insertion of pacemaker pulse generator only; with existing single lead		Removal and replacement of neurostimulator system for treatment of central sleep		Removal and replacement of phrenic nerve stimulator including vessel		
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**											
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**			**090**			**090**				**090**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ 59.72**		**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 51.81**	
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**119.0**		**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**102.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**60.0**		**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**6.0**		**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**53.0**		**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**36.0**	
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1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**	
2			**33212**		**0428T**		**33288**	
3		***RUC Collaboration Website***	Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; pulse		Removal and replacement of phrenic nerve stimulator including vessel	
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**		**090**				**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 59.72**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**119.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ -**	**$ 46.41**	**$ -**	**$ -**	**$ -**	**$ 54.15**
13		**PRE-SERVICE PERIOD**						
14		**Start: Following visit when decision for surgery/procedure made**						
15	CA001	Complete pre-service diagnostic and referral forms		5				5
16	CA002	Coordinate pre-surgery services (including test results)		20				20
17	CA003	Schedule space and equipment in facility		8				8
18	CA004	Provide pre-service education/obtain consent		20				20
19	CA005	Complete pre-procedure phone calls and prescription		7				7
20	CA006	Confirm availability of prior images/studies						
21	CA007	Review patient clinical extant information and questionnaire						
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)						
23								
26		*Other activity: please include short clinical description here and type*						
29		**End: When patient enters office/facility for surgery/procedure**						
30		**SERVICE PERIOD**						
31		**Start: When patient enters office/facility for surgery/procedure:**						
32		**Pre-Service (of service period)**						
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are						
34	CA010	Obtain vital signs						
35	CA011	Provide education/obtain consent						
36	CA012	Review requisition, assess for special needs						
37	CA013	Prepare room, equipment and supplies						
38	CA014	Confirm order, protocol exam						
39	CA015	Setup scope (nonfacility setting only)						
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient						
41	CA017	Sedate/apply anesthesia						
42								
45		*Other activity: please include short clinical description here and type*						
48		**Intra-service (of service period)**						
49	CA018	Assist physician or other qualified healthcare professional---directly						
50	CA019	Assist physician or other qualified healthcare professional---directly						
51	CA020	Assist physician or other qualified healthcare professional---directly						
52	CA021	Perform procedure/service---NOT directly related to physician work time						
55								
56		*Other activity: please include short clinical description here and type*						
59		**Post-Service (of service period)**						
60	CA022	Monitor patient following procedure/service, multitasking 1:4						
61	CA023	Monitor patient following procedure/service, no multitasking						
62	CA024	Clean room/equipment by clinical staff						
63	CA025	Clean scope						
64	CA026	Clean surgical instrument package						
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions						
66	CA028	Review/read post-procedure x-ray, lab and pathology reports						
67	CA029	Check dressings, catheters, wounds						
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,						
69	CA031	Review examination with interpreting MD/DO						
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to						
71	CA033	Perform regulatory mandated quality assurance activity (service period)						
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry						
73	CA035	Review home care instructions, coordinate visits/prescriptions						
74	CA036	Discharge day management	**n/a**	**6**	**n/a**		**n/a**	**6**
75								
78		*Other activity: please include short clinical description here and type*						
81		**End: Patient leaves office/facility**						
82		**POST-SERVICE PERIOD**						
83		**Start: Patient leaves office/facility**						
84	CA037	Conduct patient communications						
85	CA038	Coordinate post-procedure services						
86		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
87		99211 16 minutes						
88		99212 27 minutes						
89		99213 36 minutes		1				
90		99214 53 minutes						1
91		99215 63 minutes						
92	CA039	Post-operative visits (total time)	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
93								
96		*Other activity: please include short clinical description here and type*						
99		**End: with last office visit before end of global period**						

	A	B	BD	BE	BF	BG	BH	BI
1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**	
2			**33212**		**0428T**		**33288**	
3		***RUC Collaboration Website***	Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; pulse		Removal and replacement of phrenic nerve stimulator including vessel	
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**		**090**				**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 59.72**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**119.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
100	**Supply Code**	**MEDICAL SUPPLIES**						
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ 14.66**	**$ -**	**$ -**	**$ -**	**$ 5.02**
102	SA048	pack, minimum multi-specialty visit		2				1
103	SA054	pack, post-op incision care (suture)		1				
104								
105								
106								
107								
108		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*						
110	**Equipment**	**EQUIPMENT**						
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ 0.94**	**$ -**	**$ -**	**$ -**	**$ 0.56**
112	EF023	table, exam		36.0				53.0
113	EF031	table, power		36.0				
114								
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118		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*						
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1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**	
2			**33212**		**0428T**		**33288**	
3		***RUC Collaboration Website***	Insertion of pacemaker pulse generator only; with existing single lead		Removal of neurostimulator system for treatment of central sleep apnea; pulse		Removal and replacement of phrenic nerve stimulator including vessel	
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**		**090**				**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ 62.01**	**$ -**	**$ -**	**$ -**	**$ 59.72**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**102.0**	**0.0**	**0.0**	**0.0**	**119.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**60.0**	**0.0**	**0.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**36.0**	**0.0**	**0.0**	**0.0**	**53.0**
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1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFEREN**
2						**93279**		**0435T**		**93150**			**93**
3		***RUC Collaboration Website***				Programming device evaluation (in person) with iterative adjustment of the		Programming device evaluation of implanted neurostimulator pulse generator system for		Therapy activation of implanted phrenic nerve stimulator system including all interrogation and			Programm evalua person) wi adjustme
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**								
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**
6		**GLOBAL PERIOD**				**XXX**				**XXX**			**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 41.42**	**$ -**	**$ -**	**$ -**	**$ 63.46**	**$ -**		**$ 41.42**
8		**TOTAL CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**79.0**	**0.0**		**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**79.0**	**0.0**		**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**
21		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 12.22**	**$ -**	**$ -**	**$ -**	**$ 48.59**	**$ -**		**$ 12.22**
22		**PRE-SERVICE PERIOD**											
23		**Start: Following visit when decision for surgery/procedure made**											
24	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455	2							2
25	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455								
26	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455								
27	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455								
28	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455								
29	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455								
30	CA007	Review patient clinical extant information and	L037D	RN/LPN/MTA	0.455								
31	CA008	Perform regulatory mandated quality assurance activity	L037D	RN/LPN/MTA	0.455								
32			L037D	RN/LPN/MTA	0.455								
35		*Other activity: please include short clinical description*	L037D	RN/LPN/MTA	0.455								
38		**End: When patient enters office/facility for surgery/procedure**											
39		**SERVICE PERIOD**											
40		**Start: When patient enters office/facility for surgery/procedure:**											
41		**Pre-Service (of service period)**											
42	CA009	Greet patient, provide gowning, ensure appropriate	L026A	Medical/Tech	0.31	3							3
43	CA009	Greet patient, provide gowning, ensure appropriate	L037D	RN/LPN/MTA	0.455								
44	CA009	Greet patient, provide gowning, ensure appropriate	L047B	REEGT	0.615					3			
45	CA010	Obtain vital signs	L026A	Medical/Tech	0.31	5							5
46	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455								
47	CA010	Obtain vital signs	L047B	REEGT	0.615					5			
48	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455	3							3
49	CA011	Provide education/obtain consent	L047B	REEGT	0.615					3			
50	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455								
51	CA013	Prepare room, equipment and supplies	L026A	Medical/Tech	0.31	2							2
52	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455								
53	CA013	Prepare room, equipment and supplies	L047B	REEGT	0.615					2			
54	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455								
55	CA015	Setup scope (nonfacility setting only)	L047B	REEGT	0.615								
56	CA016	Prepare, set-up and start IV, initial positioning and	L037D	RN/LPN/MTA	0.455								
57	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455								
58			L037D	RN/LPN/MTA	0.455								
61		*Other activity: please include short clinical description*	L037D	RN/LPN/MTA	0.455								
64		**Intra-service (of service period)**											
65	CA018	Assist physician or other qualified healthcare	L037D	RN/LPN/MTA	0.455	10							10
66	CA019	Assist physician or other qualified healthcare	L037D	RN/LPN/MTA	0.455								
67	CA020	Assist physician or other qualified healthcare	L037D	RN/LPN/MTA	0.455								
68	CA021	Perform procedure/service---NOT directly related to	L047B	REEGT	0.615					60			
71			L037D	RN/LPN/MTA	0.455								
72		*Other activity: please include short clinical description*	L037D	RN/LPN/MTA	0.455								
75		**Post-Service (of service period)**											
76	CA022	Monitor patient following procedure/service,	L037D	RN/LPN/MTA	0.455								
77	CA023	Monitor patient following procedure/service, no	L037D	RN/LPN/MTA	0.455								
78	CA024	Clean room/equipment by clinical staff	L026A	Medical/Tech	0.31	3							3
79	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455								
80	CA024	Clean room/equipment by clinical staff	L047B	REEGT	0.615					3			
81	CA025	Clean scope	L047B	REEGT	0.615								
82	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455								
83	CA027	Complete post-procedure diagnostic forms, lab and x-	L037D	RN/LPN/MTA	0.455	3							3
84	CA027	Complete post-procedure diagnostic forms, lab and x-	L047B	REEGT	0.615					3			
85	CA028	Review/read post-procedure x-ray, lab and pathology	L037D	RN/LPN/MTA	0.455								
86	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455								
87	CA030	Technologist QC's images in PACS, checking for all	L037D	RN/LPN/MTA	0.455								
88	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455								
89	CA032	Scan exam documents into PACS. Complete exam in	L037D	RN/LPN/MTA	0.455								
90	CA033	Perform regulatory mandated quality assurance activity	L037D	RN/LPN/MTA	0.455								
91	CA034	Document procedure (nonPACS) (e.g. mandated	L037D	RN/LPN/MTA	0.455								
92	CA035	Review home care instructions, coordinate	L037D	RN/LPN/MTA	0.455								
93	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**		**n/a**		**n/a**			**n/a**
94			L037D	RN/LPN/MTA	0.455								
97		*Other activity: please include short clinical description*	L037D	RN/LPN/MTA	0.455								
100		**End: Patient leaves office/facility**											
101		**POST-SERVICE PERIOD**											
102		**Start: Patient leaves office/facility**											
103	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455								
104	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455								
118		**End: with last office visit before end of global period**											

	A	B	D	E	F	G	H	I	J	K	L	M	N
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**			**REFEREN**
2						**93279**		**0435T**		**93150**			**93**
3		***RUC Collaboration Website***				Programming device evaluation (in person) with iterative adjustment of the		Programming device evaluation of implanted neurostimulator pulse generator system for		Therapy activation of implanted phrenic nerve stimulator system including all interrogation and			Programm evalua person) wi adjustme
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**								
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**
6		**GLOBAL PERIOD**				**XXX**				**XXX**			**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 41.42**	**$ -**	**$ -**	**$ -**	**$ 63.46**	**$ -**		**$ 41.42**
8		**TOTAL CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**79.0**	**0.0**		**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**79.0**	**0.0**		**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L047B	REEGT	0.615	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**
119	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**									
120		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 6.73**	**$ -**	**$ -**	**$ -**	**$ 5.02**	**$ -**		**$ 6.73**
121	SA048	pack, minimum multi-specialty visit	5.02	pack		1				1			1
122	SD053	electrode, ECG (single)	0.06	item		5							5
123	SJ019	electrode adhesive disk	0.21	item		5							5
124	SJ053	swab-pad, alcohol	0.04	item		4							4
125	SK057	paper, laser printing (each sheet)	0.02	item		10							10
126	SB022	gloves, non-sterile	0.3	pair									
127	SC034	needle, blunt tip	0.67	item									
128	SC051	syringe 10-12ml	0.21	item									
129	SD053	electrode, ECG (single)	0.06	item									
130	SD104	oximetry sensor wrap	0.4	item									
131	SD112	sensor, airflow cannula (adult)	3.17	item									
132	SG008	applicator, cotton-tipped, non-sterile 6in	0.07	item									
133	SG050	gauze, non-sterile 2in x 2in	0.56	item									
134	SJ021	electrode conductive paste	1.81	oz									
135	SJ023	electrode skin prep tape (One-Step)	0.16	inch									
136	SJ053	swab-pad, alcohol	0.04	item									
137	SK048	measuring tape, paper	0.09	item									
138	SK057	paper, laser printing (each sheet)	0.02	item									
139	SK075	skin marking pen, sterile (Skin Skribe)	1.62	item									
140	SM021	sanitizing cloth-wipe (patient)	0.07	item									
141	SM022	sanitizing cloth-wipe (surface, instruments, equipment)	0.07	item									
142													
143		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the*											
145	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**								
146		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 22.47**	**$ -**	**$ -**	**$ -**	**$ 9.86**	**$ -**		**$ 22.47**
147	EQ198	pacemaker follow-up system (incl software and hardware) (Paceart)	279453.169	Default	0.853766759	26							26
148	EF023	table, exam	4737.727	Default	0.010538571	26				76			26
149	EQ337	Respiratory Impedance Plethysmography Belts (pair)	87	Other Formula	0.000344711								
150	EQ272	sleep diagnostic system, attended (w-acquisition station, review master, computer)	46799	Other Formula	0.181352076								
151	EQ228	sleep screening system, attended (w-resp plethysmography)	22000	Other Formula	0.087168317								
152	EQ134	impedance meter, 32-channel	1120	Other Formula	0.003614948								
153	EQ005	CPAP/BiPAP remote clinical unit	1234.667	Other Formula	0.003985051								
154	EF003	bedroom furniture (hospital bed, table, reclining chair)	2416.99	Other Formula	0.005887627								
155	ED050	Technologist PACS workstation	5557	PACS	0.022017924								
156	ED046	low-light video cameras (3) and DVR	696	Other Formula	0.002757689								
157													
158	NEW	phrenic nerve stimulator programmer with wand	3008	Default	0.11918286					76			
159		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*											
161													
162													
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	A	B	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	**RUC Practice Expense Spreadsheet**		**CE CODE**	**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**REFERENCE CODE**		**CURRENT**	
2			**279**	**0435T**		**9X046**			**93279**		**95811**		**0436T**	
3		***RUC Collaboration Website***												
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**	ing device tion (in th iterative nt of the	Programming device evaluation of implanted neurostimulator pulse generator system for		Interrogation and programming (minimum one parameter) of implanted phrenic			Programming device evaluation (in person) with iterative adjustment of the		Polysomnography; age 6 years or older, sleep staging with 4 or more additional		Programming device evaluation of implanted neurostimulator pulse generator system for	
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**XXX**			**XXX**		**XXX**			
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ 52.29**	**$ -**		**$ 41.42**	**$ -**	**$ 486.50**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**64.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**64.0**	**0.0**		**0.0**	**0.0**	**352.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**0.0**	**88.0**	**0.0**	**0.0**	**0.0**
21		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ -**	**$ -**	**$ -**	**$ 39.36**	**$ -**		**$ 12.22**	**$ -**	**$ 259.25**	**$ -**	**$ -**	**$ -**
22		**PRE-SERVICE PERIOD**												
23		**Start: Following visit when decision for surgery/proce**												
24	CA001	Complete pre-service diagnostic and referral forms							2					
25	CA002	Coordinate pre-surgery services (including test results)												
26	CA003	Schedule space and equipment in facility												
27	CA004	Provide pre-service education/obtain consent												
28	CA005	Complete pre-procedure phone calls and prescription												
29	CA006	Confirm availability of prior images/studies												
30	CA007	Review patient clinical extant information and												
31	CA008	Perform regulatory mandated quality assurance activity									6			
32														
35		*Other activity: please include short clinical description*												
38		**End: When patient enters office/facility for surgery/prc**												
39		**SERVICE PERIOD**												
40		**Start: When patient enters office/facility for surgery/pr**												
41		**Pre-Service (of service period)**												
42	CA009	Greet patient, provide gowning, ensure appropriate							3					
43	CA009	Greet patient, provide gowning, ensure appropriate												
44	CA009	Greet patient, provide gowning, ensure appropriate				3					3			
45	CA010	Obtain vital signs							5					
46	CA010	Obtain vital signs												
47	CA010	Obtain vital signs				5					5			
48	CA011	Provide education/obtain consent							3					
49	CA011	Provide education/obtain consent				3					3			
50	CA012	Review requisition, assess for special needs												
51	CA013	Prepare room, equipment and supplies							2					
52	CA013	Prepare room, equipment and supplies												
53	CA013	Prepare room, equipment and supplies				2					5			
54	CA014	Confirm order, protocol exam												
55	CA015	Setup scope (nonfacility setting only)									5			
56	CA016	Prepare, set-up and start IV, initial positioning and												
57	CA017	Sedate/apply anesthesia												
58														
61		*Other activity: please include short clinical description*												
64		**Intra-service (of service period)**												
65	CA018	Assist physician or other qualified healthcare							10					
66	CA019	Assist physician or other qualified healthcare												
67	CA020	Assist physician or other qualified healthcare												
68	CA021	Perform procedure/service---NOT directly related to				45					310			
71														
72		*Other activity: please include short clinical description*												
75		**Post-Service (of service period)**												
76	CA022	Monitor patient following procedure/service,												
77	CA023	Monitor patient following procedure/service, no												
78	CA024	Clean room/equipment by clinical staff							3					
79	CA024	Clean room/equipment by clinical staff												
80	CA024	Clean room/equipment by clinical staff				3					3			
81	CA025	Clean scope									18			
82	CA026	Clean surgical instrument package												
83	CA027	Complete post-procedure diagnostic forms, lab and x-							3					
84	CA027	Complete post-procedure diagnostic forms, lab and x-				3								
85	CA028	Review/read post-procedure x-ray, lab and pathology												
86	CA029	Check dressings, catheters, wounds												
87	CA030	Technologist QC's images in PACS, checking for all												
88	CA031	Review examination with interpreting MD/DO												
89	CA032	Scan exam documents into PACS. Complete exam in												
90	CA033	Perform regulatory mandated quality assurance activity												
91	CA034	Document procedure (nonPACS) (e.g. mandated												
92	CA035	Review home care instructions, coordinate												
93	CA036	Discharge day management		**n/a**		**n/a**			**n/a**		**n/a**		**n/a**	
94														
97		*Other activity: please include short clinical description*												
100		**End: Patient leaves office/facility**												
101		**POST-SERVICE PERIOD**												
102		**Start: Patient leaves office/facility**												
103	CA037	Conduct patient communications												
104	CA038	Coordinate post-procedure services									88			
118		**End: with last office visit before end of global period**												

	A	B	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	**RUC Practice Expense Spreadsheet**		**CE CODE**	**CURRENT**		**RECOMMENDED**			**REFERENCE CODE**		**REFERENCE CODE**		**CURRENT**	
2			**279**	**0435T**		**9X046**			**93279**		**95811**		**0436T**	
3		***RUC Collaboration Website***		Programming device evaluation of implanted neurostimulator pulse generator system for		Interrogation and programming (minimum one parameter) of implanted phrenic			Programming device evaluation (in person) with iterative adjustment of the		Polysomnography; age 6 years or older, sleep staging with 4 or more additional		Programming device evaluation of implanted neurostimulator pulse generator system for	
4	**Clinical Activity Code**	**Meeting Date: January 20223** **Revision Date (if applicable):** **Tab: 6** **Specialty: AASM, HRS, ACC**	ing device tion (in th iterative nt of the											
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**XXX**			**XXX**		**XXX**			
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ 52.29**	**$ -**		**$ 41.42**	**$ -**	**$ 486.50**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**64.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**0.0**	**6.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**64.0**	**0.0**		**0.0**	**0.0**	**352.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**0.0**	**88.0**	**0.0**	**0.0**	**0.0**
119	**Supply Code**	**MEDICAL SUPPLIES**												
120		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ -**	**$ -**	**$ 5.02**	**$ -**		**$ 6.73**	**$ -**	**$ 26.67**	**$ -**	**$ -**	**$ -**
121	SA048	pack, minimum multi-specialty visit				1			1					
122	SD053	electrode, ECG (single)							5					
123	SJ019	electrode adhesive disk							5					
124	SJ053	swab-pad, alcohol							4					
125	SK057	paper, laser printing (each sheet)							10					
126	SB022	gloves, non-sterile									4			
127	SC034	needle, blunt tip									1			
128	SC051	syringe 10-12ml									1			
129	SD053	electrode, ECG (single)									2			
130	SD104	oximetry sensor wrap									1			
131	SD112	sensor, airflow cannula (adult)									1			
132	SG008	applicator, cotton-tipped, non-sterile 6in									2			
133	SG050	gauze, non-sterile 2in x 2in									9			
134	SJ021	electrode conductive paste									4			
135	SJ023	electrode skin prep tape (One-Step)									36			
136	SJ053	swab-pad, alcohol									18			
137	SK048	measuring tape, paper									1			
138	SK057	paper, laser printing (each sheet)									4			
139	SK075	skin marking pen, sterile (Skin Skribe)									1			
140	SM021	sanitizing cloth-wipe (patient)									2			
141	SM022	sanitizing cloth-wipe (surface, instruments, equipment)									1			
142														
143		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the*												
145	**Equipment Code**	**EQUIPMENT**												
146		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ -**	**$ -**	**$ 7.91**	**$ -**		**$ 22.47**	**$ -**	**$ 200.58**	**$ -**	**$ -**	**$ -**
147	EQ198	pacemaker follow-up system (incl software and hardware) (Paceart)							26					
148	EF023	table, exam				61			26					
149	EQ337	Respiratory Impedance Plethysmography Belts (pair)									600			
150	EQ272	sleep diagnostic system, attended (w-acquisition station, review master, computer)									720			
151	EQ228	sleep screening system, attended (w-resp plethysmography)									600			
152	EQ134	impedance meter, 32-channel									600			
153	EQ005	CPAP/BiPAP remote clinical unit									600			
154	EF003	bedroom furniture (hospital bed, table, reclining chair)									600			
155	ED050	Technologist PACS workstation									352			
156	ED046	low-light video cameras (3) and DVR									600			
157														
158	NEW	phrenic nerve stimulator programmer with wand				61								
159		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*												
161														
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	A	B	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	**RUC Practice Expense Spreadsheet**		**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**9X047**			**93288**		**0434T**		**9X048**		
3		***RUC Collaboration Website***	Interrogation and programming of implanted phrenic nerve stimulator system during			Interrogation device evaluation (in person) with analysis, review and report by		Interrogation device evaluation implanted neurostimulator pulse generator system for central sleep apnea		Interrogation, without programming, of implanted phrenic nerve stimulator system		
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**										
5		**LOCATION**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**	**XXX**			**XXX**				**XXX**		
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 56.91**	**$ -**		**$ 41.42**	**$ -**	**$ -**	**$ -**	**$ 33.67**	**$ -**	
8		**TOTAL CLINICAL STAFF TIME**	**78.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**39.0**	**0.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**78.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**39.0**	**0.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
21		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 47.97**	**$ -**		**$ 12.22**	**$ -**	**$ -**	**$ -**	**$ 23.99**	**$ -**	
22		**PRE-SERVICE PERIOD**										
23		**Start: Following visit when decision for surgery/proce**										
24	CA001	Complete pre-service diagnostic and referral forms				2						
25	CA002	Coordinate pre-surgery services (including test results)										
26	CA003	Schedule space and equipment in facility										
27	CA004	Provide pre-service education/obtain consent										
28	CA005	Complete pre-procedure phone calls and prescription										
29	CA006	Confirm availability of prior images/studies										
30	CA007	Review patient clinical extant information and										
31	CA008	Perform regulatory mandated quality assurance activity										
32												
35		*Other activity: please include short clinical description*										
38		**End: When patient enters office/facility for surgery/pro**										
39		**SERVICE PERIOD**										
40		**Start: When patient enters office/facility for surgery/pr**										
41		**Pre-Service (of service period)**										
42	CA009	Greet patient, provide gowning, ensure appropriate				3						
43	CA009	Greet patient, provide gowning, ensure appropriate										
44	CA009	Greet patient, provide gowning, ensure appropriate								3		
45	CA010	Obtain vital signs				5						
46	CA010	Obtain vital signs										
47	CA010	Obtain vital signs								5		
48	CA011	Provide education/obtain consent				3						
49	CA011	Provide education/obtain consent								3		
50	CA012	Review requisition, assess for special needs										
51	CA013	Prepare room, equipment and supplies				2						
52	CA013	Prepare room, equipment and supplies										
53	CA013	Prepare room, equipment and supplies								2		
54	CA014	Confirm order, protocol exam										
55	CA015	Setup scope (nonfacility setting only)										
56	CA016	Prepare, set-up and start IV, initial positioning and										
57	CA017	Sedate/apply anesthesia										
58												
61		*Other activity: please include short clinical description*										
64		**Intra-service (of service period)**										
65	CA018	Assist physician or other qualified healthcare				10						
66	CA019	Assist physician or other qualified healthcare										
67	CA020	Assist physician or other qualified healthcare										
68	CA021	Perform procedure/service---NOT directly related to	75							20		
71												
72		*Other activity: please include short clinical description*										
75		**Post-Service (of service period)**										
76	CA022	Monitor patient following procedure/service,										
77	CA023	Monitor patient following procedure/service, no										
78	CA024	Clean room/equipment by clinical staff				3						
79	CA024	Clean room/equipment by clinical staff										
80	CA024	Clean room/equipment by clinical staff								3		
81	CA025	Clean scope										
82	CA026	Clean surgical instrument package										
83	CA027	Complete post-procedure diagnostic forms, lab and x-				3						
84	CA027	Complete post-procedure diagnostic forms, lab and x-	3							3		
85	CA028	Review/read post-procedure x-ray, lab and pathology										
86	CA029	Check dressings, catheters, wounds										
87	CA030	Technologist QC's images in PACS, checking for all										
88	CA031	Review examination with interpreting MD/DO										
89	CA032	Scan exam documents into PACS. Complete exam in										
90	CA033	Perform regulatory mandated quality assurance activity										
91	CA034	Document procedure (nonPACS) (e.g. mandated										
92	CA035	Review home care instructions, coordinate										
93	CA036	Discharge day management	**n/a**			**n/a**		**n/a**		**n/a**		
94												
97		*Other activity: please include short clinical description*										
100		**End: Patient leaves office/facility**										
101		**POST-SERVICE PERIOD**										
102		**Start: Patient leaves office/facility**										
103	CA037	Conduct patient communications										
104	CA038	Coordinate post-procedure services										
118		**End: with last office visit before end of global period**										

	A	B	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	**RUC Practice Expense Spreadsheet**		**RECOMMENDED**			**REFERENCE CODE**		**CURRENT**		**RECOMMENDED**		
2			**9X047**			**93288**		**0434T**		**9X048**		
3		***RUC Collaboration Website***	Interrogation and programming of implanted phrenic nerve stimulator system during			Interrogation device evaluation (in person) with analysis, review and report by		Interrogation device evaluation implanted neurostimulator pulse generator system for central sleep apnea		Interrogation, without programming, of implanted phrenic nerve stimulator system		
4	**Clinical Activity Code**	**Meeting Date: January 20223 Revision Date (if applicable): Tab: 6 Specialty: AASM, HRS, ACC**										
5		**LOCATION**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	
6		**GLOBAL PERIOD**	**XXX**			**XXX**				**XXX**		
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 56.91**	**$ -**		**$ 41.42**	**$ -**	**$ -**	**$ -**	**$ 33.67**	**$ -**	
8		**TOTAL CLINICAL STAFF TIME**	**78.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**39.0**	**0.0**	
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**78.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**39.0**	**0.0**	
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
119	**Supply Code**	**MEDICAL SUPPLIES**										
120		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ -**		**$ 6.73**	**$ -**	**$ -**	**$ -**	**$ 5.02**	**$ -**	
121	SA048	pack, minimum multi-specialty visit				1				1		
122	SD053	electrode, ECG (single)				5						
123	SJ019	electrode adhesive disk				5						
124	SJ053	swab-pad, alcohol				4						
125	SK057	paper, laser printing (each sheet)				10						
126	SB022	gloves, non-sterile										
127	SC034	needle, blunt tip										
128	SC051	syringe 10-12ml										
129	SD053	electrode, ECG (single)										
130	SD104	oximetry sensor wrap										
131	SD112	sensor, airflow cannula (adult)										
132	SG008	applicator, cotton-tipped, non-sterile 6in										
133	SG050	gauze, non-sterile 2in x 2in										
134	SJ021	electrode conductive paste										
135	SJ023	electrode skin prep tape (One-Step)										
136	SJ053	swab-pad, alcohol										
137	SK048	measuring tape, paper										
138	SK057	paper, laser printing (each sheet)										
139	SK075	skin marking pen, sterile (Skin Skribe)										
140	SM021	sanitizing cloth-wipe (patient)										
141	SM022	sanitizing cloth-wipe (surface, instruments, equipment)										
142												
143		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the*										
145	**Equipment Code**	**EQUIPMENT**										
146		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 8.94**	**$ -**		**$ 22.47**	**$ -**	**$ -**	**$ -**	**$ 4.67**	**$ -**	
147	EQ198	pacemaker follow-up system (incl software and hardware) (Paceart)				26						
148	EF023	table, exam				26				36		
149	EQ337	Respiratory Impedance Plethysmography Belts (pair)										
150	EQ272	sleep diagnostic system, attended (w-acquisition station, review master, computer)										
151	EQ228	sleep screening system, attended (w-resp plethysmography)										
152	EQ134	impedance meter, 32-channel										
153	EQ005	CPAP/BiPAP remote clinical unit										
154	EF003	bedroom furniture (hospital bed, table, reclining chair)										
155	ED050	Technologist PACS workstation										
156	ED046	low-light video cameras (3) and DVR										
157												
158	NEW	phrenic nerve stimulator programmer with wand	75							36		
159		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*										
161												
162												
163												
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165												
166												
167												
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AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Posterior Nasal Nerve Ablation – Tab 7

In January 2021, HCPCS code C9771 *Nasal Endoscopy with Cryoablation of nasal tissue and/or nerves* was implemented by CMS through the new technology application process. The code reports the first energy-based ablation technology FDA cleared for this type of procedure for tracking purposes. In September 2022, the CPT Editorial Panel created two separate codes, 31242 and 31243, one to describe radiofrequency ablation and one to describe cryoablation of the posterior nasal nerve. In preparation for the January 2023 RUC meeting, both new posterior nasal nerve codes, as well as family codes 30117 and 30118, were surveyed. Survey respondents were from a random sample of American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) members who self-designate as a general otolaryngologist or rhinologist in the specialty's member database.

During their presentation to the Research Subcommittee, the specialty noted that the services described by 31242 and 31243 were formerly often miscoded. CPT code 30117 was incorrectly used for reporting these posterior nerve ablation procedures, though the description of physician work is clinically different, and the typical patient is unlike those suffering from chronic rhinitis who receive an energy-based treatment. In addition, the unlisted code that should have been used to report the work described by codes 31242 and 31243; 30999 *Unlisted procedure, nose*, lacks specificity regarding patient selection criteria, physician work, and equipment required to perform the procedure.

Posterior Nasal Nerve (PNN) ablation is an endoscopic procedure that utilizes energy-based neurolysis to treat chronic rhinitis. The operative use of cryoablation or radiofrequency energy is intended to ablate an overactive posterior nasal nerve and induce denervation of the nasal mucosa and relieve sensory nasal symptoms. The surgical procedure itself is minimally invasive and the emerging energy-based devices in use have been cleared by the FDA in recent years with the specific indication to use for this type of treatment.

30117 ***Excision or destruction (eg, laser), intranasal lesion; internal approach***
The RUC reviewed the survey results from 97 otolaryngologists and determined that the survey 25th percentile work RVU of 3.91 accounts for typical physician work required to perform this service. The RUC recommends 20 minutes pre-service evaluation time, 3 minutes pre-service positioning, 5 minutes pre-service scrub/dress/wait time, 30 minutes intra-service time and 10 minutes post-service time as supported by the survey, as well as 05.-99238 discharge visit and 2-99213 post-operative visits, equaling 133 minutes of total time.

The specialty society selected pre-service time package *3-FAC Straightforward Patient/Difficult Procedure* and post-service time package *9A General Anes or Complex Blk/Strghtfrow Proc* since currently this procedure is predominantly performed in the facility setting using general anesthesia. It is notable that both standard time packages were modified to more accurately reflect pre- and post-service time involved with this service. Regarding pre-service care, the RUC agrees with 13 fewer minutes of pre-service evaluation time (decreasing from 33 to 20 minutes) and

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10 fewer minutes of pre-service scrub/dress/wait time (decreasing from 15 to 5 minutes). Regarding post-service care, the RUC agrees with 20 fewer minutes of immediate post-service time (decreasing from 30 to 10 minutes).

The intra-service work for CPT code 30117 includes the excision or destruction of an intranasal lesion by way of an internal approach. With the use of local anesthesia, a laser fiber is inserted into the nasal cavity and laser energy is applied in a circumferential area surrounding the lesion in order to cut off blood supply to the lesion until it has been directly ablated.

Regarding post-operative care, the RUC agrees with the inclusion of 0.5-99238 discharge visit and 2-99213 office visits to perform the necessary post-operative care within the 090-day global period. In their recommendation, the specialty society emphasized the importance of the two subsequent office visits and provided a clear explanation in their description of post-service work. The first post-operative visit will include a comprehensive evaluation of the patient's recovery from surgery, wherein the nose will be decongested by anesthetizing with topical oxymetazoline and lidocaine and clearing the nasal cavity. Additionally, there will be extensive discussion emphasizing nasal irrigation and the importance of avoiding nose-blowing. The second post-operative visit will be a continuation of the work involved with the first visit, but the patient's advanced wound healing will be further evaluated to determine the ability to resume normal activity.

To support the RUC recommended work RVU, the RUC compared CPT code 30117 to the top key reference service code 21555 *Excision, tumor, soft tissue of neck or anterior thorax, subcutaneous; less than 3 cm* (work RVU = 3.96, 35 minutes intra-service time and 138 minutes of total time) and the second highest key reference service 21011 *Excision, tumor, soft tissue of face or scalp, subcutaneous; less than 2 cm* (work RVU = 2.99, 30 minutes intra-service time and 107 minutes total time). The RUC recognizes that the surveyed code closely aligns with codes 21555 and 21011 in terms of intra-service time and total time and the survey 25th percentile work RVU of 3.91 maintains relativity within the code family and the Medicare Physician Payment Schedule (MFS). For additional support, the specialty also referenced CPT code 65785 *Implantation of intrastromal corneal ring segments* (work RVU = 5.39, 30 minutes intra-service time, 134 minutes total time) in their recommendation. The RUC notes this 090-day global code is an appropriate clinical comparator to the surveyed code in terms of intraoperative intensity and total time of service. The RUC concluded that CPT code 30117 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 3.91 for CPT code 30117.**

30118 ***Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)***
The RUC reviewed the survey results from 49 otolaryngologists and determined that the median work RVU of 9.55 appropriately accounts for typical physician work required to perform this service. The RUC recommends 30 minutes pre-service evaluation time, 3 minutes pre-service positioning, 10 minutes pre-service scrub/dress/wait time, 60 minutes intra-service time and 20 minutes post-service time as supported by the survey, 0.5-99238 discharge visit and 3-99213 post-operative visits, equaling 211 minutes of total time.

The specialty society selected pre-service time package *4 FAC Difficult Patient/Difficult Procedure* and post-service time package *9B General Anes or Complex Regional Blk/Cmplx Proc* since currently this procedure is predominantly performed in the facility setting using general anesthesia. The standard time packages were decreased to align with the times as indicated by the survey respondents.

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CPT code 30118 requires an intra-service twice as long as 30117 and requires a higher level of clinical complexity and intraoperative intensity. While both procedures conduct the excision or destruction of an intranasal lesion, 30117 involves an internal approach while 30118 involves an external approach. A lateral rhinotomy incision is made extending along the nasofrontal sulcus and once the lower edge of the frontal process of the maxilla is reached, the incision is extended into the nasal cavity. After the lateral nasal and angular vessels, branches of the external maxillary artery and tributaries of the anterior facial vein are identified above and below and ligated, the lateral attachment of the ala nasi is completely mobilized by carrying the incision into the floor of the nose. The nasal flap is then rotated accordingly to allow for adequate visualization of the tumor. Once identified, the entire tumor is completely resected, with special attention to the site of attachment, the wound is irrigated, and the incision is fully closed. The RUC confers that the description of work for 30118 compared to 30117 denotes a greater complexity and intensity of physician work.

Regarding post-operative visits, the first post-operative visit will include a comprehensive evaluation of the patient's recovery from surgery, wherein the surgical wounds are evaluated for any evidence of infection or dehiscence, the facial sutures are removed, steri-strips are applied, a cranial nerve exam is performed and there is extensive discussion emphasizing nasal irrigation and the importance of avoiding nose-blowing. The second post-operative visit will be a continuation of the work involved with the first visit, but the patient's advanced healing will be further evaluated based on scar tissue formation and medication management. The third post-operative visit will serve as a final check-in to assess overall healing, function, aesthetic and potential resumption of normal activity.

To justify a value of 9.55, the RUC compared CPT code 30118 to the top key reference service code 60220 *Total thyroid lobectomy, unilateral; with or without isthmusectomy* (work RVU = 11.19, 90 minutes intra-service time and 267 minutes of total time) and the second highest key reference service 43180 *Esophagoscopy, rigid, transoral with diverticulectomy of hypopharynx or cervical esophagus (eg, Zenker's diverticulum), with cricopharyngeal myotomy, includes use of telescope or operating microscope and repair, when performed* (work RVU = 9.03, 60 minutes intra-service time and 201 minutes total time). The RUC recognizes that the surveyed code is appropriately comparable to CPT codes 60220 and 43180 in terms of physician time, work and intraoperative complexity. For additional support, the specialty also referenced 30118 to MPC codes 21025 *Excision of bone (eg, for osteomyelitis or bone abscess); mandible* (work RVU = 10.03, 90 minutes intra-service time and 283 minutes total time) and 21015 *Radical resection of tumor (eg, sarcoma), soft tissue of face or scalp; less than 2 cm* (work RVU = 9.89, 75 minutes intra-service time and 277 minutes total time) in their recommendation. The RUC notes that together these two 090-day global codes are appropriate clinical comparators to the survey code in terms of intraoperative intensity and total time of service. The RUC concluded that CPT code 30118 should be valued at the median work RVU as supported by the survey. **The RUC recommends a work RVU of 9.55 for CPT code 30118.**

31242 ***Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve***

The RUC reviewed the survey results from 138 otolaryngologists and determined that the survey 25th percentile work RVU of 2.70 appropriately accounts for typical physician work required to perform this service. The RUC recommends 17 minutes pre-service evaluation time, 1 minute pre-service positioning, 5 minutes pre-service scrub/dress/wait time, 18 minutes intra-service time and 10 minutes post-service time as supported by the survey, equaling 51 minutes of total time.

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The intra-service work for CPT code 31242 includes surgical nasal endoscopy and destruction of the posterior nasal nerve by radiofrequency ablation. Using endoscopic visualization, local anesthesia is administered before the radiofrequency energy delivery device is introduced into the nasal cavity. Multiple applications of radiofrequency are performed around the posterior nasal nerve before the device is withdrawn. This intra-service work is then repeated and performed on the contralateral side.

To justify a value of 2.70, the RUC compared CPT code 31242 to the top key reference service code 31295 *Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa* (work RVU = 2.70, 20 minutes intra-service time and 56 minutes of total time) and the second highest key reference service 31297 *Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); sphenoid sinus ostium* (work RVU = 2.44, 20 minutes intra-service time and 56 minutes total time). The RUC recognizes that the surveyed code requires the same physician work at 2.70 work RVUs, almost identical intra-service time and similar intensity and complexity to perform. For further support, the RUC referenced MPC codes 51102 *Aspiration of bladder; with insertion of suprapubic catheter* (work RVU = 2.70, 20 minutes intra-service time and 60 minutes total time) and 55876 *Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), prostate (via needle, any approach), single or multiple* (work RVU = 1.73, 20 minutes intra-service time and 59 minutes total time), as well as CPT code 45346 *Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)* (work RVU = 2.81, 20 minutes intra-service time, 53 minutes total time). The RUC notes that together these additional codes provide strong points of comparison in terms of physician work and time, support the survey 25th percentile and maintain relativity within the code family. **The RUC recommends a work RVU of 2.70 for CPT code 31242.**

31243 ***Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve***
The RUC reviewed the survey results from 153 otolaryngologists and determined that the survey 25th percentile work RVU of 2.70 appropriately accounts for typical physician work required to perform this service. The RUC recommends 17 minutes pre-service evaluation time, 1-minute pre-service positioning, 5 minutes pre-service scrub/dress/wait time, 20 minutes intra-service time and 10 minutes post-service time as supported by the survey, equaling 53 minutes of total time.

The description of intra-service work for CPT code 31243 details surgical nasal endoscopy and destruction of the posterior nasal nerve by way of cryoablation. Performed using endoscopic visualization, local anesthesia is administered using pledgets soaked in decongestant before an intranasal anesthetic/vasoconstrictive agent is injected into the lateral attachment to medialize the middle turbinate. The cryoablation probe is then introduced into the nasal cavity and cryotherapy freezing is then performed under scrupulous endoscopic observation. Once the freezing process is complete, the patient is asked to breathe through their nose while the cryotherapy probe unfreezes from the affected mucosa. The probe is then withdrawn and pledgets soaked in decongestant are then placed in the treated areas to allow for hemostasis. This intra-service work is then repeated and performed on the contralateral side.

The additional two minutes of intra-service time for 31243 when compared to 31242 can be accounted for due to the difference in technology being used. During cryoablation, when the wand is removed from the nose after completing the first side, the cryotherapy container needs to be removed from the wand and replaced with a second canister in order to complete the other (contralateral) side. While this low intensity activity accounts for the additional time, the activity does not represent a change in the intensity of physician work.

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To justify a value of 2.70, the RUC compared CPT code 31243 to the top key reference service code 31295 *Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa* (work RVU = 2.70, 20 minutes intra-service time and 56 minutes of total time) and the second highest key reference service 30140 *Submucous resection inferior turbinate, partial or complete, any method* (work RVU = 3.00, 20 minutes intra-service time and 78 minutes total time). The RUC recognizes that the surveyed code aligns closely with 31295 and 30140 in terms of intra-service time, total time and intraoperative intensity and further notes that the recommended work RVU of 2.70 exactly matches the top key reference service code. For further support, the RUC referenced MPC codes 51102 *Aspiration of bladder; with insertion of suprapubic catheter* (work RVU = 2.70, 20 minutes intra-service time and 60 minutes total time) and 55876 *Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), prostate (via needle, any approach), single or multiple* (work RVU = 1.73, 20 minutes intra-service time and 59 minutes total time) and CPT code 31572 *Laryngoscopy, flexible; with ablation or destruction of lesion(s) with laser, unilateral* (work RVU = 3.01, 20 minutes intra-service time, 60 minutes total time). The RUC notes that together these additional codes provide strong points of comparison in terms of physician work and time, support the survey 25th percentile and maintain relativity within the code family. **The RUC recommends a work RVU of 2.70 for CPT code 31243.**

Practice Expense
The Practice Expense (PE) Subcommittee reviewed the direct practice expense inputs and made no modifications. The Subcommittee considered and approved compelling evidence based upon changes in supplies and equipment due to change in technique. The Subcommittee discussed the two new high-cost supply items, *radiofrequency stylus/wand* and *cryoablation handpiece and two canisters*, as well as the new equipment input, *radiofrequency console.* It restated continued support for the long-standing RUC recommendation that CMS separately identify and pay for high-cost disposable supplies using separate and appropriate HCPCS codes.

The PE Subcommittee noted the additional 3 minutes for CA037 *Conduct patient communications* in CPT codes 30117 and 30118. The specialty society indicated that this call to a patient is typical 1-2 days post-op. The Subcommittee recognized that a phone call is outside of the 090-day global standard but agreed that this type of post-operative communication is evolving and reflects best practice. **The RUC recommends the direct practice expense inputs as submitted by the specialty societies.**

CPT Assistant Article
The RUC will recommend to CPT that a CPT Assistant article be created for CPT code 30117 to address the number of typical units of service performed on the same date which should be 1 moving forward not 2, and to also address possible inappropriate coding.

New Technology
CPT codes 31242 and 31243 will be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation, patient population, and utilization assumptions.

Work Neutrality
The RUC's recommendation for these codes will result in overall work savings that should be redistributed back to the Medicare conversion factor.

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CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Respiratory System** **Nose** **Excision**				
(f)30117	L1	Excision or destruction (eg, laser), intranasal lesion; internal approach	090	3.91
(f)30118	L2	external approach (lateral rhinotomy) (For surgical nasal/sinus endoscopy with destruction by radiofrequency ablation of posterior nasal nerve, use 31242) (For surgical nasal/sinus endoscopy with destruction by cryoablation of posterior nasal nerve, use 31243)	090	9.55
Accessory Sinuses **Endoscopy** *31231* *Nasal endoscopy, diagnostic, unilateral or bilateral (separate procedure)* *31237* *Nasal/sinus endoscopy, surgical; with biopsy, polypectomy or debridement (separate procedure)* *(Do not report 31237 in conjunction with 31238, 31253, 31254, 31255, 31256, 31257, 31259, 31267, 31276, 31287, 31288, 31290, 31291, 31292, 31293, 31294, when performed on the ipsilateral side)*				
●31242	L3	with destruction by radiofrequency ablation, posterior nasal nerve	000	2.70
●31243	L4	with destruction by cryoablation, posterior nasal nerve (31242, 31243 are used to report bilateral procedures. For unilateral procedure, use modifier 52) (Do not report 31242, 31243 in conjunction with 31231, 92511)	000	2.70

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31238	*with control of nasal hemorrhage*
	(Do not report 31238 in conjunction with 31237, 31241, when performed on the ipsilateral side)
31239	*with dacryocystorhinostomy*
31240	*with concha bullosa resection*
31241	*with ligation of sphenopalatine artery*
	(Do not report 31241 in conjunction with 31238, when performed on the ipsilateral side)
Medicine Special Otorhinolaryngologic Services	
92511	*Nasopharyngoscopy with endoscope (separate procedure)*
	(Do not report 92511 in conjunction with 31575, 42975, 43197, 43198)
	(For nasopharyngoscopy, surgical, with dilation of eustachian tube, see 69705, 69706)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:30117 Tracking Number Original Specialty Recommended RVU: **3.91**
Presented Recommended RVU: **3.91**
Global Period: 090 Current Work RVU: **3.26** RUC Recommended RVU: **3.91**

CPT Descriptor: Excision or destruction (eg, laser), intranasal lesion; internal approach

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 59-year-old male presents with nasal obstruction and epistaxis. a lesion of the nasal cavity is identified on anterior rhinoscopy and/or nasal endoscopy (separately reported). a transnasal excision or destruction of the nasal lesion is performed under direct vision.

Percentage of Survey Respondents who found Vignette to be Typical: 86%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 18% , In the ASC 38%, In the office 44%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 95% , Overnight stay-less than 24 hours 5% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Meet with patients and family to describe and discuss in detail the planned procedure. Review and update the medical history. Perform a current physical exam. Reconcile medications and allergies. Address NPO status and timing. Discuss the patient's expected convalescence and educate the patient and caregivers regarding the signs and symptoms of the most common complications. Discussion with the anesthesiologist regarding the anesthetic plan and the approximate length of the case. Review and obtain informed consent. The availability of all required instruments and supplies is verified. Laser precautions are discussed. A timeout is performed with entire surgical team, including confirmation of the procedure, locations, allergies, antibiotic prophylaxis, anesthesia and fire risks, expected duration, and any concerns related to the procedure. The patient is positioned. The surgeon scrubs and gowns. The patient is prepped and draped. Pledgets soaked in anesthesia and decongestant are placed in the nasal cavity.

Description of Intra-Service Work: After an appropriate time for the action of anesthetic and decongestant agents, the nasal cavity is visualized with the assistance of a nasal speculum and a headlight. The lesion is visualized and the area surrounding it is injected with local anesthesia. Time is given to allow this to take effect.
The laser fiber is inserted into the nasal cavity. Laser safety precautions according to ANSI standards are used. Laser energy is applied in a circumferential area surrounding the lesion in order to cut off the blood supply to the lesion. Bleeding of and around the lesion is controlled with pledgets soaked in decongestant. This is continued in a circumferential fashion until the lesion is reached and directly ablated. If concerning, the lesion is removed and sent for pathologic examination.

Description of Post-Service Work: The patient is observed during emergence from anesthesia. The procedure is dictated. Discharge medications are reconciled. The prescription drug monitoring database is reviewed. Postoperative orders, medications and instructions are written. There is a discussion with the family and patient regarding the procedure and findings. There is reiteration of the convalescence, precautions, follow up appointments, expected postoperative course, signs and symptoms of complications, and review of the written postoperative instructions. Instructions, appropriate discharge timing, follow up, and precautions are discussed with the postoperative nursing team.

Visit 1 99213
A history is taken to evaluate the patients' recovery from surgery. The nose is decongested and anesthetized with topical oxymetazoline and lidocaine. Using a nasal speculum along with a Frazier tip suction and alligator forceps, the nasal cavity is cleared.. Topical mupirocin is applied with a qtip. Extensive discussion regarding what to expect at the next visit,

including emphasis on nasal irrigation and avoiding heavy lifting straining or nose blowing occurs between the patient and the physician.

Visit 2 99213
A history is taken to evaluate the patients' recovery from surgery. The nose is decongested and anesthetized with topical oxymetazoline and lidocaine. Using a nasal speculum along with a Frazier tip suction and alligator forceps, the nasal cavity is cleared. Topical mupirocin is applied with a qtip. The patient's wound healing is evaluated to determine their ability to resume normal activity.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	R. Peter Manes, MD / Ari Wirtschafter, MD					
Specialty Society(ies):	AAO-HNS					
CPT Code:	30117					
Sample Size:	4187	**Resp N:**	97			
Description of Sample:	Targeted Random					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	3.00	**8.00**	16.00	50.00	
Survey RVW:	2.03	3.91	**4.50**	6.00	12.00	
Pre-Service Evaluation Time:			**20.00**			
Pre-Service Positioning Time:			**5.00**			
Pre-Service Scrub, Dress, Wait Time:			**10.00**			
Intra-Service Time:	3.00	15.00	**30.00**	40.00	120.00	
Immediate Post Service-Time:	**10.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

3-FAC Straightforward Patient/Difficult Procedure

CPT Code:	30117	**Recommended Physician Work RVU: 3.91**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**20.00**	**33.00**	**-13.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**5.00**	**15.00**	**-10.00**
Intra-Service Time:		**30.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9A General Anes or Complex Reg Blk/Strghtforw Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**30.00**	**-20.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
21555	090	3.96	**RUC Time**

CPT Descriptor Excision, tumor, soft tissue of neck or anterior thorax, subcutaneous; less than 3 cm

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
21011	090	2.99	**RUC Time**

CPT Descriptor Excision, tumor, soft tissue of face or scalp, subcutaneous; less than 2 cm

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
33213	000	5.28	**RUC Time**	988

CPT Descriptor 1 Insertion of pacemaker pulse generator only; with existing dual leads

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
53850	090	5.42	**RUC Time**	1,438

CPT Descriptor 2 Transurethral destruction of prostate tissue; by microwave thermotherapy

Other Reference CPT Code	Global	Work RVU	Time Source
65785	090	5.39	**RUC Time**

CPT Descriptor Implantation of intrastromal corneal ring segments

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 31 **% of respondents:** 31.9 **%**

Number of respondents who choose 2nd Key Reference Code: 19 **% of respondents:** 19.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 30117	Top Key Reference CPT Code: 21555	2nd Key Reference CPT Code: **21011**
Median Pre-Service Time	28.00	30.00	28.00
Median Intra-Service Time	30.00	35.00	30.00
Median Immediate Post-service Time	10.00	15.00	10.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	19.00	0.00
Median Office Visit Time	46.0	39.00	39.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**133.00**	**138.00**	**107.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	6%	33%	58%	3%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	6%	47%	47%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	13%	20%	67%
Physical effort required	10%	45%	45%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and	19%	26%	55%

judgment of physician • Estimated risk of malpractice suit with poor outcome

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	5%	53%	37%	5%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	5%	33%	62%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	5%	32%	63%
Physical effort required	5%	63%	32%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	5%	52%	43%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background:
In September of 2022, the Academy submitted a code change application (CCA) requesting a new code for destruction of the posterior nasal nerve. During the September CPT Editorial Panel meeting, the Panel requested that we submit an alternate option, dividing the code we'd proposed into two separate codes. One for the procedure when done using radiofrequency ablation and one when cryoablation is used. The Academy supported this request from the panel, and two new codes were approved, CPT 31242 and 31243. Despite extensive educational efforts, the Academy believes that providers have historically reported these services using code 30117 Excision or destruction (eg, laser), intranasal lesion; internal approach. That code, as well as 30118, are also being reviewed during this RUC meeting, despite being from separate code families and having different globals (new PNN codes are 000 and 30117/18 are 090 globals).

Survey Sample and Process:

A survey request was sent to a targeted, random selection of 4187 AAO-HNS members who self-designate as a general otolaryngologist, head and neck surgery, or as a rhinologist in the AAO-HNS member database.

Discussion of Key Reference Codes

The first KRS selected was CPT 21555 Excision, tumor, soft tissue of neck or anterior thorax, subcutaneous; less than 3 cm valued at 3.96 RVUs with a pre time of 30 / intra time of 35 / post time of 15, .5 a discharge management visit, and two post operative visits (1 – 99213 and 1- 99212) totaling 138 minutes. 31 respondents selected this as their primary KRS.

The second KRS selected was CPT 21011 Excision, tumor, soft tissue of face or scalp, subcutaneous; less than 2 cm valued at 2.99 RVUs with a pre time of 28 / intra time of 30 / post time of 10, and two post operative visits (1-99213 and 1 – 99212) totaling 107 minutes. 19 respondents selected this as their second KRS.

Recommendation (Work and Intra Time):

We are recommending a work RVU of **3.91, our survey's 25th percentile** which we believe maintains relativity throughout the family and fits well in terms of the fee schedule. We are also recommending the survey median time of **30 minutes of intra service time**.

Compelling evidence: We recognize that despite recommending our survey's 25th percentile, this represents an increase to the current RVU of 3.26, however, after careful review we believe the family of four codes being presented (31242, 31243, 30117, and 30118) will be budget neutral even with this increase in RVU for 30117. Specifically, we anticipate that the volume for the top three diagnosis in the current RUC database will transfer to the new PNN codes (31242, 31243) which were previously being coded incorrectly, using 30117. While the Academy provided extensive coding guidance that PNN services should be reported using an unlisted code, we are confident this was not always adhered to and that the explanation for the continual increase in volume of 30117, starting in 2016 was due to the emergence of the PNN technology. Based on this, 75% of the volume of 30117 is anticipated to now be reported using either (31242, 31243) which are being proposed at a lower RVU of 2.70 for both codes. New volume estimates for 30117 are listed below in the appropriate section of this SOR.

Time package selection: We have selected pre-time package 3 and post-time package 9A due to this procedure currently being done predominantly in the facility setting using general anesthesia.

Pre-time Package 3 Straightforward Patient/Difficult Procedure

Evaluation Time – We are recommending 20 minutes of evaluation time which is consistent with the lesser of the pre-service package or our survey data.

Positioning Time – We are recommending 3 minutes of positioning time which is consistent with the lesser of the pre-service package or our survey data.

Scrub, Dress, Wait Time – We are recommending 5 minutes of scrub, dress and wait which is consistent with the time lesser of the pre-service package or our survey data.

This results in a total recommended pre time of 28 minutes, taking the lesser of surveyed time or the pre-service package time.

Post-time Package 9A General Anesthesia or Complex Regional Block/ Straightforward Procedure
Recommended time has been reduced to 10 minutes which is a decrease of 20 minutes from the post package time selected to match our survey time. ***This results in a total recommended post time of 10 minutes, taking the lesser of surveyed time or the pre-service package time.***

Supporting Reference Codes for the Recommended Value

CPT Code	Long Desc	Global	IWPUT	Work RVU	Pre Time Package	Pre Eval Time	Pre Positioning Time	Pre Scrub, Dress, Wait Time	Intra Time	Immediate Post Time	Post-op Visit Time	Total Time	Hospital Post-op Visit Count	Most Recent RUC Review
25075	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; less than 3 cm	090	0.0305	3.96	1b	14	10.0	10.0	30	15	58	137	0.5	2009-02
26115	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; less than 1.5 cm	090	0.0305	3.96	1b	14	10.0	10.0	30	15	58	137	0.5	2009-02
27327	Excision, tumor, soft tissue of thigh or knee area, subcutaneous; less than 3 cm	090	0.0283	3.96	1b	14	8.0	10.0	30	20	58	140	0.5	2009-02
27618	Excision, tumor, soft tissue of leg or ankle area, subcutaneous; less than 3 cm	090	0.0305	3.96	1b	14	10.0	10.0	30	15	58	137	0.5	2009-02
28043	Excision, tumor, soft tissue of foot or toe, subcutaneous; less than 1.5 cm	090	0.0274	3.96	1b	19	6.0	5.0	30	20	58	138	0.5	2009-02
65785	Implantation of intrastromal corneal ring segments	090	0.0771	5.39	6a	17	1.0	5.0	30	10	71	134	0	2015-01

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and

accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 30117

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Otolayrngology How often? Commonly

Specialty Nurse Practitioner How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 14778
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is 3 times the anticipated RUC database volume for Medicare patients.

Specialty Otolaryngology Frequency 14778 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,926
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This represents 25% of the existing RUC database volume for the code. We anticipate that the other 75% of existing volume will transfer to the new PNN codes (31242, 31243)

Specialty Otolaryngology Frequency 4926 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:

BETOS Sub-classification Level II:
Musculoskeletal

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 30117

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:30118 Tracking Number Original Specialty Recommended RVU: **9.55**
Presented Recommended RVU: **9.55**
Global Period: 090 Current Work RVU: **9.92** RUC Recommended RVU: **9.55**

CPT Descriptor: Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 72-year-old male presents with nasal obstruction and epistaxis. a mass of the nasal cavity is identified by rhinoscopy and/or nasal endoscopy (separately reported) and further analyzed by nasal and sinus imaging (separately reported). an external approach (lateral rhinotomy) with excision of the nasal lesion is performed.

Percentage of Survey Respondents who found Vignette to be Typical: 89%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 68% , In the ASC 31%, In the office 1%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 43% , Overnight stay-less than 24 hours 45% , Overnight stay-more than 24 hours 12%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 96%

Description of Pre-Service Work: Meet with patient and family to describe and discuss in detail the planned procedure. Review and update the medical history. Perform a current physical exam and document in the medical record. Reconcile medications and allergies. Address NPO status and timing. Discuss preoperative home medications and postoperative prescriptions and check the prescription drug monitoring database, discuss. Plan the patient's expected convalescence and educate the patient and caregivers regarding the signs and symptoms of the most common and serious complications. There is confirmation of the surgical site and a detailed description is given of the postoperative changes in wound and incision and the expected cosmetic and functional results. Review and obtain informed consent. Verify that all required instruments and supplies are available. Following induction of anesthesia, the patient is positioned and prepped for the procedure. A timeout is performed with entire surgical team, including confirmation of the procedure, locations, allergies, antibiotic prophylaxis, anesthesia and fire risks, expected duration, and any concerns related to the procedure. Local anesthesia is injected into the planned incision.

Description of Intra-Service Work: A lateral rhinotomy incision is made extending along the nasofrontal sulcus. When the lower edge of the frontal process of the maxilla is reached, the incision is extended into the nasal cavity. The lateral nasal and angular vessels, branches of the external maxillary artery and tributaries of the anterior facial vein are identified above and below and ligated. The lateral attachment of the ala nasi is completely mobilized by carrying the incision into the floor of the nose. The nasal flap is rotated upward and medially, allowing for adequate visualization of the tumor. Once the tumor is adequately seen, the entire tumor is resected. Special care is taken to the site of attachment which is completely resected as well. Frozen section margins are taken around the site of attachment to ensure complete resection of the tumor. The wound is then irrigated and the incision is closed in multiple layers. Packing material is placed within the nasal cavity.

Description of Post-Service Work: The patient is observed during emergence from anesthesia. The procedure is dictated. Discharge medications are reconciled. The prescription drug monitoring database is reviewed. Postoperative orders, medications and instructions are written. There is a discussion with the family and patient regarding the procedure and findings. There is reiteration of the convalescence, precautions, follow up appointments, expected postoperative course, signs and symptoms of complications, and review of the written postoperative instructions. Instructions, appropriate discharge timing, follow up, and precautions are discussed with the postoperative nursing team.

Visit 1 99213

A history is taken to evaluate the patients' recovery from surgery. The surgical wounds are evaluated for any evidence of infection or dehiscence. Sutures are removed. Ster-strips applied. A cranial nerve exam is performed with careful attention paid to the Facial and Trigeminal nerves as well as function of the extra ocular muscles. Extensive discussion regarding what to expect at the next visit occurs between the patient and the physician. The physician stresses saline lavage and to avoid heavy lifting, straining or nose blowing. Pathology is discussed as well as further treatments needed depending on the pathology outcomes.

Visit 2 99213

A history is taken to evaluate the patients' recovery from surgery. The surgical wounds are evaluated for any evidence of infection or dehiscence. A cranial nerve exam is performed with careful attention paid to the Facial and Trigeminal nerves as well as function of the extra ocular muscles. The nasal cavity is examined to evaluate for any scar tissue formation. the Extensive discussion regarding what to expect at the next visit occurs between the patient and the physician. The physician stresses saline lavage and to avoid heavy lifting, straining or nose blowing.

Visit 3 99213

A history is taken to evaluate the patients' recovery from surgery. The surgical wounds are evaluated for any evidence of infection or dehiscence. A cranial nerve exam is performed with careful attention paid to the Facial and Trigeminal nerves as well as function of the extra ocular muscles. The nasal cavity is examined to evaluate for any scar formation. The patients' condition is evaluated to determine their ability to resume normal activity.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	R. Peter Manes, MD / Ari Wirtschafter, MD					
Specialty Society(ies):	AAO-HNS					
CPT Code:	30118					
Sample Size:	4187	**Resp N:**	49			
Description of Sample:	Targeted Ramdom					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	0.00	**2.00**	2.00	10.00	
Survey RVW:	3.00	6.98	**9.55**	11.62	23.00	
Pre-Service Evaluation Time:			**30.00**			
Pre-Service Positioning Time:			**10.00**			
Pre-Service Scrub, Dress, Wait Time:			**10.00**			
Intra-Service Time:	10.00	45.00	**60.00**	90.00	180.00	
Immediate Post Service-Time:	**20.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**19.00**	99238x **0.50** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**69.00**	99211x **0.00** 12x **0.00** 13x **3.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	30118	**Recommended Physician Work RVU: 9.55**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**30.00**	**40.00**	**-10.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**10.00**	**20.00**	**-10.00**
Intra-Service Time:		**60.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**20.00**	**33.00**	**-13.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	0.00	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	19.00	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	69.00	99211x **0.00** 12x **0.00** 13x **3.00** 14x **0.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
60220	090	11.19	**RUC Time**

CPT Descriptor Total thyroid lobectomy, unilateral; with or without isthmusectomy

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
43180	090	9.03	**RUC Time**

CPT Descriptor Esophagoscopy, rigid, transoral with diverticulectomy of hypopharynx or cervical esophagus (eg, Zenker's diverticulum), with cricopharyngeal myotomy, includes use of telescope or operating microscope and repair, when performed

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
21025	090	10.03	**RUC Time**	4,098

CPT Descriptor 1 Excision of bone (eg, for osteomyelitis or bone abscess); mandible

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
21015	090	9.89	**RUC Time**	376

CPT Descriptor 2 Radical resection of tumor (eg, sarcoma), soft tissue of face or scalp; less than 2 cm

Other Reference CPT Code	Global	Work RVU	Time Source
57240	090	10.08	**RUC Time**

CPT Descriptor Anterior colporrhaphy, repair of cystocele with or without repair of urethrocele, including cystourethroscopy, when performed

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 17 **% of respondents:** 34.6 **%**

Number of respondents who choose 2nd Key Reference Code: 7 **% of respondents:** 14.2 **%**

TIME ESTIMATES (Median)

	CPT Code: 30118	Top Key Reference CPT Code: 60220	2nd Key Reference CPT Code: **43180**
Median Pre-Service Time	43.00	72.00	60.00
Median Intra-Service Time	60.00	90.00	60.00
Median Immediate Post-service Time	20.00	40.00	20.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	19.00	38.00
Median Office Visit Time	69.0	46.00	23.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**211.00**	**267.00**	**201.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	6%	35%	41%	18%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	6%	18%	76%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	6%	41%	53%
Physical effort required	6%	41%	53%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	6%	41%	53%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	14%	43%	43%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	14%	29%	57%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	14%	57%	29%
Physical effort required	14%	29%	57%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	14%	29%	57%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background:
In September of 2022, the Academy submitted a code change application (CCA) requesting a new code for destruction of the posterior nasal nerve. During the September CPT Editorial Panel meeting, the Panel requested that we submit an alternate option, dividing the code we'd proposed into two separate codes. One for the procedure when done using radiofrequency ablation and one when cryoablation is used. The Academy supported this request from the panel, and two new codes were approved, CPT 31242 and 31243. Despite extensive educational efforts, the Academy believes that

providers have historically reported these services using code 30117 Excision or destruction (eg, laser), intranasal lesion; internal approach. That code, as well as 30118, are also being reviewed during this RUC meeting, despite being from separate code families and having different globals (new PNN codes are 000 and 30117/18 are 090 globals).

Survey Sample and Process:

A survey request was sent to a targeted, random selection of 4187 AAO-HNS members who self-designate as a general otolaryngologist, head and neck surgery, or as a rhinologist in the AAO-HNS member database.

Discussion of Key Reference Codes

The first KRS selected was CPT 60220 Total thyroid lobectomy, unilateral; with or without isthmusectomy valued at 11.19 RVUs with a pre time of 72 / intra time of 90 / post time of 40, .5 a discharge management visit, and two post operative visits (2 – 99213) totaling 267 minutes. 17 respondents selected this as their primary KRS.

The second KRS selected was CPT 43180 Esophagoscopy, rigid, transoral with diverticulectomy of hypopharynx or cervical esophagus (eg, Zenker's diverticulum), with cricopharyngeal myotomy, includes use of telescope or operating microscope and repair, when performed valued at 9.03 RVUs with a pre time of 60 / intra time of 60 / post time of 20, 1 discharge management visit, and one 99213 post operative visits, totaling 201 minutes. 7 respondents selected this as their second KRS.

Recommendation (Work and Intra Time):

We are recommending a work RVU of **9.55 and 60 minutes of intra service time which both represent our survey median**. Our expert panel felt this value maintains relativity throughout the family and fits well in terms of the fee schedule. Further, this recommendation is a reduction in value from the exiting RVW of 9.92.

Time package selection: We have selected pre-time package 4 and post-time package 9B due to this procedure currently being a complex procedure done in the facility setting using general anesthesia.

Pre-time Package 4 Difficult Patient/Difficult Procedure

Evaluation Time – We are recommending 30 minutes of evaluation time which is consistent with the lesser of the pre-service package or our survey data.

Positioning Time – We are recommending 3 minutes of positioning time which is consistent with the lesser of the pre-service package or our survey data.

Scrub, Dress, Wait Time – We are recommending 10 minutes of scrub, dress and wait which is consistent with the time lesser of the pre-service package or our survey data.

This results in a total recommended pre time of 43 minutes, taking the lesser of surveyed time or the pre-service package time.

Post-time Package 9B General Anesthesia or Complex Regional Block/Complex Procedure
Recommended time has been reduced to 20 minutes which is a decrease of 13 minutes from the post package time selected to match our survey time. ***This results in a total recommended post time of 20 minutes, taking the lesser of surveyed time or the pre-service package time.***

Supporting Reference Codes for the Recommended Value

CPT Code	Long Desc	Global	IWPUT	Work RVU	Pre Eval Time	Pre Positioning Time	Pre Scrub, Dress, Wait Time	Intra Time	Immediate Post Time	Post-op Visit Time	Total Time	Hospital Post-op Visit Count	Most Recent RUC Review

37761	Ligation of perforator vein(s), subfascial, open, including ultrasound guidance, when performed, 1 leg	090	0.0738	9.13	33	10.0	15.0	60	25	81	224	0.5	2009-04
64831	Suture of digital nerve, hand or foot; 1 nerve	090	0.0674	9.16	40	10.0	15.0	60	15	97	237	0.5	2008-02
27690	Transfer or transplant of single tendon (with muscle redirection or rerouting); superficial (eg, anterior tibial extensors into midfoot)	090	0.0521	9.17	33	10.0	15.0	60	20	120	258	0.5	2008-04
29905	Arthroscopy, subtalar joint, surgical; with synovectomy	090	0.0584	9.18	40	15.0	10.0	60	15	104	244	0.5	2007-04
27650	Repair, primary, open or percutaneous, ruptured Achilles tendon;	090	0.0575	9.21	19	15.0	5.0	60	20	120	239	0.5	2008-02
14060	Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less	090	0.0899	9.23	15	10.0	5.0	60	15	78	183	0	2005-08
23415	Coracoacromial ligament release, with or without acromioplasty	090	0.0648	9.23	40	15.0	15.0	60	20	97	247	0.5	2008-02
64821	Sympathectomy; radial artery	090	0.0515	9.33	50			60	30	129	269	2	2001-04
64822	Sympathectomy; ulnar artery	090	0.0515	9.33	50			60	30	129	269	2	2001-04
49501	Repair initial inguinal hernia, age 6 months to younger than 5 years, with or without hydrocelectomy; incarcerated or strangulated	090	0.0698	9.36	45			60	30	97	232	2	2000-08
44312	Revision of ileostomy; simple (release of superficial scar) (separate procedure)	090	0.0053	9.43	75			60	30	184	349	4	2000-08
25607	Open treatment of distal radial extra-articular fracture or epiphyseal separation, with internal fixation	090	0.0523	9.56	40	10.0	15.0	60	30	120	275	0.5	2006-02
26356	Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath (eg, no man's land); primary, without free graft, each tendon	090	0.0551	9.56	33	10.0	15.0	60	30	129	277	0.5	2015-04
66184	Revision of aqueous shunt to extraocular equatorial plate reservoir; without graft	090	0.0485	9.58	19	1.0	5.0	60	10	159	254	0.5	2014-01
28555	Open treatment of tarsal bone dislocation, includes internal fixation, when performed	090	0.0503	9.65	40	10.0	15.0	60	20	136	281	2	2007-02
29906	Arthroscopy, subtalar joint, surgical; with debridement	090	0.0662	9.65	40	15.0	10.0	60	15	104	244	0.5	2007-04
27784	Open treatment of proximal fibula or shaft fracture, includes internal fixation, when performed	090	0.0507	9.67	40	10.0	15.0	60	20	136	281	2	2007-02
24575	Open treatment of humeral epicondylar fracture, medial or lateral, includes internal fixation, when performed	090	0.0357	9.71	45	15.0	15.0	60	30	143	308	2	2007-02
50590	Lithotripsy, extracorporeal shock wave	090	0.0908	9.77	33	3.0	15.0	60	15	81	207	0.5	2012-04

69716	Implantation, osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor	090	0.0998	9.77	32	3.0	10.0	60	15	65	185	0.5	2021-01
69719	Revision or replacement (including removal of existing device), osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor	090	0.0994	9.77	33	3.0	10.0	60	15	65	186	0.5	2021-01
42145	Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty)	090	0.0613	9.78	40	10.0	15.0	60	30	107	262	1	2008-04
15100	Split-thickness autograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children (except 15050)	090	0.0533	9.90	45	10.0	10.0	60	20	136	281	2	2005-08
49520	Repair recurrent inguinal hernia, any age; reducible	090	0.1065	9.99	45			60	22.5	58	185.5	0.5	2000-08
24164	Removal of prosthesis, includes debridement and synovectomy when performed; radial head	090	0.0812	10.00	33	12.0	15.0	60	20	88	228	0.5	2013-01

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 30118

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Otolaryngology How often? Rarely

Specialty General Surgery How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 204
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This is 3 times the 2020 Medicare volume for this service.

Specialty Otolaryngology Frequency 204 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 68 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This represnts the 2020 Medicare volume per the RUC database.

Specialty Otolaryngology Frequency 68 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 30118

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:31242 Tracking Number Original Specialty Recommended RVU: **2.70**
Presented Recommended RVU: **2.70**
Global Period: 000 Current Work RVU: **N/A** RUC Recommended RVU: **2.70**

CPT Descriptor: Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68-year-old female presents with symptoms of chronic rhinitis that have been refractory to medical therapy. the patient is scheduled for endoscopic surgical energy-based neurolysis, using a radiofrequency ablation probe, of the posterior nasal nerve.

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Meet with the patient and family to describe and discuss in detail the planned procedure. Review and update the patient's medical history. Perform a current physical examination. Reconcile medications and allergies. Discuss the patient's expected convalescence and educate the patient and caregivers regarding the signs and symptoms of the most common complications. Review and obtain informed consent. Confirm planned site to apply radiofrequency technology. Provide a detailed description of the postoperative expectations in terms of bleeding, congestion, and discomfort. Verify availability and proper function of all required instruments, endoscopic and image equipment, and supplies. Perform a time-out with the entire surgical team, including confirmation of the procedure, locations, allergies, antibiotic prophylaxis, anesthesia, fire risks, expected duration, and any concerns related to the procedure. Position the patient. Wash hands and don proper gloves, gown, and personal protective equipment. Drape the patient. Apply topical decongestant and anesthetic sprays to the nostrils, followed by a wait time for them to take effect. Pledgets soaked in decongestant and anesthesia are placed in the nasal cavity followed by a wait time for them to take effect.

Description of Intra-Service Work: Previously placed pledgets are removed. The following portions of the procedure are performed under endoscopic visualization, Additional pledgets soaked in decongestant and anesthesia are placed more posteriorly in the middle meatus, followed by a wait time for them to take effect. Pledgets are removed. Under endoscopic visualization, pledgets soaked in decongestant and anesthesia are placed at the lateral attachment site of the middle turbinate followed by a wait time for them to take effect. An intranasal anesthetic/vasoconstrictive agent is injected into the lateral attachment of middle turbinate followed by a wait time for this to take effect. The middle turbinate is medialized. Under endoscopic visualization, the radio frequency energy delivery device is introduced into the nasal cavity. Multiple applications of radio frequency are performed in the area of the posterior nasal nerve, including the lateral attachment of the middle turbinate as well as the superior aspect of the inferior turbinate. The radio frequency delivery device is withdrawn. Under endoscopic visualization, pledgets soaked in decongestant are then placed in the treated areas to allow for hemostasis. Pledgets are then removed. The same procedure is then performed on the contralateral side.

Description of Post-Service Work: Monitor the patient for adequate hemostasis. Dictate a procedure report. Reconcile discharge medications. Review the prescription drug monitoring database. Write postoperative orders, medications, and instructions. Have a detailed discussion regarding the procedure and findings with the patient and family. Reiterate

convalescence instructions, precautions, follow-up appointments, expected postoperative course, signs and symptoms of complications, and review of the written postoperative instructions.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	R. Peter Manes, MD / Ari Wirtschafter, MD					
Specialty Society(ies):	AAO-HNS					
CPT Code:	31242					
Sample Size:	3605	**Resp N:**	138			
Description of Sample:	Targeted Random					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	2.00	**5.00**	10.00	75.00	
Survey RVW:	1.00	2.70	**3.05**	3.74	20.00	
Pre-Service Evaluation Time:			**23.00**			
Pre-Service Positioning Time:			**5.00**			
Pre-Service Scrub, Dress, Wait Time:			**5.00**			
Intra-Service Time:	2.00	11.00	**18.00**	25.00	90.00	
Immediate Post Service-Time:	**10.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

6-NF Proc w local/topical anes care req wait time

CPT Code:	31242	**Recommended Physician Work RVU:**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**17.00**	**17.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**5.00**	**5.00**	**0.00**
Intra-Service Time:		**18.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

7A Local/Simple Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**18.00**	**-8.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
31295	000	2.70	**RUC Time**

CPT Descriptor Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
31297	000	2.44	**RUC Time**

CPT Descriptor Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); sphenoid sinus ostium

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
51102	000	2.70	**RUC Time**	12,346

CPT Descriptor 1 Aspiration of bladder; with insertion of suprapubic catheter

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
55876	000	1.73	**RUC Time**	19,114

CPT Descriptor 2 Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), prostate (via needle, any approach), single or multiple

Other Reference CPT Code	Global	Work RVU	Time Source
45346	000	2.81	**RUC Time**

CPT Descriptor Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 37 **% of respondents:** 26.8 **%**

Number of respondents who choose 2nd Key Reference Code: 22 **% of respondents:** 15.9 **%**

TIME ESTIMATES (Median)

	CPT Code: 31242	Top Key Reference CPT Code: 31295	2nd Key Reference CPT Code: **31297**
Median Pre-Service Time	23.00	21.00	21.00
Median Intra-Service Time	18.00	20.00	20.00
Median Immediate Post-service Time	10.00	15.00	15.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**51.00**	**56.00**	**56.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	3%	11%	65%	19%	2%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	16%	54%	30%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	16%	68%	16%
Physical effort required	8%	71%	21%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	30%	51%	19%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	13%	77%	5%	5%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	9%	82%	9%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	10%	86%	4%
Physical effort required	5%	81%	14%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	36%	59%	5%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background:
In September of 2022, the Academy submitted a code change application (CCA) requesting a new code for destruction of the posterior nasal nerve. During the September CPT Editorial Panel meeting, the Panel requested that we submit an alternate option, dividing the code we'd proposed into two separate codes. One for the procedure when done using radiofrequency ablation and one when cryoablation is used. The Academy supported this request from the panel, and two new codes were approved, CPT 31242 and 31243. Despite extensive educational efforts, the Academy believes that

providers have historically reported these services using code 30117 Excision or destruction (eg, laser), intranasal lesion; internal approach. That code, as well as 30118, are also being reviewed during this RUC meeting, despite being from separate code families and having different globals (new PNN codes are 000 and 30117/18 are 090 globals).

Survey Sample and Process:

A survey request was sent to a targeted, random selection of 3605 AAO-HNS members who self-designate as a general otolaryngologist or as a rhinologist in the AAO-HNS member database.

Discussion of Key Reference Codes

The first KRS selected was CPT 31295 Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa valued at 2.70 RVUs with a pre time of 21 / intra time of 20 / post time of 15, totaling 56 minutes. 37 respondents selected this as their primary KRS.

The second KRS selected was CPT 31297 Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); sphenoid sinus ostium valued at 2.44 RVUs with a pre time of 21 / intra time of 20 / post time of 15, totaling 56 minutes. 22 respondents selected this as their second KRS.

Recommendation (Work and Intra Time):

We are recommending a work RVU of **2.70, our survey's 25th percentile** which we believe maintains relativity throughout the family and fits well in terms of the fee schedule. We are also recommending the survey median time of **18 minutes of intra service time**.

Time package selection: We have selected pre-time package 6 and post-time package 7A due to this procedure currently being done predominantly in the office setting using local/topical anesthesia.

Our expert panel feels the work of these procedures is very similar, and our data is consistent with this conclusion. Our data does, however, give two additional minutes of intraservice time for 31243 when compared to 31242. These additional two minutes can be accounted for due to difference in the technology. During the 31243 (cryoablation), when the wand is removed from the nose after completing the first side, the cryotherapy container needs to be removed from the wand and replaced with a second canister in order to complete the second side. This accounts for the additional time needed but does not represent a particularly intense portion of the intraservice work. In an attempt to maintain relativity between 31242 and 31243, as well as codes in the existing fee schedule such as our Key Reference Services, we are requesting the same wRVUs for 31242 and 31243 despite their slight difference in time.

Pre-time Package 6 Procedure with local/topical anesthesia care requiring wait time for anesthesia to take effect

Evaluation Time – We are recommending 17 minutes of evaluation time which is consistent with the pre-service package and less than our survey time.

Positioning Time – We are recommending 1 minute of positioning time in accordance with the preservice package.

Scrub, Dress, Wait Time – We are recommending 5 minutes of scrub, dress and wait time which is the same as our survey time and the pre service package.

This results in a total recommended pre time of 23 minutes, taking the lesser of surveyed time or the pre-service package time.

Post-time Package 7A Local Anesthesia/ Straightforward Procedure
Recommended time has been reduced to 10 minutes which is a decrease of 8 minutes from the post package time selected to match our survey time. ***This results in a total recommended post time of 10 minutes, taking the lesser of surveyed time or the pre-service package time.***

Supporting Reference Codes for the Recommended Value

CPT Code	Long Desc	Global	IWPUT	Work RVU	Pre Eval	Pre Positioning	Pre SDW	Intra Time	Immediate Post Time	Total Time	Most Recent

						Time					RUC Review
31573	Laryngoscopy, flexible; with therapeutic injection(s) (eg, chemodenervation agent or corticosteroid, injected percutaneous, transoral, or via endoscope channel), unilateral	000	0.1153	2.43	17	1.0	9.0	15	10	52	2015-10
31574	Laryngoscopy, flexible; with injection(s) for augmentation (eg, percutaneous, transoral), unilateral	000	0.1108	2.43	20	1.0	9.0	15	10	55	2015-10
31578	Laryngoscopy, flexible; with removal of lesion(s), non-laser	000	0.1168	2.43	16	1.0	9.0	15	10	51	2015-10
31297	Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); sphenoid sinus ostium	000	0.0853	2.44	15	1.0	5.0	20	15	56	2017-01
43205	Esophagoscopy, flexible, transoral; with band ligation of esophageal varices	000	0.0886	2.44	15	3.0	5.0	20	10	53	2012-10
43215	Esophagoscopy, flexible, transoral; with removal of foreign body(s)	000	0.0886	2.44	15	3.0	5.0	20	10	53	2012-10
32556	Pleural drainage, percutaneous, with insertion of indwelling catheter; without imaging guidance	000	0.0845	2.50	13	3.0	6.0	20	18	60	2012-10
47536	Exchange of biliary drainage catheter (eg, external, internal-external, or conversion of internal-external to external only), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation	000	0.0994	2.61	10	3.0	5.0	20	13	51	2015-10
43249	Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic balloon dilation of esophagus (less than 30 mm diameter)	000	0.0956	2.67	14	3.0	5.0	20	15	57	2013-01
31295	Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa	000	0.0983	2.70	15	1.0	5.0	20	15	56	2017-01
45346	Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)	000	0.1071	2.81	15	3.0	5.0	20	10	53	2013-10
49452	Replacement of gastro-jejunostomy tube, percutaneous, under fluoroscopic guidance including contrast injection(s), image documentation and report	000	0.1018	2.86	20	5.0	5.0	20	10	60	2007-09
43248	Esophagogastroduodenoscopy, flexible, transoral; with insertion of guide wire followed by passage of dilator(s) through esophagus over guide wire	000	0.1076	2.91	14	3.0	5.0	20	15	57	2013-01
43250	Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by hot	000	0.1151	2.97	11	3.0	5.0	20	14	53	2013-01

	biopsy forceps										
31572	Laryngoscopy, flexible; with ablation or destruction of lesion(s) with laser, unilateral	000	0.1121	3.01	20	1.0	9.0	20	10	60	2015-10
43251	Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique	000	0.1401	3.47	15	3.0	5.0	20	10	53	2013-04
27250	Closed treatment of hip dislocation, traumatic; without anesthesia	000	0.2027	3.82	15	5.0	5.0	15	13	53	2008-02

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 30999 should have been used to report this service previously, some were miscoding 30117 instead.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Otolaryngology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 14631
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This represents 1/3 of the current Medicare volume of 30117, which we believe will transfer from that code to this one with the new development of this code, multiplied by 3 for national volume.

Specialty Otolaryngology Frequency 14631 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 15,078 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. We estimate that 1/4 of the existing volume of 30117 in the RUC database will transfer to this new code.

Specialty Otolaryngology Frequency 15078 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:

BETOS Sub-classification Level II:
Musculoskeletal

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 69706

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:31243 Tracking Number Original Specialty Recommended RVU: **2.70**
Presented Recommended RVU: **2.70**
Global Period: 000 Current Work RVU: **N/A** RUC Recommended RVU: **2.70**

CPT Descriptor: Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 72-year-old female presents with symptoms of chronic rhinitis that have been refractory to medical therapy. the patient is scheduled for endoscopic surgical energy-based neurolysis, using a cryoablation probe, of the posterior nasal nerve.

Percentage of Survey Respondents who found Vignette to be Typical: 97%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Meet with the patient and family to describe and discuss in detail the planned procedure. Review and update the patient's medical history. Perform a current physical examination. Reconcile medications and allergies. Discuss the patient's expected convalescence and educate the patient and caregivers regarding the signs and symptoms of the most common complications. Review and obtain informed consent. Confirm planned site to apply cryoablation technology. Provide a detailed description of the postoperative expectations in terms of bleeding, congestion, and discomfort. Verify availability and proper function of all required instruments, endoscopic and image equipment, and supplies . Perform a time-out with the entire surgical team, including confirmation of the procedure, locations, allergies, antibiotic prophylaxis, anesthesia, fire risks, expected duration, and any concerns related to the procedure. Position the patient. Wash hands and don proper gloves, gown, and personal protective equipment. Drape the patient. Apply topical decongestant and anesthetic sprays to the nostrils, followed by a wait time for them to take effect. Pledgets soaked in decongestant and anesthesia are placed in the nasal cavity followed by a wait time for them to take effect.

Description of Intra-Service Work: Previously placed pledgets are removed. Under endoscopic visualization, pledgets soaked in decongestant and anesthesia are placed in the middle meatus followed by a wait time for them to take effect. Pledgets are removed. Under endoscopic visualization, pledgets soaked in decongestant and anesthesia are placed at the lateral attachment site of the middle turbinate followed by a wait time for them to take effect. An intranasal anesthetic/vasoconstrictive agent is injected into the lateral attachment of middle turbinate followed by a wait time for this to take effect. The middle turbinate is medialized. Under endoscopic visualization, the cryoablation probe is introduced into the nasal cavity. The cryoablation probe is then placed at the lateral attachment of the middle turbinate and activated, initiating the freezing process. The cryotherapy freezing is then performed under scrupulous endoscopic observation. Once adequate cryotherapy has been applied, the application of cryotherapy is stopped. The patient is then asked to breathe through their nose while the cryotherapy probe unfreezes from the affected mucosa. OOnce the cryotherapy probe unfreezes from the surrounding mucosa, it is withdrawn. Under endoscopic visualization, pledgets soaked in decongestant are then placed in the treated areas to allow for hemostasis. Pledgets are then removed. The cryoablaiton canister is then exchanged for a new one. The wand is reoriented to accommodate the contralateral side. The same procedure is then performed on the contralateral side.

Description of Post-Service Work: Monitor the patient for adequate hemostasis. Monitor the patient for headache and treat as needed. Dictate a procedure report. Reconcile discharge medications. Review the prescription drug monitoring

database. Write postoperative orders, medications, and instructions. Have a detailed discussion regarding the procedure and findings with the patient and family. Reiterate convalescence instructions, precautions, follow-up appointments, expected postoperative course, signs and symptoms of complications, and review the written postoperative instructions.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	R. Peter Manes, MD / Ari Wirtschafter, MD					
Specialty Society(ies):	AAO-HNS					
CPT Code:	31243					
Sample Size:	3605	**Resp N:**	153			
Description of Sample:	Targeted Random					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	2.00	**6.00**	12.00	50.00	
Survey RVW:	1.00	2.70	**3.05**	3.75	50.00	
Pre-Service Evaluation Time:			**22.00**			
Pre-Service Positioning Time:			**5.00**			
Pre-Service Scrub, Dress, Wait Time:			**5.00**			
Intra-Service Time:	2.00	10.00	**20.00**	30.00	61.00	
Immediate Post Service-Time:	**10.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

6-NF Proc w local/topical anes care req wait time

CPT Code:	31243	**Recommended Physician Work RVU: 2.70**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**17.00**	**17.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**5.00**	**5.00**	**0.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

7A Local/Simple Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**18.00**	**-8.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
31295	000	2.70	**RUC Time**

CPT Descriptor Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
30140	000	3.00	**RUC Time**

CPT Descriptor Submucous resection inferior turbinate, partial or complete, any method

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
51102	000	2.70	**RUC Time**	12,346

CPT Descriptor 1 Aspiration of bladder; with insertion of suprapubic catheter

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
55876	000	1.73	**RUC Time**	19,114

CPT Descriptor 2 Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), prostate (via needle, any approach), single or multiple

Other Reference CPT Code	Global	Work RVU	Time Source
31572	000	3.01	**RUC Time**

CPT Descriptor Laryngoscopy, flexible; with ablation or destruction of lesion(s) with laser, unilateral

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 37 **% of respondents:** 24.1 **%**

Number of respondents who choose 2nd Key Reference Code: 25 **% of respondents:** 16.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 31243	Top Key Reference CPT Code: 31295	2nd Key Reference CPT Code: **30140**
Median Pre-Service Time	23.00	21.00	43.00
Median Intra-Service Time	20.00	20.00	20.00
Median Immediate Post-service Time	10.00	15.00	15.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**53.00**	**56.00**	**78.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	3%	23%	56%	18%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	28%	44%	28%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	21%	69%	10%
Physical effort required	10%	77%	13%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	36%	49%	15%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	12%	52%	36%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	12%	52%	36%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	20%	36%	44%
Physical effort required	21%	58%	21%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	4%	64%	32%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background:
In September of 2022, the Academy submitted a code change application (CCA) requesting a new code for destruction of the posterior nasal nerve. During the September CPT Editorial Panel meeting, the Panel requested that we submit an alternate option, dividing the code we'd proposed into two separate codes. One for the procedure when done using radiofrequency ablation and one when cryoablation is used. The Academy supported this request from the panel, and two new codes were approved, CPT 31242 and 31243. Despite extensive educational efforts, the Academy believes that

providers have historically reported these services using code 30117 Excision or destruction (eg, laser), intranasal lesion; internal approach. That code, as well as 30118, are also being reviewed during this RUC meeting, despite being from separate code families and having different globals (new PNN codes are 000 and 30117/18 are 090 globals).

Survey Sample and Process:

A survey request was sent to a targeted, random selection of 3605 AAO-HNS members who self-designate as a general otolaryngologist or as a rhinologist in the AAO-HNS member database.

Discussion of Key Reference Codes

The first KRS selected was CPT 31295 Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa valued at 2.70 RVUs with a pre time of 21 / intra time of 20 / post time of 15, totaling 56 minutes. 37 respondents selected this as their primary KRS.

The second KRS selected was CPT 30140 Submucous resection inferior turbinate, partial or complete, any method valued at 3.00 RVUs with a pre time of 43 / intra time of 20 / post time of 15, totaling 78 minutes. 25 respondents selected this as their second KRS.

Recommendation (Work and Intra Time):

We are recommending a work RVU of **2.70, our survey's 25th percentile,** which we believe maintains relativity throughout the family and fits well in terms of the fee schedule. We are also recommending the survey median time of **20 minutes of intra service time**.

Time package selection: We have selected pre-time package 6 and post-time package 7A due to this procedure currently being done predominantly in the office setting using local/topical anesthesia.

Our expert panel feels the work of these procedures is very similar, and our data is consistent with this conclusion. Our data does, however, give two additional minutes of intraservice time for 31243 when compared to 31242. These additional two minutes can be accounted for due to difference in the technology. During the 31243 (cryoablation), when the wand is removed from the nose after completing the first side, the cryotherapy container needs to be removed from the wand and replaced with a second canister in order to complete the second side. This accounts for the additional time needed but does not represent a particularly intense portion of the intraservice work. In an attempt to maintain relativity between 31242 and 31243, as well as codes in the existing fee schedule such as our Key Reference Services, we are requesting the same wRVUs for 31242 and 31243 despite their slight difference in time.

Pre-time Package 6 Procedure with local/topical anesthesia care requiring wait time for anesthesia to take effect

Evaluation Time – We are recommending 17 minutes of evaluation time which is consistent with the pre-service package and less than our survey time.

Positioning Time – We are recommending 1 minute of positioning time in accordance with the preservice package.

Scrub, Dress, Wait Time – We are recommending 5 minutes of scrub, dress and wait time which is the same as our survey time and the pre service package.

This results in a total recommended pre time of 23 minutes, taking the lesser of surveyed time or the pre-service package time.

Post-time Package 7A Local Anesthesia/ Straightforward Procedure
Recommended time has been reduced to 10 minutes which is a decrease of 8 minutes from the post package time selected to match our survey time. ***This results in a total recommended post time of 10 minutes, taking the lesser of surveyed time or the pre-service package time.***

Supporting Reference Codes for the Recommended Value

CPT Code	Long Desc	Global	IWPUT	Work RVU	Pre Eval	Pre Positioning	Pre SDW	Intra Time	Immediate Post Time	Total Time	Most Recent

						Time					RUC Review
32556	Pleural drainage, percutaneous, with insertion of indwelling catheter; without imaging guidance	000	0.0845	2.50	13	3.0	6.0	20	18	60	2012-10
47536	Exchange of biliary drainage catheter (eg, external, internal-external, or conversion of internal-external to external only), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation	000	0.0994	2.61	10	3.0	5.0	20	13	51	2015-10
43249	Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic balloon dilation of esophagus (less than 30 mm diameter)	000	0.0956	2.67	14	3.0	5.0	20	15	57	2013-01
31295	Nasal/sinus endoscopy, surgical, with dilation (eg, balloon dilation); maxillary sinus ostium, transnasal or via canine fossa	000	0.0983	2.70	15	1.0	5.0	20	15	56	2017-01
45346	Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)	000	0.1071	2.81	15	3.0	5.0	20	10	53	2013-10
49452	Replacement of gastro-jejunostomy tube, percutaneous, under fluoroscopic guidance including contrast injection(s), image documentation and report	000	0.1018	2.86	20	5.0	5.0	20	10	60	2007-09
43248	Esophagogastroduodenoscopy, flexible, transoral; with insertion of guide wire followed by passage of dilator(s) through esophagus over guide wire	000	0.1076	2.91	14	3.0	5.0	20	15	57	2013-01
43250	Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps	000	0.1151	2.97	11	3.0	5.0	20	14	53	2013-01
31572	Laryngoscopy, flexible; with ablation or destruction of lesion(s) with laser, unilateral	000	0.1121	3.01	20	1.0	9.0	20	10	60	2015-10
43251	Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique	000	0.1401	3.47	15	3.0	5.0	20	10	53	2013-04
27250	Closed treatment of hip dislocation, traumatic; without anesthesia	000	0.2027	3.82	15	5.0	5.0	15	13	53	2008-02

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

- ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
- ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
- ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
- ☐ Multiple codes are used to maintain consistency with similar codes.
- ☐ Historical precedents.
- ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 30999 should have been used to report this service previously, some were miscoding 30117 instead.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Otolaryngology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 30306
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This represents 2/3 of the current Medicare volume of 30117, which we believe will transfer from that code to this one with the new development of this code, multiplied by 3 for national volume.

Specialty Otolaryngology Frequency 30306 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 10,102 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. We estimate that 1/2 of the existing volume of 30117 in the RUC database will transfer to this new code.

Specialty Otolaryngology Frequency 10102 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

---

Berenson-Eggers Type of Service (BETOS) Assignment
Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Minor procedure

BETOS Sub-classification Level II:
Musculoskeletal

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 69706

SS Rec Summary

ISSUE: Posterior Nasal Nerve Ablation

TAB: 7

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt/same day 91	92	33	32	31	38	39	FAC-obs 26	25	24	17	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	21555	090	Excision, tumor, soft tissue of n	Feb-09	31	0.027	0.029			3.96			138	19	6	5			35			15					0.5								1	1						
2nd REF	21011	090	Excision, tumor, soft tissue of f	Feb-09	19	0.023	0.028			2.99			107	22	6	0			30			10												1	1						
CURRENT	30117	090	Excision or destruction (eg, las	Harvard		0.045	0.030			3.26			110	15	0	15			34			14											2							
SVY		090			97	0.057	0.037	2.03	3.91	4.50	6.00	12.00	121	20	5	10	3	15	30	40	120	10											2					0	3	8	16	50
SVY w/EXP		090			95	0.057	0.037	2.03	3.93	4.50	6.13	12.00	121	20	5	10	3	15	30	40	120	10											2					1	3	9	18	50
REC	30117	090	Excision or destruction (eg, las			0.0183	0.029			3.91			133	20	3	5			30			10					0.5						2								

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt/same day 91	92	33	32	31	38	39	FAC-obs 26	25	24	17	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	60220	090	Total thyroid lobectomy, unilate	Oct-10	17	0.071	0.042			11.19			267	40	12	20			90			40					0.5						2								
2nd REF	43180	090	Esophagoscopy, rigid, transora	Jan-14	7	0.086	0.045			9.03			201	40	10	10			60			20					1.0						1								
CURRENT	30118	090	Excision or destruction (eg, las	Harvard		0.049	0.034			9.92			288	29	0	25			105			25				0.5	1.0						3.5								
SVY		090			49	0.076	0.044	3.00	6.98	9.55	11.62	23.00	218	30	10	10	10	45	60	90	180	20					0.5						3					0	0	2	2	10
SVY w/ EXP		090			34	0.066	0.041	3.00	6.96	8.95	11.88	23.00	218	30	10	10	10	33	60	90	180	20					0.5						3					1	2	2	3	10
REC	30118	090	Excision or destruction (eg, las			0.079	0.045			9.55			211	30	3	10			60			20					0.5						3								

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt/same day 91	92	33	32	31	38	39	FAC-obs 26	25	24	17	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	31295	000	Nasal/sinus endoscopy, surgica	Jan-17	37	0.098	0.048			2.70			56	15	1	5			20			15																				
2nd REF	31297	000	Nasal/sinus endoscopy, surgica	Jan-17	22	0.085	0.044			2.44			56	15	1	5			20			15																				
CURRENT	31242	000				-	-						0																													
SVY	31242	000	Nasal/sinus endoscopy, surgica		138	0.120	0.050	1.00	2.70	3.05	3.74	20.00	61	23	5	5	2	11	18	25	90	10																	0	2	5	10	75
SVY w/EXP	31242	000			119	0.122	0.050	1.00	2.70	3.10	3.73	20.00	62	23	5	6	2	12	18	25	90	10																	1	2	6	10	75
REC	31242	000	Nasal/sinus endoscopy, surgica			0.113	0.053			2.70			51	17	1	5			18			10																				

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt/same day 91	92	33	32	31	38	39	FAC-obs 26	25	24	17	Office 15	14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	31295	000	Nasal/sinus endoscopy, surgica	Jan-17	37	0.098	0.048			2.70			56	15	1	5			20			15																				
2nd REF	30140	000	Submucous resection inferior tu	Jan-16	25	0.092	0.038			3.00			78	30	3	10			20			15																				
CURRENT	31243	000				-	-						0																													
SVY	31243	000	Nasal/sinus endoscopy, surgica		153	0.109	0.049	1.00	2.70	3.05	3.75	50.00	62	22	5	5	2	10	20	30	61	10																	0	2	6	12	50
SVY w/EXP	31243	000			130	0.108	0.048	1.70	2.70	3.05	3.97	50.00	63	23	5	5	2	11	20	30	61	10																	1	4	8	15	50
REC	31243	000	Nasal/sinus endoscopy, surgica			0.102	0.051			2.70			53	17	1	5			20			10																				

NONFACILITY DIRECT PE INPUTS **CPT CODE(S):__ 31242, 31243, 30117_____**

SPECIALTY SOCIETY(IES): AAO-HNS_____

PRESENTER(S):__Drs. Manes and Wirtschafter_____

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
31242	Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve	000
31243	Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve	000
30117	Excision or destruction (eg, laser), intranasal lesion; internal approach	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
31242	A 68-year-old female presents with symptoms of chronic rhinitis that have been refractory to medical therapy. The patient is scheduled for endoscopic surgical energy-based neurolysis, using a radiofrequency ablation probe, of the posterior nasal nerve.
31243	A 72-year-old female presents with symptoms of chronic rhinitis that have been refractory to medical therapy. The patient is scheduled for endoscopic surgical energy-based neurolysis, using a cryoablation probe, of the posterior nasal nerve.
30117	A 59-year-old male presents with nasal obstruction and epistaxis. A lesion of the nasal cavity is identified on anterior rhinoscopy and/or nasal endoscopy (separately reported). A transnasal excision or destruction of the nasal lesion is performed under direct vision.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   Our specialty formed a panel of experts to develop practice expense recommendations for this family of codes. The panel was comprised of our RUC Advisor and multiple clinical experts who practice in the areas of general otolaryngology and rhinology. The expert panel members also practice across in settings that vary by size, geography, and represent both private and academic settings.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   The first two codes are new codes, but we felt that CPT 69706 was most clinically similar as a bilateral procedure and was recently reviewed by the RUC. For the third, we used existing PE as a reference, for code 30117.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   No.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Is the dominant provider in the nonfacility different than for the global?
(Please see the *Billed Together* tab in the RUC Database)

Otolaryngology for all places of service. 3x016 and 3x017 are new codes which are estimated to be provided in the non-facility / office the majority of the time.

For 30117:

MEDICARE PLACE OF SERVICE	SITE %
PHYSICIAN OFFICE	81.5%
OUTPATIENT HOSPITAL (ON CAMPUS)	11.2%
AMBULATORY SURGICAL CENTER	6.1%
OUTPATIENT HOSPITAL (OFF CAMPUS)	0.8%
INPATIENT HOSPITAL	0.3%

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

For the 000 codes we are recommending 5 minutes outside the standard clinical staff time for staff to complete diagnostic and referral forms and provide patient education and consent. The rationale for this time is that non-facility staff are essential to completing diagnostic and referral forms and providing education and consent to the patient prior to the procedure. Additionally, the RUC has approved these minutes in the past for similar codes, as the time represents staff work that occurs in order for the procedure to take place.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

See response in question 5 above.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

For 30117, please note this is a harvard valued code, therefore all clinical activities in the previous PE was rolled into CA008 and CA038.

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

For 30117, we are requesting 5 minutes for this activity, as five vitals are taken.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

000 codes: Complete pre-service diagnostic and referral forms, including scheduling the procedure in the office.
Provide pre-service education/obtain consent, including informing the patient what to expect the day of the procedure.

090 code: Complete pre-service diagnostic and referral forms, coordinate pre surgery services (including test results). Provide pre-service education/obtain consent, including informing the patient what to expect the day of the procedure. Complete pre-procedure phone calls and prescriptions.

    b. Service period (includes pre, intra and post):

000 codes:
Greet patient, provide gowning, ensure appropriate medical records are available
Obtain vital signs (5) Obtain blood pressure, pulse, O2 saturation, temperature, and respirations
Prepare room, equipment and supplies Requires setup of appropriate supplies by staff
Setup scope rigid 0 degree
Initial positioning and monitoring of patient - Patient must be positioned in the seated position, with chair reclined at approximately a 20 degree angle
Sedate/apply anesthesia
Assist physician or other qualified healthcare professional---directly related to physician work time (100%)
Monitor patient following procedure/service, multitasking 1:4
Clean room/equipment by clinical staff
Clean scope - 0 degree
Clean surgical instrument package - nasal speculum, bayonette forceps, freer elevator, suction
Review home care instructions, coordinate visits/prescriptions

090 code:
Greet patient, provide gowning, ensure appropriate medical records are available
Obtain vital signs (5) Obtain blood pressure, pulse, O2 saturation, temperature, and respirations
Prepare room, equipment and supplies Requires setup of appropriate supplies by staff
Initial positioning and monitoring of patient - Patient must be positioned in the seated position, with chair reclined at approximately a 20 degree angle
Sedate/apply anesthesia
Assist physician or other qualified healthcare professional---directly related to physician work time (100%)
Monitor patient following procedure/service, multitasking 1:4
Clean room/equipment by clinical staff
Clean surgical instrument package - nasal speculum, bayonette forceps, freer elevator, suction
Review home care instructions, coordinate visits/prescriptions

    c. Post-service period:

000 codes:

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Conduct patient communications to ensure patient is doing well post-procedure

090 codes:
Conduct patient communications to ensure patient is doing well post-procedure
During the post operative visits, the staff assist during the entirety of the visit. They directly assist the physician, handing instruments to clean the nasal cavity and dress the surgical wound. They also provide reiteration of activity and post-operative instructions.

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

000 codes:
During the entirety of the procedure, the clinical staff is with the physician, performing a variety of tasks. They are loading up pledgets in forceps so the physician may place them. They are passing the physician instruments, including suction and the device utilized to perform the posterior nasal nerve ablation. They are also keeping time during the procedure to make sure the energy source is applied for the appropriate amount of time.

090 code:
During the intraservice clinical activity, the staff is present the entire time both providing instruments to the physician, as well as monitoring the laser and alternating it between "on" mode when in use and "standby" mode when not in use, in order to avoid any inadvertent pulse delivery.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

Radiofrequency wand (3x016 only)
Cryoablation handpiece and 2 canisters (3x017 only)

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

000 codes:
Yes, SA042, pack, cleaning and disinfecting endoscope, SA043, pack cleaning surgical instruments, SA048 pack, minimum multi-specialty visit

090 codes:
Yes, SA043, pack cleaning surgical instruments, SA048 pack, minimum multi-specialty visit

000 codes:

Code	Unit	Item Qty	Unit price
pack, cleaning and disinfecting, endoscope	**SA042**	**pack**	**19.43**
gloves, non-sterile		pair	4
gown, staff, impervious		item	1
face shield, splash protection		item	1
biohazard bag		item	1
gauze, sterile 4in x 4in (10 pack uou)		item	1
alcohol isopropyl 70%		ml	60
cleaning brush, endoscope		item	1
glutaraldehyde 3.4% (Cidex, Maxicide, Wavicide)		oz	32
glutaraldehyde test strips (Cidex, Metrex)		item	1

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, cleaning, surgical instruments	**SA043**	**pack**	1	**12.61**
gloves, non-sterile		pair	2	
gown, staff, impervious		item	1	
face shield, splash protection		item	1	
autoclave bag		item	1	
autoclave tape		yd	0.33	
enzymatic detergent		oz	1	
cleaning brush, instruments		item	1	

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

NONFACILITY DIRECT PE INPUTS **CPT CODE(S):__ 31242, 31243, 30117_____**

SPECIALTY SOCIETY(IES): AAO-HNS_____

PRESENTER(S):__Drs. Manes and Wirtschafter_____

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

090 code:

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, cleaning, surgical instruments	**SA043**	**pack**	1	**12.61**
gloves, non-sterile		pair	2	
gown, staff, impervious		item	1	
face shield, splash protection		item	1	
autoclave bag		item	1	
autoclave tape		yd	0.33	
enzymatic detergent		oz	1	
cleaning brush, instruments		item	1	

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**	**5.02**	
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

19. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

Radiofrequency console (3x016 only)

20. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

4 years

21. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

c. Does the computer include code specific software that is typically used to provide the service(s)?

n/a

22. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

000 codes:

endoscope disinfector, rigid or fiberoptic, w-cart	Scope Systems
scope video system (monitor, processor, digital capture, cart, printer, LED light)	Scope Systems
PROXY endoscope, rigid, sinoscopy (0 degrees)	Scope
suction and pressure cabinet, ENT (SMR)	Default
light, fiberoptic headlight w-source	Default
instrument pack, basic ($500-$1499)	Instrument Packs
light source, xenon	Default
chair with headrest, exam, reclining	Default
mayo stand	Default
Radiofrequency console (31242 only)	Highly Technical

090 code:

EQ234	suction and pressure cabinet, ENT (SMR)	Office Visits
EQ170	light, fiberoptic headlight w-source	Office Visits
EQ137	instrument pack, basic ($500-$1499)	Office Visits
EQ110	electrocautery-hyfrecator, up to 45 watts	Default
EQ156	laser, CO2 (Star X)	Highly Technical
EF008	chair with headrest, exam, reclining	Office Visits
EF015	mayo stand	Default

NONFACILITY DIRECT PE INPUTS **CPT CODE(S):__ 31242, 31243, 30117_____**

SPECIALTY SOCIETY(IES): AAO-HNS_____

PRESENTER(S):__Drs. Manes and Wirtschafter_____

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

23. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

24. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

FACILITY DIRECT PE INPUTS

CPT CODE(S):__ 31242, 31243, 30117, 30118_____
SPECIALTY SOCIETY(IES):__AAO-HNS_____
PRESENTER(S):__Drs. Manes and Wirtschafter_____

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
31242	Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve	000
31243	Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve	000
30117	Excision or destruction (eg, laser), intranasal lesion; internal approach	090
30118	Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
31242	A 68-year-old female presents with symptoms of chronic rhinitis that have been refractory to medical therapy. The patient is scheduled for endoscopic surgical energy-based neurolysis, using a radiofrequency ablation probe, of the posterior nasal nerve.
31243	A 72-year-old female presents with symptoms of chronic rhinitis that have been refractory to medical therapy. The patient is scheduled for endoscopic surgical energy-based neurolysis, using a cryoablation probe, of the posterior nasal nerve.
30117	A 59-year-old male presents with nasal obstruction and epistaxis. A lesion of the nasal cavity is identified on anterior rhinoscopy and/or nasal endoscopy (separately reported). A transnasal excision or destruction of the nasal lesion is performed under direct vision.
30118	A 72-year-old male presents with nasal obstruction and epistaxis. A mass of the nasal cavity is identified by rhinoscopy and/or nasal endoscopy (separately reported) and further analyzed by nasal and sinus imaging (separately reported). An external approach (lateral rhinotomy) with excision of the nasal lesion is performed.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   Our specialty formed a panel of experts to develop practice expense recommendations for this family of codes. The panel was comprised of our RUC Advisor and multiple clinical experts who practice in the areas of general otolaryngology and rhinology. The expert panel members also practice across in settings that vary by size, geography, and represent both private and academic settings.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   The 000 codes are new codes, but we felt that CPT 69706 was most clinically similar as a bilateral procedure and was recently reviewed by the RUC. For the 090 codes, we used existing PE for 30117/18 as our reference.

3. Is this code(s) typically reported with an E/M service?

   No.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

N/A for the 000 codes, these are new CPT codes

For both 30117 and 30118 there is an increase in total facility practice expense. We believe this is justified given that these are Harvard valued codes and in some cases, the current practice expense is simply incorrect. For instance, the Harvard valued PE includes an endoscope and a scope cleaning pack. These items are not necessary for these procedures. In other cases, the PE is lacking modern/updated inputs that have evolved over the years as the PE process has been refined by the RUC and CMS. For example, 30118 did not include a surgical instrument pack and the associated cleaning pack. We are also swapping out the OSHA compliant needle and syringe previously listed for 30117 for more typically used needle and syringe inputs. We also felt the suction inputs needed to be updated to reflect a more current technology.

These procedures are done sterilely, so we have added sterile gloves and sterile water for irrigation for 30117. Finally, we are adding some missing inputs such as Fibrillar for 30117 Fibrillar is absorbable hemostatic nasal packing utilized to control any bleeding in the post-procedure period. For 30118, we have replaced the extensive gauze and dressing inputs with SG041 Xeroform dressing. We also increased the quantity of 4% lidocaine solution for 30118 because this is used in all three of the post operative visits. Last, we have added an RhinoGuard atomizer tip shield for both codes is used to deliver sprays of topical anesthesia and decongestant to assist with evaluation of the nasal cavity.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No.

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

For the 000 codes, we are recommending clinical staff pre-time above the standard for 000 globals of 0 minutes. This represents extensive use of clinical staff per the PE Subcommittee standards and is consistent with the PE approved in the January 2017 for the FESS family of codes, as well as the PE approved for the Eustachian Tube codes in January 2020. The rationale for this time is that staff are essential to scheduling and completing paperwork necessary to schedule these procedures in the

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

facility setting. All new codes are consistent with these recommendations and include time for presumed use of clinical staff for endoscopy procedures time in the pre-service as well.

For the 090 codes, we are recommending the standard clinical staff pre-time for 090 globals for both codes.

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

For the 090 codes these codes are Harvard valued so their clinical staff time was previously listed in two categories: CA008, CA021, and CA038.

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

Complete pre-service diagnostic and referral forms	
Coordinate pre-surgery services (including test results)	
Schedule space and equipment in facility	
Provide pre-service education/obtain consent	
Complete pre-procedure phone calls and prescription	

   b. Service period (includes pre, intra and post):

None for the 000 codes.

For the 090 codes, both procedures include a .5 discharge management visit as the standard for 090 globals.

   c. Post-service period:

Conduct patient communications for all codes.

30117 Post Visits
During the post operative visits, the staff assist during the entirety of the visit. They directly assist the physician, handing instruments to clean the nasal cavity and dress the surgical wound. They also provide reiteration of activity and post-operative instructions.

30118 Post Visits
During the post operative visits, the staff assist during the entirety of the visit. They directly assist the physician, handing instruments to clean the nasal cavity and dress the surgical wound. They also provide reiteration of activity and post-operative instructions.

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

FACILITY DIRECT PE INPUTS

CPT CODE(S):__ 31242, 31243, 30117, 30118_____
SPECIALTY SOCIETY(IES):__AAO-HNS_____
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AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

12. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

14. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

No for the 000 codes

Yes for the 090 codes

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

30117
SA043 pack, cleaning, surgical instruments
SA048 pack, minimum multi-specialty visit

30118
SA043 pack, cleaning, surgical instruments
SA048 pack, minimum multi-specialty visit
SA054 pack, post-op incision care (suture)

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

c. Does the computer include code specific software that is typically used to provide the service(s)?

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

EQ234	suction and pressure cabinet, ENT (SMR)	Office Visits
EQ170	light, fiberoptic headlight w-source	Office Visits
EQ137	instrument pack, basic ($500-$1499)	Office Visits
EF008	chair with headrest, exam, reclining	Office Visits

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:
N/A

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

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	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		RECOMMENDED		RECOMMENDED		CURRENT		RECOMMENDED		CURI
2						CPT Code 69706		CPT Code 31242		CPT Code 31243		CPT Code 30117		CPT Code 30117		CPT Coc
3		*RUC Collaboration Website*														
4	Clinical Activity Code	Meeting Date: January 2023 Revision Date (if applicable): Tab: 7 Specialty: AAO-HNS	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); bilateral		Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve		Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or (eg, laser) lesion; approac rhino
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
6		GLOBAL PERIOD				000	000	000	000	000	000	090	090	090	090	090
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$2,293.15	$ 10.01	$2,127.81	$ 10.01	$2,230.61	$ 10.01	$ 700.88	$ 139.15	$ 700.86	$ 182.05	$ -
8		TOTAL CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	113.0	22.0	88.0	22.0	90.0	22.0	228.0	153.0	184.0	141.0	0.0
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	8.0	19.0	8.0	19.0	8.0	19.0	35.0	60.0	35.0	60.0	0.0
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	102.0	0.0	77.0	0.0	79.0	0.0	106.0	6.0	74.0	6.0	0.0
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	3.0	3.0	3.0	3.0	3.0	3.0	87.0	87.0	75.0	75.0	0.0
12		TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE				$ 51.42	$ 10.01	$ 40.04	$ 10.01	$ 40.95	$ 10.01	$ 103.74	$ 69.62	$ 83.72	$ 64.16	$ -
13		PRE-SERVICE PERIOD														
14		Start: Following visit when decision for surgery/procedure made														
15	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455	3	3	3	3	3	3	5	5	5	5	
16	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455		5		5		5	10	20	10	20	
17	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455		3		3		3	0	8	0	8	
18	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455	5	5	5	5	5	5	10	20	10	20	
19	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455		3		3		3	10	7	10	7	
20	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455											
21	CA007	Review patient clinical extant information and questionnaire	L037D	RN/LPN/MTA	0.455											
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455											
23			L037D	RN/LPN/MTA	0.455											
26		*Other activity: please include short clinical description here and type new in*	L037D	RN/LPN/MTA	0.455											
29		End: When patient enters office/facility for surgery/procedure														
30		SERVICE PERIOD														
31		Start: When patient enters office/facility for surgery/procedure:														
32		Pre-Service (of service period)														
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L037D	RN/LPN/MTA	0.455	3		3		3		5		3		
34	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455	5		5		5		5		5		
35	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455											
36	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455											
37	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455	2		2		2		2		2		
38	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455											
39	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455	5		5		5		5				
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L037D	RN/LPN/MTA	0.455	2		2		2		2		2		
41	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455	2		2		2		2		2		
42			L037D	RN/LPN/MTA	0.455											
45		*Other activity: please include short clinical description here and type new in*	L037D	RN/LPN/MTA	0.455											
48		Intra-service (of service period)														
49	CA018	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455	30		18		20		34		30		
50	CA019	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455											
51	CA020	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455											
52	CA021	Perform procedure/service---NOT directly related to physician work time	L037D	RN/LPN/MTA	0.455											
55			L037D	RN/LPN/MTA	0.455											
56		*Other activity: please include short clinical description here and type new in*	L037D	RN/LPN/MTA	0.455											
59		Post-Service (of service period)														
60	CA022	Monitor patient following procedure/service, multitasking 1:4	L037D	RN/LPN/MTA	0.455	15		15		15		5		15		
61	CA023	Monitor patient following procedure/service, no multitasking	L037D	RN/LPN/MTA	0.455											
62	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455	3		3		3		3		3		
63	CA025	Clean scope	L037D	RN/LPN/MTA	0.455	20		10		10		20				
64	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455	10		10		10		15		10		
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D	RN/LPN/MTA	0.455	3										
66	CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D	RN/LPN/MTA	0.455											
67	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455											
68	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose	L037D	RN/LPN/MTA	0.455											
69	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455											
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate	L037D	RN/LPN/MTA	0.455											
71	CA033	Perform regulatory mandated quality assurance activity (service period)	L037D	RN/LPN/MTA	0.455											
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG	L037D	RN/LPN/MTA	0.455											
73	CA035	Review home care instructions, coordinate visits/prescriptions	L037D	RN/LPN/MTA	0.455	2		2		2		3		2		
74	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455			n/a		n/a			6	n/a	6	n/a
75			L037D	RN/LPN/MTA	0.455											
78	set up laser	*Other activity: please include short clinical description here and type new in*	L037D	RN/LPN/MTA	0.455							5				

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**		**RECOMMENDED**		**CURRENT**		**RECOMMENDED**		**CURI**
2						**CPT Code 69706**		**CPT Code 31242**		**CPT Code 31243**		**CPT Code 30117**		**CPT Code 30117**		**CPT Co**
3		***RUC Collaboration Website***														
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 7** **Specialty: AAO-HNS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); bilateral		Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve		Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or (eg, laser) lesion; approac rhino
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**				**000**	**000**	**000**	**000**	**000**	**000**	**090**	**090**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$2,293.15**	**$ 10.01**	**$2,127.81**	**$ 10.01**	**$2,230.61**	**$ 10.01**	**$ 700.88**	**$ 139.15**	**$ 700.86**	**$ 182.05**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**113.0**	**22.0**	**88.0**	**22.0**	**90.0**	**22.0**	**228.0**	**153.0**	**184.0**	**141.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**8.0**	**19.0**	**8.0**	**19.0**	**8.0**	**19.0**	**35.0**	**60.0**	**35.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**102.0**	**0.0**	**77.0**	**0.0**	**79.0**	**0.0**	**106.0**	**6.0**	**74.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**87.0**	**87.0**	**75.0**	**75.0**	**0.0**
81		**End: Patient leaves office/facility**														
82		**POST-SERVICE PERIOD**														
83		**Start: Patient leaves office/facility**														
84	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455	3	3	3	3	3	3			3	3	
85	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455											
86		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
87		99211 16 minutes	16													
88		99212 27 minutes	27									2	2			
89		99213 36 minutes	36											2	2	
90		99214 53 minutes	53													
91		99215 63 minutes	63													
92	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**54.0**	**54.0**	**72.0**	**72.0**	**0.0**
93			L037D	RN/LPN/MTA	0.455											
96		*Other Setup/Clean Scopes @ 2/3 Std Time*	L037D	RN/LPN/MTA	0.455							33	33			
99		**End: with last office visit before end of global period**														

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		RECOMMENDED		RECOMMENDED		CURRENT		RECOMMENDED		CURI
2						CPT Code 69706		CPT Code 31242		CPT Code 31243		CPT Code 30117		CPT Code 30117		CPT Co
3		*RUC Collaboration Website*														
4	Clinical Activity Code	Meeting Date: January 2023 Revision Date (if applicable): Tab: 7 Specialty: AAO-HNS	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); bilateral		Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve		Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or (eg, laser) lesion; approac rhino
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
6		GLOBAL PERIOD				000	000	000	000	000	000	090	090	090	090	090
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$2,293.15	$ 10.01	$2,127.81	$ 10.01	$2,230.61	$ 10.01	$ 700.88	$ 139.15	$ 700.86	$ 182.05	$ -
8		TOTAL CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	113.0	22.0	88.0	22.0	90.0	22.0	228.0	153.0	184.0	141.0	0.0
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	8.0	19.0	8.0	19.0	8.0	19.0	35.0	60.0	35.0	60.0	0.0
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	102.0	0.0	77.0	0.0	79.0	0.0	106.0	6.0	74.0	6.0	0.0
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037D	RN/LPN/MTA	0.455	3.0	3.0	3.0	3.0	3.0	3.0	87.0	87.0	75.0	75.0	0.0
100	Supply Code	MEDICAL SUPPLIES	PRICE	UNIT												
101		TOTAL COST OF SUPPLY QUANTITY x PRICE				$2,219.75	$ -	$ 2,072.74	$ -	$ 2,175.03	$ -	$ 531.15	$ 63.76	$ 593.66	$ 114.84	$ -
102	SA042	pack, cleaning and disinfecting, endoscope	19.43	pack		1		1		1		3	2			
103	SA043	pack, cleaning, surgical instruments	12.61	pack		1		1		1		1		3	2	
104	SA048	pack, minimum multi-specialty visit	5.02	pack		1		1		1		3	2	3	2	
105	SA054	pack, post-op incision care (suture)	4.62	pack												
106	SA134	kit, eustachian tube procedure	2010	kit		1										
107	SB012	drape, sterile, for Mayo stand	1.07	item		1		1		1		3	2	1		
108	SB019	drape-towel, sterile 18in x 26in	0.47	item								4		4		
109	SB024	gloves, sterile	0.91	pair		2		2		2				2		
110	SB027	gown, staff, impervious	1.186	item		2		2		2		2		2		
111	SB034	mask, surgical, with face shield	3.4	item		2		2		2		2		2		
112	SB044	underpad 2ft x 3ft (Chux)	0.32	item		1		1		1						
113	SB046	drape, sterile, split-sheet	4.52	item								1				
114	SC028	needle, 18-26g 1.5-3.5in, spinal	9.96	item		1		1		1						
115	SC029	needle, 18-27g	0.04	item		2		2		2				2		
116	SC051	syringe 10-12ml	0.21	item		1		1		1				1		
117	SC058	syringe w-needle, OSHA compliant (SafetyGlide)	0.49	item								1				
118	SC080	needle, OSHA compliant (SafetyGlide)	0.78	item								1				
119	SD009	canister, suction	4.31	item		1		1		1		3	2	3	2	
120	SD122	suction tip, Yankauer	0.41	item								3	2			
121	SD132	tubing, suction, non-latex (6ft uou)	0.63	item		1		1		1		6	4	3	2	
122	SD214	tubing, suction, non-latex (2ft) with Frazier tip (1)	31.25	item		1		1		1				3	2	
123	SD279	Fibrillar, surgical	0	item										1		
124	SD338	eustachian tube balloon	83.01	item		1										
125	SF016	cautery, monopolar, electrode tip	0.37	item								1		1		
126	SF020	cautery, monopolar, pencil-handpiece	5.67	item								1		1		
127	SF021	cautery, patient ground pad w-cord	7.02	item								1		1		
128	SF028	laser tip (single use)	369.99	item								1		1		
129	SG031	cottonoid	0.8	item		10		10		10		4		4		
130	SG041	dressing, 5in x 9in (Xeroform)	1.7	item												
131	SG044	dressing, Merocel nasal standard 4.5cm	16.6	item								1		1		
132	SG055	gauze, sterile 4in x 4in	0.19	item								4	4	4	4	
133	SG056	gauze, sterile 4in x 4in (10 pack uou)	1.2	item		2		2		2		1		1		
134	SG082	cotton balls, sterile	0.03	item												
135	SH046	lidocaine 1% w-epi inj (Xylocaine w-epi)	0.08	ml		20		20		20		5		5		
136	SH050	lidocaine 4% soln, topical (Xylocaine)	0.18	ml		6		6		6				9	6	
137	SH074	water, sterile for irrigation (250-1000ml uou)	2.85	item		1								1		
138	SJ010	basin, emesis	0.25	item		1		1		1		1		1		
139	SJ037	oxymetazoline nasal spray (Afrin) (15ml uou)	1.66	item		6		6		6		1		3	2	
140	SJ053	swab-pad, alcohol	0.04	item								2				
141	SL037	cup, medicine (1oz size)	0.009	item		1		1		1						
142	SL038	cup-container, sterile, graduated 1000ml	1.15	item		1										
143	SM001	atomizer tip shield (RhinoGuard)	1.02	item		2		2		2				3	2	
144	SM014	endoscope anti-fog solution	0.76	ml		2		2		2						
145	NEW	Radiofrequency Stylus / wand	1950	item				1								
146	NEW	Cryoablation handpiece and 2 canisters (one per side)	2052.29	item						1						

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**		**RECOMMENDED**		**CURRENT**		**RECOMMENDED**		**CURI**
2						**CPT Code 69706**		**CPT Code 31242**		**CPT Code 31243**		**CPT Code 30117**		**CPT Code 30117**		**CPT Co**
3		***RUC Collaboration Website***														
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 7** **Specialty: AAO-HNS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); bilateral		Nasal/sinus endoscopy, surgical; with destruction by radiofrequency ablation, posterior nasal nerve		Nasal/sinus endoscopy, surgical; with destruction by cryoablation, posterior nasal nerve		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or destruction (eg, laser), intranasal lesion; internal approach		Excision or (eg, laser) lesion; approac rhino
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**				**000**	**000**	**000**	**000**	**000**	**000**	**090**	**090**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$2,293.15**	**$ 10.01**	**$2,127.81**	**$ 10.01**	**$2,230.61**	**$ 10.01**	**$ 700.88**	**$ 139.15**	**$ 700.86**	**$ 182.05**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**113.0**	**22.0**	**88.0**	**22.0**	**90.0**	**22.0**	**228.0**	**153.0**	**184.0**	**141.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**8.0**	**19.0**	**8.0**	**19.0**	**8.0**	**19.0**	**35.0**	**60.0**	**35.0**	**60.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**102.0**	**0.0**	**77.0**	**0.0**	**79.0**	**0.0**	**106.0**	**6.0**	**74.0**	**6.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**87.0**	**87.0**	**75.0**	**75.0**	**0.0**
147		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*														
149	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**											
150		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 21.98**	**$ -**	**$ 15.03**	**$ -**	**$ 14.63**	**$ -**	**$ 65.99**	**$ 5.77**	**$ 23.48**	**$ 3.05**	**$ -**
151	ES005	endoscope disinfector, rigid or fiberoptic, w-cart	27500	Scope Accessories	0.086369514	44										
152	ES041	PROXY endoscope, rigid, sinoscopy (30 degrees)	2414.17	Scope	0.007792052	61										
153	ES040	PROXY endoscope, rigid, sinoscopy (0 degrees)	2414.17	Scope	0.007792052	61		39		39						
154	ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)	70673.3811	Scope Systems	0.267782794	44		39		39						
155	EQ234	suction and pressure cabinet, ENT (SMR)	4212.233	Default	0.011178114	52		40		42						
156	EQ170	light, fiberoptic headlight w-source	4036.943	Default	0.01599516	52		40		42						
157	EQ137	instrument pack, basic ($500-$1499)	500	Instrument Packs	0.002323783	59		47		49						
158	EQ167	light source, xenon	12230.584	Default	0.048459974	52		40		42						
159	EF008	chair with headrest, exam, reclining	5808.692	Default	0.012920819	102		40		42						
160	EF015	mayo stand	522.804	Default	0.001162922	52		40		42						
161	NEW	Radiofrequency console	4995	Highly Technical	0.023214596			25								
162	ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)	70673.3811	Scope Systems	0.267782794											
163	ES013	endoscope, rigid, sinoscopy	4067.627	Scope	0.013128803							382	174			
164	EQ234	suction and pressure cabinet, ENT (SMR)	4212.233	Office Visits	0.011178114							191	87	119.0	72.0	
165	EQ170	light, fiberoptic headlight w-source	4036.943	Office Visits	0.01599516							191	87	119.0	72.0	
166	EQ137	instrument pack, basic ($500-$1499)	500	Office Visits	0.002323783									119.0	72.0	
167	EQ138	instrument pack, medium ($1500 and up)	1500	Instrument Packs	0.00697135							106	0			
168	EQ110	electrocautery-hyfrecator, up to 45 watts	837.5	Default	0.002222496							106	0	47		
169	EQ156	laser, CO2 (Star X)	130322.943	Highly Technic	0.493796127							106	0	37		
170	EF008	chair with headrest, exam, reclining	5808.692	Office Visits	0.012920819							191	87	119.0	72.0	
171	EF015	mayo stand	522.804	Default	0.001162922									47		
172		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*														

	A	B	R	S	T
1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**	
2			**de 30118**	**CPT Code 30118**	
3		***RUC Collaboration Website***			
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 7** **Specialty: AAO-HNS**	destruction intranasal external n (lateral tomy)	Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)	
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 233.72**	**$ -**	**$ 262.56**
8		**TOTAL CLINICAL STAFF TIME**	**176.5**	**0.0**	**177.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**60.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**12.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**105**	**0.0**	**111.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 80.31**	**$ -**	**$ 80.54**
13		**PRE-SERVICE PERIOD**			
14		**Start: Following visit when decision for surgery/procedure made**			
15	CA001	Complete pre-service diagnostic and referral forms	5		5
16	CA002	Coordinate pre-surgery services (including test results)	20		20
17	CA003	Schedule space and equipment in facility	8		8
18	CA004	Provide pre-service education/obtain consent	20		20
19	CA005	Complete pre-procedure phone calls and prescription	7		7
20	CA006	Confirm availability of prior images/studies			
21	CA007	Review patient clinical extant information and questionnaire			
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)			
23					
26		*Other activity: please include short clinical description here and type new in*			
29		**End: When patient enters office/facility for surgery/procedure**			
30		**SERVICE PERIOD**			
31		**Start: When patient enters office/facility for surgery/procedure:**			
32		**Pre-Service (of service period)**			
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are available			
34	CA010	Obtain vital signs			
35	CA011	Provide education/obtain consent			
36	CA012	Review requisition, assess for special needs			
37	CA013	Prepare room, equipment and supplies			
38	CA014	Confirm order, protocol exam			
39	CA015	Setup scope (nonfacility setting only)			
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient			
41	CA017	Sedate/apply anesthesia			
42					
45		*Other activity: please include short clinical description here and type new in*			
48		**Intra-service (of service period)**			
49	CA018	Assist physician or other qualified healthcare professional---directly related to			
50	CA019	Assist physician or other qualified healthcare professional---directly related to			
51	CA020	Assist physician or other qualified healthcare professional---directly related to			
52	CA021	Perform procedure/service---NOT directly related to physician work time			
55					
56		*Other activity: please include short clinical description here and type new in*			
59		**Post-Service (of service period)**			
60	CA022	Monitor patient following procedure/service, multitasking 1:4			
61	CA023	Monitor patient following procedure/service, no multitasking			
62	CA024	Clean room/equipment by clinical staff			
63	CA025	Clean scope			
64	CA026	Clean surgical instrument package			
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions			
66	CA028	Review/read post-procedure x-ray, lab and pathology reports			
67	CA029	Check dressings, catheters, wounds			
68	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose			
69	CA031	Review examination with interpreting MD/DO			
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate			
71	CA033	Perform regulatory mandated quality assurance activity (service period)			
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG			
73	CA035	Review home care instructions, coordinate visits/prescriptions			
74	CA036	Discharge day management	**12**	**n/a**	**6**
75					
78	set up laser	*Other activity: please include short clinical description here and type new in*			

	A	B	R	S	T
1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**	
2			**de 30118**	**CPT Code 30118**	
3		***RUC Collaboration Website***			
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 7** **Specialty: AAO-HNS**	destruction intranasal external n (lateral tomy)	Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)	
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 233.72**	**$ -**	**$ 262.56**
8		**TOTAL CLINICAL STAFF TIME**	**176.5**	**0.0**	**177.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**60.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**12.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**105**	**0.0**	**111.0**
81		**End: Patient leaves office/facility**			
82		**POST-SERVICE PERIOD**			
83		**Start: Patient leaves office/facility**			
84	CA037	Conduct patient communications			3
85	CA038	Coordinate post-procedure services			
86		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**
87		99211 16 minutes			
88		99212 27 minutes	3.5		
89		99213 36 minutes			3
90		99214 53 minutes			
91		99215 63 minutes			
92	CA039	Post-operative visits (total time)	**94.5**	**0.0**	**108.0**
93					
96		*Other Setup/Clean Scopes @ 2/3 Std Time*	10		
99		**End: with last office visit before end of global period**			

	A	B	R	S	T
1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**	
2			**de 30118**	**CPT Code 30118**	
3		***RUC Collaboration Website***			
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 7** **Specialty: AAO-HNS**	destruction intranasal external n (lateral tomy)	Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)	
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 233.72**	**$ -**	**$ 262.56**
8		**TOTAL CLINICAL STAFF TIME**	**176.5**	**0.0**	**177.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**60.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**12.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**105**	**0.0**	**111.0**
100	**Supply Code**	**MEDICAL SUPPLIES**			
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ 139.67**	**$ -**	**$ 177.44**
102	SA042	pack, cleaning and disinfecting, endoscope	1		
103	SA043	pack, cleaning, surgical instruments			3
104	SA048	pack, minimum multi-specialty visit	3.5		3
105	SA054	pack, post-op incision care (suture)	1.0		1
106	SA134	kit, eustachian tube procedure			
107	SB012	drape, sterile, for Mayo stand			
108	SB019	drape-towel, sterile 18in x 26in	4		
109	SB024	gloves, sterile	1		
110	SB027	gown, staff, impervious	2		
111	SB034	mask, surgical, with face shield	2		
112	SB044	underpad 2ft x 3ft (Chux)			
113	SB046	drape, sterile, split-sheet	2		
114	SC028	needle, 18-26g 1.5-3.5in, spinal			
115	SC029	needle, 18-27g			
116	SC051	syringe 10-12ml			
117	SC058	syringe w-needle, OSHA compliant (SafetyGlide)			
118	SC080	needle, OSHA compliant (SafetyGlide)			
119	SD009	canister, suction	2		3
120	SD122	suction tip, Yankauer			
121	SD132	tubing, suction, non-latex (6ft uou)	2		3
122	SD214	tubing, suction, non-latex (2ft) with Frazier tip (1)	2		3
123	SD279	Fibrillar, surgical			
124	SD338	eustachian tube balloon			
125	SF016	cautery, monopolar, electrode tip			
126	SF020	cautery, monopolar, pencil-handpiece			
127	SF021	cautery, patient ground pad w-cord			
128	SF028	laser tip (single use)			
129	SG031	cottonoid			
130	SG041	dressing, 5in x 9in (Xeroform)			1
131	SG044	dressing, Merocel nasal standard 4.5cm			
132	SG055	gauze, sterile 4in x 4in	2		
133	SG056	gauze, sterile 4in x 4in (10 pack uou)			
134	SG082	cotton balls, sterile	7		
135	SH046	lidocaine 1% w-epi inj (Xylocaine w-epi)			
136	SH050	lidocaine 4% soln, topical (Xylocaine)	1		9
137	SH074	water, sterile for irrigation (250-1000ml uou)			
138	SJ010	basin, emesis	2		
139	SJ037	oxymetazoline nasal spray (Afrin) (15ml uou)	2		3
140	SJ053	swab-pad, alcohol	2		
141	SL037	cup, medicine (1oz size)			
142	SL038	cup-container, sterile, graduated 1000ml			
143	SM001	atomizer tip shield (RhinoGuard)			3
144	SM014	endoscope anti-fog solution			
145	NEW	Radiofrequency Stylus / wand			
146	NEW	Cryoablation handpiece and 2 canisters (one per side)			

	A	B	R	S	T
1	**RUC Practice Expense Spreadsheet**		**RENT**	**RECOMMENDED**	
2			**de 30118**	**CPT Code 30118**	
3		***RUC Collaboration Website***			
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 7** **Specialty: AAO-HNS**	destruction intranasal external n (lateral tomy)	Excision or destruction (eg, laser), intranasal lesion; external approach (lateral rhinotomy)	
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**090**	**090**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 233.72**	**$ -**	**$ 262.56**
8		**TOTAL CLINICAL STAFF TIME**	**176.5**	**0.0**	**177.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**60.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**12.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**105**	**0.0**	**111.0**
147		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*			
149	**Equipment Code**	**EQUIPMENT**			
150		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 13.74**	**$ -**	**$ 4.58**
151	ES005	endoscope disinfector, rigid or fiberoptic, w-cart			
152	ES041	PROXY endoscope, rigid, sinoscopy (30 degrees)			
153	ES040	PROXY endoscope, rigid, sinoscopy (0 degrees)			
154	ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)			
155	EQ234	suction and pressure cabinet, ENT (SMR)			
156	EQ170	light, fiberoptic headlight w-source			
157	EQ137	instrument pack, basic ($500-$1499)			
158	EQ167	light source, xenon			
159	EF008	chair with headrest, exam, reclining			
160	EF015	mayo stand			
161	NEW	Radiofrequency console			
162	ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)	37		
163	ES013	endoscope, rigid, sinoscopy	37		
164	EQ234	suction and pressure cabinet, ENT (SMR)	54		108.0
165	EQ170	light, fiberoptic headlight w-source	95		108.0
166	EQ137	instrument pack, basic ($500-$1499)			108.0
167	EQ138	instrument pack, medium ($1500 and up)			
168	EQ110	electrocautery-hyfrecator, up to 45 watts			
169	EQ156	laser, CO2 (Star X)			
170	EF008	chair with headrest, exam, reclining	95		108.0
171	EF015	mayo stand			
172		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*			

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Cystourethroscopy with Urethral Therapeutic Drug Delivery – Tab 8

In September 2022, the CPT Editorial Panel replaced Category III code 0499T with the new Category I CPT code 52284 to describe cystourethroscopy with mechanical urethral dilation and urethral therapeutic drug delivery.

52284 ***Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed***
The RUC reviewed the survey results from 119 urologists and determined that the survey 25th percentile work RVU of 3.10 appropriately accounts for the physician work required to perform this service. The RUC recommends 25 minutes pre-service evaluation, 5 minutes positioning, 6 minutes scrub/dress/wait time, 20 minutes intra-service time and 15 minutes immediate post-service time. This service is typically performed under general anesthesia in the facility setting.

The specialties noted that CPT code 52284 requires a retrograde urethrogram to appropriately measure the length of stricture along with an initial pre-dilation to ensure that the stricture can be successfully dilated prior to placement of the drug-coated balloon. It was noted that the retrograde urethrogram is bundled into 52284 and not separately reported.

In order to perform the bundled retrograde urethrogram, the patient is placed in the lateral decubitus position. Following that initial imaging, the patient is switched to the dorsal lithotomy position. Following measurement and pre-dilation using a balloon catheter, a separate drug-coated balloon is then placed and kept inflated for a minimum of 5 minutes. Fluoroscopy is used throughout the procedure to confirm appropriate balloon placement. These initial steps are required to confirm that both the stricture can be dilatated and that the balloon is in the correct placement with a small overlap of the healthy urethra on either side. If any portion of the stricture is not covered by the drug-coated balloon, then the long-term recurrence rate of a stricture will be significantly higher. In clinical trial studies, it was shown that if the initial steps are not performed then the device will not be successful.

To justify a work RVU of 3.10, the RUC referenced MPC and 2nd key reference code 52287 *Cystourethroscopy, with injection(s) for chemodenervation of the bladder* (work RVU= 3.20, 21 minutes of intra-service time, 58 minutes of total time), and noted that both cystourethroscopy require almost identical intra-service time and typically a similar amount of physician work. The RUC also compared the surveyed code to top key reference code 52441 *Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant* (work RVU= 4.00, intra-service time of 25 minutes, total time of 81 minutes) and noted that the reference code involves 5 more minutes of intra-service time and 10 more minutes of total time. The RUC noted that a work value of 3.10 for the surveyed code would have appropriate relativity with reference code 52441.

For additional support, the RUC noted that MPC code 52281 *Cystourethroscopy, with calibration and/or dilation of urethral stricture or stenosis, with or without meatotomy, with or without injection procedure for cystography, male or female* (work RVU= 2.75, intra-service time of 20

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minutes, total time of 46 minutes) has identical intra-service time, however, involves less physician work and much less total time. The specialty noted that reference code 52281 requires less physician work as it only involves a single balloon dilation, whereas the surveyed code involves two balloon dilations. CPT code 52284 is an intense service as the typical patient would have had prior dilations and significant scarring in the urethra and more than three prior endoscopic procedures. The RUC concluded that CPT code 52284 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 3.10 for CPT code 52284.**

Practice Expense
The Practice Expense (PE) Subcommittee reviewed the direct practice expense inputs and made modifications to the clinical staff time and supplies. The Subcommittee revised CA002 *Coordinate pre-surgery services (including test results)* to 3 minutes in the non-facility setting to align with the Use of Clinical Staff for Endoscopy standards¸ and added the standard 2 minutes for CA031 *Review examination with interpreting MD/DO* and 1 minute for CA032 *Scan exam documents into PACS. Complete exam in RIS system to populate images into work queue* for imaging services. The PE Subcommittee reduced the supply input SH048 *lidocaine 2% jelly, topical (Xylocaine)* to 20 ml and removed SH069 *sodium chloride 0.9% irrigation (500-1000ml uou)* to eliminate any duplication with items included in the packs and trays. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

New Technology/New Service
The RUC recommends that CPT code 52284 be placed on the New Technology list to be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

CPT Referral
During the PE Subcommittee discussion, a PE Subcommittee member noted that the CPT *Do Not Report* parenthetical only listed the interpretation and report CPT code for retrograde urethrogram (74450 *Urethrocystography, retrograde, radiological supervision and interpretation*) instead of also listing the separate injection code (51610 *Injection procedure for retrograde urethrocystography*). As the surveyed code 52284 bundles the work of a retrograde urethrogram, it was unclear if the omission of 51610 was an oversight or if that bundling is inherent for a large group of services. **The RUC recommends that CPT code 52284 be referred to the CPT Editorial Panel to determine whether the parenthetical should be revised to "(Do not report 52284 in conjunction with 51610, 52000, 52281, 52283, 74450, 76000)" to clarify that the work of 51610 is bundled into CPT code 52284.** *Note, the CPT Editorial Panel made the parentethical change, as was proposed by the RUC, on February 3, 2022.*

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CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Urinary System** **Bladder** **Transurethral Surgery** **Urethra and Bladder**				
52281		*Cystourethroscopy, with calibration and/or dilation of urethral stricture or stenosis, with or without meatotomy, with or without injecton procedure for cystography, male or female* ~~(To report cystourethroscopy with urethral therapeutic drug delivery, use 0499T)~~ (For cystourethroscopy with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, including fluoroscopy, use 52284)		
52282		*Cystourethroscopy, with insertion of permanent urethral stent* *(For placement of temporary prostatic urethral stent, use 53855)*		
52283		*Cystourethroscopy, with steroid injection into stricture*		
●52284	M1	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed (Do not report 52284 in conjunction with 51610, 52000, 52281, 52283, 74450, 76000)	000	3.10
Category III Codes				
~~0499T~~		~~Cystourethroscopy, with mechanical dilation and urethral therapeutic drug delivery for urethral stricture or stenosis, including fluoroscopy, when performed~~ ~~(Do not report 0499T in conjunction with 52281, 52283)~~ (0499T has been deleted) (For cystourethroscopy with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, including fluoroscopy, use 52284)		

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0619T	*Cystourethroscopy with transurethral anterior prostate commissurotomy and drug delivery, including transrectal ultrasound and fluoroscopy, when performed* (Do not report 0619T in conjunction with 52000, 52441, 52442, 52450, 52500, 52601, 52630, 52640, 52647, 52648, 52649, 53850, 53852, 53854, 76872~~, 0499T~~)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:52284 Tracking Number Original Specialty Recommended RVU: **3.10**
Presented Recommended RVU: **3.10**
Global Period: 000 Current Work RVU: **N/A** RUC Recommended RVU: **3.10**

CPT Descriptor: Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 69-year-old male underwent transurethral resection of prostate (TURP) two years ago for benign prostatic hyperplasia (BPH). He now presents with worsening frequency, nocturia, and decreased force of stream. An office cystoscopy reveals a dense 2-cm bulbar stricture. To minimize the incidence of recurrence, he elects to undergo urethral dilation with therapeutic drug delivery by drug coated balloon catheter.

Percentage of Survey Respondents who found Vignette to be Typical: 84%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Select and order the appropriate antibiotic(s). Confirm timing and administration. Review results of admission testing and imaging. Review preoperative labs including urinalysis and urine culture. Review the planned procedure and postoperative management with the patient. Review and obtain informed consent. Review the length and type of anesthesia with the anesthesiologist. Verify availability of all required instruments and supplies. Provide assistance in placing the patient in modified supine position for retrograde urethrogram. Check video equipment for white balance. Prep and drape the penis and perineal area. Put on lead protection for the operative team. Scrub and gown. Perform a surgical time-out with the operating surgical team and anesthesia team. Position patient in lateral decubitus for oblique performance of retrograde urethrogram.

Description of Intra-Service Work: Position the C-Arm with scout films to assure visibility. Utilizing fluoroscopy, contrast is injected from the urethral meatus to the bladder to identify the length and location of the stricture. After performance of retrograde urethrogram reposition patient in dorsal lithotomy. Appropriate padding is placed at knees and ankles. The patient is re-prepped and re-draped in dorsal lithotomy. Prep and drape the penis. Cystoscope is placed per urethra to the level of the stricture and a guidewire is passed through the lumen into the bladder. Fluoroscopy is utilized to confirm appropriate placement. A non-drug coated balloon is passed over the guidewire to the level of the stricture using fluoroscopic guidance. The balloon is inflated with contrast under fluoroscopic guidance to pre-dilate the stricture. Following dilation, the non drug coated balloon is deflated and removed leaving the guidewire in place. The cystoscope is placed per urethra and the drug coated balloon is appropriately positioned under fluoroscopic guidance and direct visualization. The balloon is inflated and inflation is maintained for a minimum of 5 minutes to allow for drug delivery. The balloon is deflated and removed leaving the guidewire in place. A 14 french council tip catheter is placed over the guidewire into the bladder with 10cc of sterile water placed in the balloon.

Description of Post-Service Work: Remove drapes and assist with transitioning the patient from dorsal-lithotomy to supine. Discuss the outcome of the surgery with the patient and write a brief operative note. Monitor patient stabilization in the recovery room. Dictate an operative report, and complete medical record documentation. Discuss aftercare treatment, including home restrictions on sexual activity, with the patient. Review prescribed narcotics and nacrotic tracking system. Reconcile medications and write orders for discharge medications. Complete a discharge summary and instructions.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Drs. Thomas Turk, Jonathan Kiechle, Drew Peterson, Jyoti Chouhan					
Specialty Society(ies):	American Urological Association					
CPT Code:	52284					
Sample Size:	4728	**Resp N:**	119			
Description of Sample:	Randomized subset from AUA database (4492) plus vendor list (236)					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	0.00	**2.00**	5.00	125.00	
Survey RVW:	1.47	3.10	**4.00**	4.54	8.73	
Pre-Service Evaluation Time:			**25.00**			
Pre-Service Positioning Time:			**5.00**			
Pre-Service Scrub, Dress, Wait Time:			**6.00**			
Intra-Service Time:	5.00	15.00	**20.00**	30.00	60.00	
Immediate Post Service-Time:	**15.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

3-FAC Straightforward Patient/Difficult Procedure

CPT Code:	52284	**Recommended Physician Work RVU: 3.10**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**25.00**	**33.00**	**12.00**
Pre-Service Positioning Time:		**5.00**	**3.00**	**1.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**15.00**	**0.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

8B IV Sedation/Complex Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**15.00**	**28.00**	**-13.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
52441	000	4	**RUC Time**

CPT Descriptor Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
52287	000	3.20	**RUC Time**

CPT Descriptor Cystourethroscopy, with injection(s) for chemodenervation of the bladder

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
51102	000	2.70	**RUC Time**	12,346

CPT Descriptor 1 Aspiration of bladder; with insertion of suprapubic catheter

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52287	000	3.20	**RUC Time**	46,656

CPT Descriptor 2 Cystourethroscopy, with injection(s) for chemodenervation of the bladder

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 36 **% of respondents:** 30.2 **%**

Number of respondents who choose 2nd Key Reference Code: 12 **% of respondents:** 10.08 **%**

TIME ESTIMATES (Median)

	CPT Code: 52284	Top Key Reference CPT Code: 52441	2nd Key Reference CPT Code: **52287**
Median Pre-Service Time	36.00	41.00	22.00
Median Intra-Service Time	20.00	25.00	21.00
Median Immediate Post-service Time	15.00	15.00	15.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**71.00**	**81.00**	**58.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	6%	56%	36%	3%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	6%	50%	44%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	8%	64%	28%
Physical effort required	13%	63%	25%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and	3%	53%	45%

judgment of physician • Estimated risk of malpractice suit with poor outcome	

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	16%	25%	58%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	17%	33%	50%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	8%	25%	67%
Physical effort required	9%	55%	36%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	33%	66%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background:
52284 represents a new category 1 code for endoscopic dilation of a urethral stricture with a drug coated balloon. The category 3 code was 0499T.

Recommendation:
We recommend the 25th percentile work RVU of 3.10. We had a strong survey with over 100 respondents. We do have some concerns about the survey respondents lack of experience with procedure 52284. The median number of 52284 procedures performed by respondents was 1 and the 75th percentile was only 5. The expert panel does believe this lack of experience may have led to an inappropriately low intraservice time. Physicians inexperienced with 52284 may have underestimated the time it takes to perform this procedure compared to other less involved endoscopic procedures.

However, median intraservice time from the survey was 20 minutes with a 25th percentile recommended wRVU of 3.10. This wRVU and intraservice time fit appropriately within the fee schedule among the other 96 RUC reviewed 000 day global codes with an intraservice time of 20 minutes.

Pre-time package 3 and Post-time package 8b are selected. The patient is straightforward and the dilation procedure is difficult. Care must be taken to ensure that the balloon comes in appropriate contact with the entire length of stricture along with a small area of healthy urethra on both sides of the stricture. If any portion of the stricture is not covered by the drug coated balloon long term recurrence rate will be significantly higher representing surgical failure. Evaluation time and scrub, dress, wait time are reduced to be consistent with the survey median. The positioning time was increased as the patient will be positioning in dorsal-lithotomy.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0499T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Urology How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 1400
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. From the CCA submitted: "Post FDA approval from January 1, 2022 to June 13, 2022, an additional 560 procedures have been performed across 41 states in 125 medical centers. It is projected that by August 31, 2022 there will be approximately 360 additional cases performed (sales and utilization statistics from Urotronic and Laborie Medical)". The 920 covering 8 months was increased by 50% to have the estimate cover 12 months.

Specialty Urology Frequency 1400 Percentage 100.00 %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 500
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. 1/3rd of the national amount, rounded

Specialty Urology Frequency 500 Percentage 100 %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
NA

BETOS Sub-classification Level II:
NA

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 52276

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SS Rec Summary

ISSUE: Cystourethroscopy

TAB: 8

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	52441	Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant	000		36	0.116	0.049			4.00			81	26	5	10			25			15															
2nd REF	52287	Cystourethroscopy, with injection(s) for chemodenervation of the bladder	000		12	0.120	0.055			3.20			58	7	5	10			21			15															
CURRENT	0499T					-	-						0																									
SVY	52284	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by	000		119	0.147	0.056	1.47	3.10	4.00	4.54	8.73	71	25	5	6	5	15	20	30	60	15												0	0	2	5	125
Random AUA Sample	52284	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by	000		101	0.146	0.055	1.47	3.00	4.00	4.50	8.45	73	25	6	7	5	15	20	30	60	15												0	0	1	5	125
Vendor List	52284	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by	000		18	0.166	0.066	2.75	3.81	4.23	5.45	8.73	64	19	5	5	5	15	20	29	45	15												1	3	5	7	20
REC	52284	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed	000			0.102	0.044			3.10			71	25	5	6			20			15															

NONFACILITY DIRECT PE INPUTS

CPT CODE(S):_ 52284_____
SPECIALTY SOCIETY(IES):__AUA____
PRESENTER(S):_ Drs. Thomas Turk, Jonathan Kiechle, Drew Peterson, Jyoti Chouhan

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
52284	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed	000

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
52284	A 69-year-old male underwent transurethral resection of prostate (TURP) two years ago for benign prostatic hyperplasia (BPH). He now presents with worsening frequency, nocturia, and decreased force of stream. An office cystoscopy reveals a dense 2-cm bulbar stricture. To minimize the incidence of recurrence, he elects to undergo urethral dilation with therapeutic drug delivery by drug coated balloon catheter.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:
   AUA advisors reviewed the procedure and required equipment.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):
   52441

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)
   No

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)
   Urology
   100%
   No

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

N/A

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

3

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

Clinical staff arrange pre-operative testing and help schedule necessary pe-operative appointments. Clinical staff call the patient to discuss pre-operative instructions.

    b. Service period (includes pre, intra and post):

Pre-operatively clinical staff check the patient in, obtain vital signs, start an IV and help prepare the patient for the procedure. During the intra-service period two clinical staff members are required as one person must assist the surgeon directly with holding wires and helping to manipulate inflation devices. Another clinical staff member is required to operate the fluoroscopy equipment throughout the procedure.

    c. Post-service period:

Following the procedure, clinical staff monitor the patient in the recovery area, clean the room and scope, upload images to PACS and review post-operative instructions.

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly*

related to physician work time or *Perform procedure/service---NOT directly related to physician work time:*

Clinical staff help transition from retrograde urethrogram positioning to lithotomy positioning during the intraservice period. Clinical staff are required to assist with holding guidewire, helping to take dilation balloons on and off the guidewire, securing the flexible cystoscope to visualize the dilation balloon while it is being inflated. Clinical staff is also required to operate the fluoroscopy equipment throughout the procedure from the initial retrograde urethrogram through completion of the drug coated balloon being deflated.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

Optilume DCB, guidewire, and inflation device. $2095.00

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

No

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

NONFACILITY DIRECT PE INPUTS

CPT CODE(S):_ 52284_____
SPECIALTY SOCIETY(IES):__AUA____
PRESENTER(S):_ Drs. Thomas Turk, Jonathan Kiechle, Drew Peterson, Jyoti Chouhan

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)

PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

CMS Code	Description	Unit Price	Unit	Quantity
SA114	kit, contrast imaging	7.59	kit	1
SA042	pack, cleaning and disinfecting, endoscope	19.43	pack	1
SA048	pack, minimum multi-specialty visit	5.02	pack	1
SA058	pack, urology cystoscopy visit	113.7	pack	1
SA063	tray, catheter insertion (w-o catheter)	1.27	tray	2

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

Code	Description	Formula Chosen	Formula
ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)	Scope System	Scope system minus 20 for clinical staff time =(SUM(K37+K38+K39+K40+K41+K49+K50+K51+K62)-20)
ES018	fiberscope, flexible, cystoscopy	Scope	Scope minus 20 for clinical staff time =(SUM(K37+K38+K39+K40+K41+K49+K50+K51+K63)-20)
EF024	table, fluoroscopy	Default	Default minus 20 for clinical staff time= =(SUM(K33+K34+K35+K36+K37+K38+K39+K40+K41+K49+K50+K51+K52+K62+K67)-20
EF027	table, instrument, mobile	Default	Default minus 20 for clinical staff time= =(SUM(K33+K34+K35+K36+K37+K38+K39+K40+K41+K49+K50+K51+K52+K62+K67)-20

NONFACILITY DIRECT PE INPUTS

CPT CODE(S):_ 52284_____
SPECIALTY SOCIETY(IES):__AUA____
PRESENTER(S):_ Drs.
Thomas Turk, Jonathan Kiechle, Drew Peterson, Jyoti Chouhan
AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

EF014	light, surgical	Default	Default minus 20 for clinical staff time= =(SUM(K33+K34+K35+K36+K37+K38+K39+K40+K41+K49+K50+K51+K52+K62+K67)-20

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

- CA002 Coordinate pre surgery services changed from 0 minutes to 3 minutes to align with endoscopy standards
- CA0031 Review examination with interpreting MD/DO changed from 0 minutes to 2 minutes
- CA0032 Scan exam documents into PACS changed from 0 minutes to 1 minute
- SH048 Lidocaine 2% jelly decreased from 30ml to 20ml
- SH049 Sodium chloride 0.9% decreased from 1 to 0

FACILITY DIRECT PE INPUTS **CPT CODE(S):_52284_____**
SPECIALTY SOCIETY(IES):__AUA____
PRESENTER(S):_ Drs. Thomas Turk, Jonathan Kiechle, Drew Peterson, Jyoti Chouhan

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
52284	Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed	000

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
52284	A 69-year-old male underwent transurethral resection of prostate (TURP) two years ago for benign prostatic hyperplasia (BPH). He now presents with worsening frequency, nocturia, and decreased force of stream. An office cystoscopy reveals a dense 2-cm bulbar stricture. To minimize the incidence of recurrence, he elects to undergo urethral dilation with therapeutic drug delivery by drug coated balloon catheter.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:
   AUA advisors reviewed the procedure and required equipment.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):
   52441

3. Is this code(s) typically reported with an E/M service?
   No

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:
   N/A

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major

surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

Additional time for scrub, dress, wait due to lithotomy positioning.

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

Clinical staff arrange pre-operative testing and help schedule necessary pe-operative appointments. Clinical staff schedule surgery in the facility.. Clinical staff call the patient to discuss pre-operative instructions.

   b. Service period (includes pre, intra and post):

N/A

   c. Post-service period:

N/A

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

12. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

Optilume DCB, guidewire, and inflation device. $2095.00

14. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

No

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

CMS Code	Description	Unit Price	Unit	Quantity
SA114	kit, contrast imaging	7.59	kit	1
SA042	pack, cleaning and disinfecting, endoscope	19.43	pack	1
SA048	pack, minimum multi-specialty visit	5.02	pack	1
SA058	pack, urology cystoscopy visit	113.7	pack	1
SA063	tray, catheter insertion (w-o catheter)	1.27	tray	2

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Code	Description	Formula Chosen	Formula
ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)	Scope System	Scope system minus 20 for clinical staff time =(SUM(K37+K38+K39+K40+K41+K49+K50+K51+K62)-20)
ES018	fiberscope, flexible, cystoscopy	Scope	Scope minus 20 for clinical staff time =(SUM(K37+K38+K39+K40+K41+K49+K50+K51+K62)-20)
EF024	table, fluoroscopy	Default	Default minus 20 for clinical staff time= =(SUM(K33+K34+K35+K36+K37+K38+K39+K40+K41+K49+K50+K51+K52+K62+K67)-20
EF027	table, instrument, mobile	Default	Default minus 20 for clinical staff time= =(SUM(K33+K34+K35+K36+K37+K38+K39+K40+K41+K49+K50+K51+K52+K62+K67)-20
EF014	light, surgical	Default	Default minus 20 for clinical staff time= =(SUM(K33+K34+K35+K36+K37+K38+K39+K40+K41+K49+K50+K51+K52+K62+K67)-20

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:
N/A

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:
N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition to those revisions, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

FACILITY DIRECT PE INPUTS **CPT CODE(S):_52284_____**
SPECIALTY SOCIETY(IES):__AUA____
PRESENTER(S):_ Drs. Thomas Turk, Jonathan Kiechle, Drew Peterson, Jyoti Chouhan

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

RUC Practice Expense Spreadsheet		
	RUC Collaboration Website	
Clinical Activity Code	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 08** **Specialty: AUA**	**Clinical Staff Type Code**
	LOCATION	
	GLOBAL PERIOD	
	TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND	
	TOTAL CLINICAL STAFF TIME	L037D
	TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037D
	TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037D
	TOTAL POST-SERVICE CLINICAL STAFF TIME	L037D
	TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE	
	PRE-SERVICE PERIOD	
	Start: Following visit when decision for surgery/procedure made	
CA001	Complete pre-service diagnostic and referral forms	L037D
CA002	Coordinate pre-surgery services (including test results)	L037D
CA003	Schedule space and equipment in facility	L037D
CA004	Provide pre-service education/obtain consent	L037D
CA005	Complete pre-procedure phone calls and prescription	L037D
CA006	Confirm availability of prior images/studies	L037D
CA007	Review patient clinical extant information and questionnaire	L037D
CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D
		L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	End: When patient enters office/facility for surgery/procedure	
	SERVICE PERIOD	
	Start: When patient enters office/facility for surgery/procedure:	
	Pre-Service (of service period)	
CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L037D
CA010	Obtain vital signs	L037D
CA011	Provide education/obtain consent	L037D
CA012	Review requisition, assess for special needs	L037D
CA013	Prepare room, equipment and supplies	L037D
CA014	Confirm order, protocol exam	L037D
CA015	Setup scope (nonfacility setting only)	L037D
CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L037D
CA017	Sedate/apply anesthesia	L037D
		L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	Intra-service (of service period)	
CA018	Assist physician or other qualified healthcare professional---directly related to physician work time (100%)	L037D
CA019	Assist physician or other qualified healthcare professional---directly related to physician work time (67%)	L037D
CA020	Assist physician or other qualified healthcare professional---directly related to physician work time (other%)	L037D
CA021	Perform procedure/service---NOT directly related to physician work time	L037D
		L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	Post-Service (of service period)	
CA022	Monitor patient following procedure/service, multitasking 1:4	L037D

CA023	Monitor patient following procedure/service, no multitasking	L037D
CA024	Clean room/equipment by clinical staff	L037D
CA025	Clean scope	L037D
CA026	Clean surgical instrument package	L037D
CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D
CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D
CA029	Check dressings, catheters, wounds	L037D
CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose page	L037D
CA031	Review examination with interpreting MD/DO	L037D
CA032	Scan exam documents into PACS. Complete exam in RIS system to populate images into work queue	L037D
CA033	Perform regulatory mandated quality assurance activity (service period)	L037D
CA034	Document procedure (non-PACS) (e.g. mandated reporting, registry logs, EEG file, etc.)	L037D
CA035	Review home care instructions, coordinate visits/prescriptions	L037D
CA036	Discharge day management	L037D
		L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	End: Patient leaves office/facility	
	POST-SERVICE PERIOD	
	Start: Patient leaves office/facility	
CA037	Conduct patient communications	L037D
CA038	Coordinate post-procedure services	L037D
	Office visits: List Number and Level of Office Visits	**MINUTES**
	99211 16 minutes	16
	99212 27 minutes	27
	99213 36 minutes	36
	99214 53 minutes	53
	99215 63 minutes	63
CA039	Post-operative visits (total time)	L037D
		L037D
		L037D
		L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	Other activity: please include short clinical description here and type new in column A	L037D
	End: with last office visit before end of global period	

Supply Code	MEDICAL SUPPLIES	PRICE
	TOTAL COST OF SUPPLY QUANTITY x PRICE	
SA027	kit, scissors and clamp	0.82
SA042	pack, cleaning and disinfecting, endoscope	19.43
SA048	pack, minimum multi-specialty visit	5.02
SA058	pack, urology cystoscopy visit	113.7
SA063	tray, catheter insertion (w-o catheter)	1.27
SA114	kit, contrast imaging	7.59
SB001	cap, surgical	1.14
SB012	drape, sterile, for Mayo stand	1.07
SB019	drape-towel, sterile 18in x 26in	0.47
SB024	gloves, sterile	0.91
SB027	gown, staff, impervious	1.186
SB034	mask, surgical, with face shield	3.4
SB039	shoe covers, surgical	0.1
SC028	needle, 18-26g 1.5-3.5in, spinal	9.96
SC029	needle, 18-27g	0.04
SC053	syringe 20ml	0.83
SC062	syringe, Toomey	3.35
SD024	catheter, Foley	10.85
SD030	catheter, straight	2.76
SD090	guidewire, stiff	45.29
SD287	endoscopic balloon, dilation	162.43
SD291	Urolift Implant and implantation device	875
SH047	lidocaine 1%-2% inj (Xylocaine)	0.06
SH048	lidocaine 2% jelly, topical (Xylocaine)	1.04
SH069	sodium chloride 0.9% irrigation (500-1000ml uou)	3.34
SJ031	leg or urinary drainage bag	4.16
SJ032	lubricating jelly (K-Y) (5gm uou)	0.54
SJ053	swab-pad, alcohol	0.04
SC051	syringe 10-12ml	0.21
SM022	sanitizing cloth-wipe (surface, instruments, equipment)	0.07
NEW	Optilume DCB, guidewire, and inflation device	2095
	Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter	
Equipment	**EQUIPMENT**	**Purchase**
	TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE	
ES031	scope video system (monitor, processor, digital capture, cart, printer, LED light)	70673.3811
ES018	fiberscope, flexible, cystoscopy	6998.699
EF031	table, power	5906.76
EF024	table, fluoroscopy	65802.93
EF027	table, instrument, mobile	531.926
EF014	light, surgical	1256.667
ER031	fluoroscopic system, mobile C-Arm	144384.374
	Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and	

		REFERENCE CODE		RECOMMENDED	
		CPT Code 52441		CPT Code 52284	
Clinical Staff Type	Clinical Staff Type Rate Per Minute	Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant		Cystourethroscopy, with mechanical urethral dilation and urethral therapeutic drug delivery by drug coated balloon catheter for urethral stricture or stenosis, male, including fluoroscopy, when performed	
		Non Fac	Facility	Non Fac	Facility
		000	000	000	000
		$ 1,164.97	$ 10.01	$ 2,619.63	$ 10.01
RN/LPN/MTA	0.455	105.5	22.0	128.5	22.0
RN/LPN/MTA	0.455	6.0	19.0	9.0	19.0
RN/LPN/MTA	0.455	96.5	0.0	116.5	0.0
RN/LPN/MTA	0.455	3.0	3.0	3.0	3.0
		$ 48.00	$ 10.01	$ 58.47	$ 10.01
RN/LPN/MTA	0.455	3	3	3	3
RN/LPN/MTA	0.455	0	5	3	5
RN/LPN/MTA	0.455	0	3	0	3
RN/LPN/MTA	0.455	0	5	0	5
RN/LPN/MTA	0.455	3	3	3	3
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	3	0	3	0
RN/LPN/MTA	0.455	3	0	3	0
RN/LPN/MTA	0.455	3	0	3	0
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	2	0	2	0
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	5	0	5	0
RN/LPN/MTA	0.455	5	0	5	0
RN/LPN/MTA	0.455	7	0	7	0
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	25	0	40	0
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	2.5	0	2.5	0

RN/LPN/MTA	0.455	5	0	5	0
RN/LPN/MTA	0.455	3	0	3	0
RN/LPN/MTA	0.455	30	0	30	0
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	1	0	1	0
RN/LPN/MTA	0.455			2	
RN/LPN/MTA	0.455			2	
RN/LPN/MTA	0.455			1	
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	2	0	2	0
RN/LPN/MTA	0.455	**n/a**	**n/a**	**n/a**	**n/a**
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455	3	3	3	3
RN/LPN/MTA	0.455				
		# visits	**# visits**	**# visits**	**# visits**
RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				
RN/LPN/MTA	0.455				

UNIT					
		$ 1,095.05	$ -	$ 2,525.78	$ -
kit		1			
pack		1		1	
pack		1		1	
pack		1		1	
tray		2		2	
kit				1	
item		2		3	
item		1		1	
item		2		6	
pair		1		3	
item		1		2	
item		1		3	
pair		2		3	
item		1			
item		1			
item		1		1	
item		1		1	
item		1		2	
item		1			
item				1	
item				1	
item		1			
ml		20			
ml		30		20	
item		1		0	
item		1		1	
item		1		1	
item		1			
item				1	
item		4		4	
item				1	
Equipment	**Cost Per**				
		$ 21.92	$ -	$ 35.38	$ -
Scope	0.267782794	62		42	
Scope	0.040549308	89		69	
Default	0.015674926	87			
Default				52	
Default	0.001183213	87		52	
Default	0.002795322	87		52	
Default	0.406270566			52	

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Transcervical RF Ablation of Uterine Fibroids – Tab 9

In September 2022, the CPT Editorial Panel replaced Category III code 0404T with the new Category I CPT code 58580 to describe transcervical radiofrequency ablation of uterine fibroid(s).

58580 ***Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency***
The RUC reviewed the survey results from 45 obstetricians/gynecologists and determined that the survey 25th percentile work RVU of 7.21 appropriately accounts for the work involved in this service. The RUC recommends 33 minutes pre-service evaluation, 8 minutes positioning, 10 minutes scrub/dress/wait time, 45 minutes intra-service time and 15 minutes immediate post-service time, ½ day discharge (99238) and 1x 99213 post-operative office visit. This service is typically performed under general anesthesia in the facility setting. CPT code 58580 is a relatively intense service to perform, with risks of perforating the fibroid, endometrium, myometrium, bladder and bowel. There is also a risk of hemorrhage and cramping in the uterine muscle layer.

To justify a work RVU of 7.21, the RUC referenced top key reference code 58356 *Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed* (work RVU= 6.41, intra-service time of 45 minutes, total time of 167 minutes) and noted that although both services involve identical intra-service time, the majority of survey respondents that selected this key reference code indicated the surveyed code was a more intense and complex service to perform (94 percent). Reference service code 58356 describes a procedure that only involves placing a blunt probe that is 5 mm through the cervix and into the endometrial cavity without perforating any surrounding anatomy. Further, the reference code does not require the use of any sharp instruments, lowering the patient risk. The surveyed code is a much more intense and complex procedure that requires cervical dilation to 9 mm. Following dilation, the surgeon places a trocar through that 9 mm dilated cervix into the endometrial layer and into the fibroid. Then, the surgeon inserts sharp metal tines into the fibroid to achieve the RF ablation. The RUC concurred with the specialty's assertion that the surveyed code is a much more intense service to perform. It was noted that the greater dilation of the cervix (9 mm vs 5 mm) also adds additional risk to the procedure.

The RUC also compared the surveyed code to CPT code 22514 *Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; lumbar* (work RVU= 7.99, intra-service time of 45 minutes, total time of 150 minutes) and noted that both services typically involve the same intra-service time and therefore should be valued similarly. The RUC concluded that CPT code 58580 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 7.21 for CPT code 58580.**

Practice Expense

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The Practice Expense (PE) Subcommittee reviewed the direct practice expense inputs, including the new high-cost supply item *RFA handpiece, sterile* and the *RFA dispersive electrode* as well as new equipment input, *RFA Generator System.* . The Subcommittee discussed the monitoring time in detail; converting CA023 *Monitor patient following procedure/service, no multitasking* to CA022 *Monitor patient following procedure/service, multitasking 1:4* and reducing the clinical staff time to 30 minutes to align with the standards for monitoring following procedure (standard 15 minutes of RN/LPN/MTA time per 1 hour of monitoring). The PE Subcommittee also added SA048 *pack, minimum multi-specialty visit* to the facility inputs for the bundled post-operative office visit and reduced the number of SD024 *catheter, Foley* to one. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

New Technology/New Service
The RUC recommends that CPT code 58580 be placed on the New Technology list to be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Female Genital System** **Corpus Uteri**				
Introduction				
~~58353~~		~~Endometrial ablation thermal, without hysteroscopic guidance~~		
		~~(For hysteroscopic procedure, use 58563)~~		
~~58356~~		~~Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed~~		
		~~(Do not report 58356 in conjunction with 58100, 58120, 58340, 76700, 76856)~~		
Laparoscopy/Hysteroscopy				
#58674		*Laparoscopy, surgical, ablation of uterine fibroid(s) including intraoperative ultrasound guidance and monitoring, radiofrequency*		
		(Do not report 58674 in conjunction with 49320, 58580, 58541-58554, 58570, 58571, 58572, 58573, 76998)		
		(For transcervical radiofrequency ablation of uterine fibroid[s] including intraoperative ultrasound guidance and monitoring, use 58580)		
…				
58579		*Unlisted hysteroscopy procedure, uterus*		

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Other Procedures

#58353 Endometrial ablation thermal, without hysteroscopic guidance

(For hysteroscopic procedure, use 58563)

#58356 Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed

(Do not report 58356 in conjunction with 58100, 58120, 58340, 76700, 76856)

●58580	N1	Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency (Do not report 58580 in conjunction with 58561, 58674, 76830, 76940, 76998) (For laparoscopic radiofrequency ablation of uterine fibroid[s] including intraoperative ultrasound guidance and monitoring, use 58674)	010	7.21

Category III Codes

~~0404T Transcervical uterine fibroid(s) ablation with ultrasound guidance, radiofrequency~~

(0404T has been deleted)

(To report transcervical radiofrequency ablation of uterine fibroid[s], including intraoperative ultrasound guidance and monitoring, use 58580)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:58580 Tracking Number N1 Original Specialty Recommended RVU: **7.21**
Presented Recommended RVU: **7.21**
Global Period: 010 Current Work RVU: **N/A** RUC Recommended RVU: **7.21**

CPT Descriptor: Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency
(Do not report 58580 in conjunction with 58561, 58674, 76830, 76940, 76998)
(For laparoscopic radiofrequency ablation of uterine fibroid[s] including intraoperative ultrasound guidance and monitoring, use 58674)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 38-year-old female presents with heavy menstrual bleeding for six months. Examination reveals an eight-week size uterus. A human chorionic gonadotropin (hCG) test is negative and endometrial biopsy is normal. Transvaginal sonogram reveals multiple fibroids of which the largest is a 5.2 cm x 4.5 cm x 4.6 cm transmural myoma.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 71% , In the ASC 22%, In the office 7%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 88% , Overnight stay-less than 24 hours 13% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 75%

Description of Pre-Service Work: Pre-procedure history and physical is performed and/or updated and all labs updated and/or reviewed. The patient is counseled, and consent obtained. The operating room is confirmed for all necessary equipment and associated personnel are notified. The surgeon completes his/her standard surgical scrub and dressing. When anesthesia has taken full effect, the patient is placed in dorsal lithotomy position, prepped and draped in a sterile fashion. A pelvic examination is performed under anesthesia and an indwelling catheter is placed into the bladder.

Description of Intra-Service Work: A bi-valve speculum placed within the vagina and the uterine cervix is visualized. A tenaculum is positioned on the anterior lip of the cervix and the cervix is dilated to 27F. The radiofrequency handpiece, handpiece cable and intrauterine ultrasound probe clip together to create the transcervical fibroid ablation (TFA) device (forming a single component). After adequate cervical dilatation has been achieved, the TFA device is inserted transcervically into the uterus. A small volume of fluid such as sterile water is infused through the device for acoustic coupling to enhance ultrasound visualization. Leiomyomata are then visualized with the integrated intrauterine ultrasound (IUUS) probe and mapped in a systematic fashion within the uterus. Mapping with the IUUS probe is an integral and required step to view and confirm the number and location of fibroids as well as identify other critical structures. After identifying which fibroids to treat and articulating the IUUS probe, the physician uses the SMART (Setting Margins of Ablation in Real Time) Guide graphical overlay to target and plan ablations in the fibroid. Once the size, angle, and location of the ablation have been established, the physician advances a trocar-tipped introducer into the fibroid under guided IUUS visualization. The physician aligns the graphical overlay with the introducer tip and, as the IUUS probe rotates independently of the introducer and needle electrodes, performs an initial safety rotation by rotating the IUUS probe 360° around the introducer. The physician then deploys the needle electrodes, again completing a second safety rotation to confirm the position of the Thermal Safety Border relative to the uterine serosa. After the Thermal Safety Border has been confirmed by the physician to be within the uterine serosal margin in all adjacent ultrasound planes, RF energy is activated. During this and any subsequent ablation, the physician is monitoring the status of the RF generator and holding the TFA device steady throughout the ablation time. Each treated fibroid will receive one or more ellipsoidal ablations to achieve

durable symptom relief. Targeting and treatment steps are repeated as required to place any additional ablations in the same fibroid (if necessary) and/or treat any additional fibroids that were previously mapped. Upon completion of the procedure, the needle electrodes and introducer are retracted, the ultrasound is articulated to 0° and the TFA device is removed. Cervical tenaculum is removed and tenaculum site is observed for bleeding. Vaginal speculum is then removed and the procedure is terminated.

Description of Post-Service Work: The patient is taken out of the lithotomy position and placed in supine position. The pateint is hemodynamically monitored. The patient and/or family is counseled regarding the procedure. Operative note is dictated, and post-op orders are completed. The patient is typically discharge on the date of service. One post-op visit is performed with associated documentation and orders as indicated.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Jon Hathaway, MD, PhD, Mitch Schuster, MD and Eileen Attwood, MD					
Specialty Society(ies):	obstetrics/gynecology					
CPT Code:	58580					
Sample Size:	8164	**Resp N:**	45			
Description of Sample:	Targeted (vendor list): 164 ACOG Random: 8000					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	0.00	**2.00**	5.00	25.00
Survey RVW:		5.00	7.21	**8.00**	13.50	25.00
Pre-Service Evaluation Time:				**40.00**		
Pre-Service Positioning Time:				**10.00**		
Pre-Service Scrub, Dress, Wait Time:				**10.00**		
Intra-Service Time:		15.00	34.00	**45.00**	60.00	180.00
Immediate Post Service-Time:	**15.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**38.00**	99238x **1.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

3-FAC Straightforward Patient/Difficult Procedure

CPT Code:	58580	**Recommended Physician Work RVU: 7.21**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**33.00**	**33.00**	**0.00**
Pre-Service Positioning Time:		**8.00**	**3.00**	**5.00**
Pre-Service Scrub, Dress, Wait Time:		**10.00**	**15.00**	**-5.00**
Intra-Service Time:		**45.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**15.00**	**33.00**	**-18.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	0.00	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	19.00	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	23.00	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
58356	010	6.41	**RUC Time**

CPT Descriptor Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
38570	010	8.49	**RUC Time**

CPT Descriptor Laparoscopy, surgical; with retroperitoneal lymph node sampling (biopsy), single or multiple

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
31239	010	9.04	**RUC Time**	1,012

CPT Descriptor 1 Nasal/sinus endoscopy, surgical; with dacryocystorhinostomy

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
55706	010	6.28	**RUC Time**	1,955

CPT Descriptor 2 Biopsies, prostate, needle, transperineal, stereotactic template guided saturation sampling, including imaging guidance

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 33 **% of respondents:** 73.0 **%**

Number of respondents who choose 2nd Key Reference Code: 6 **% of respondents:** 13.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 58580	Top Key Reference CPT Code: 58356	2nd Key Reference CPT Code: **38570**
Median Pre-Service Time	58.00	50.00	53.00
Median Intra-Service Time	45.00	45.00	60.00
Median Immediate Post-service Time	15.00	30.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	19.00	38.00
Median Office Visit Time	23.0	23.00	39.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**160.00**	**167.00**	**220.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	6%	64%	30%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	3%	24%	73%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	3%	97%
Physical effort required	0%	39%	61%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	3%	24%	73%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	83%	17%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	67%	33%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	67%	33%
Physical effort required	33%	67%	0%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	100%	0%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Positioning Time

The society requests 5 extra minutes of positioning time to put the patient in the dorsal lithotomy position.

Intensity

The intensity of the new procedure (58580) is higher than the key reference CPT code (58356) because this procedure requires precise penetration of three needles into each fibroid, placing prominent arterial vasculature at risk.

Recommendations

The specialties received 45 completed RUC physician work surveys from physicians for this new procedure. The consensus panel reviewed the survey data and believes the 25th percentile 7.21 wRVU appropriately ranks the procedure within the fee schedule.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0404T Transcervical uterine fibroid(s) ablation with ultrasound guidance, radiofrequency

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty gynecology How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 2000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate provided by the vendor.

Specialty gynecology Frequency 2000 Percentage 100.00 %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,950
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate provided by the vendor.

Specialty gynecology Frequency 1950 Percentage 100.00 %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Do many physicians perform this service across the United States? No

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Minor procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 57022

SS Rec Summary

ISSUE: Transcervical RF Ablation of Uterine Fibroids (58580)

TAB: 9

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-in 38	FAC-in 39	Office 15	Office 14	Office 13	Office 12	Office 11	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	58356	010	Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed	2004	33	0.070	0.038			6.41			167	30	10	10			45			30	0.5				1							
2nd REF	38570	010	Laparoscopy, surgical; with retroperitoneal lymph node sampling (biopsy), single or multiple	2014	6	0.067	0.039			8.49			220	40	3	10			60			30	1.0				1	1						
CURRENT	0404T	XXX	Transcervical uterine fibroid(s) ablation with ultrasound guidance, radiofrequency			-	-						0																					
SVY	58580	010	Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency		45	0.094	0.044	5.00	7.21	8.00	13.50	25.00	181	40	10	10	15	33	45	60	180	15	1.0				1				0	0	2	5	25
SVY	*58580*	*010*	*Vendor List*		*21*	*0.133*	*0.053*	*7.00*	*8.00*	*12.00*	*15.00*	*20.75*	*227*	*35*	*10*	*8*	*20*	*40*	*50*	*70*	*180*	*23*	*1.0*			*1*	*1*				*0*	*3*	*11*	*11*	*25*
SVY	*58580*	*010*	*ACOG Random*		*24*	*0.080*	*0.041*	*5.00*	*7.00*	*7.40*	*8.50*	*25.00*	*181*	*40*	*10*	*10*	*15*	*30*	*45*	*60*	*75*	*15*	*1.0*				*1*				*0*	*0*	*0*	*2*	*5*
REC	58580	010	Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency			0.095	0.047			7.21			153	33	8	10			45			15	0.5				1								

FACILITY DIRECT PE INPUTS

CPT CODE(S): 58580
SPECIALTY SOCIETY(IES): ACOG
PRESENTER(S): Hathaway, Schuster, Attwood

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
58580	Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency	'010

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
58580	A 38-year-old female presents with heavy menstrual bleeding for six months. Examination reveals an eight-week size uterus. A human chorionic gonadotropin (hCG) test is negative and endometrial biopsy is normal. Transvaginal sonogram reveals multiple fibroids of which the largest is a 5.2 cm x 4.5 cm x 4.6 cm transmural myoma.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   ACOG convened a panel that included a physician trained on the new procedure. The panel developed the direct practice expense recommendations for CPT Code 58580 based on best practices and current AMA RUC/PE guidelines.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   CPT Code 58356 *Endometrial cryoablation with ultrasound guidance, including endometrial curettage, when performed* was selected as the physician work key reference code. The society included the current direct practice expense inputs on the PE spreadsheet as a reference code.

3. Is this code(s) typically reported with an E/M service?

   N/A

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

   N/A

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

The society is requesting **Facility** *"extensive use of clinical staff"* for this 010 day service (30 minutes). This new service is considered a major procedure. The clinical staff activities are described in Question 8 below.

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

Clinical staff complete all needed referral forms and obtain/correlate pre-procedure laboratory/radiologic results. Staff schedule the procedure and ensure the availability of all supplies/equipment will be available at time of scheduled procedure. The clinical staff will call the patient and review all pre-procedure education and pre-operative protocols, review current and planned postoperative medications, and confirm informed consent.

   b. Service period (includes pre, intra and post):

Staff provides post procedure education/discharge instructions.

   c. Post-service period:

Staff assists during one typical 99213 level post-operative visit, including room set-up, vitals, chaperone for exam, and room cleaning following the visit.

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

12. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

No new supplies in the facility setting.

14. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

SA048 multispecialty visit pack –used during the f/u visit
SA051 pelvic exam pack – used during the f/u visit

**Both packs are established packs as defined by CMS*

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, pelvic exam	**SA051**	**pack**		**20.16**
lubricating jelly (K-Y) (5gm uou)		item	1	
pad, feminine mini		item	1	
swab, procto 16in		item	2	
specula, vaginal		item	1	

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

No new equipment in the facility setting.

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

No new equipment in the facility setting.

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

On the spreadsheet there is not an option to select a formula for the NF and another formula for the F setting.

In the Facility Setting
EQ168 exam, light
Office Visit Formula

EF031 table, power
Office Visit Formula

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

Currently there are no direct PE inputs in the Facilty Setting for CPT Code 58356. We reviewed the original PEAC data and the recommendations included pre service clinical time, half discharge day, pack for f/u office visit and equipment time for f/u office visit. The 2005 MFS rule says the CMS is accepting the RUC recommendations to Carrier price the code. In the CMS 2007, CPT code 58356 appears in the DPEI files, but there is no clinical time in the Facility setting. There was a lot going on in the practice expense space between 2004-2006. After reviewing the history and files for the reference code, the societies believe the facility inputs were potentially not entered into the CMS files in error. The societies offer this background information not to request that CMS update the inputs for 58356, but to explain why the spreadsheet does not include facility inputs for the reference code.

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition to those revisions, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

Pelvic Exam was removed from the F PE SOR for the f/u visit
The PE spreadsheet was corrected to include the SA048 in the F setting (which was included on the F SOR).

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

NONFACILITY DIRECT PE INPUTS

CPT CODE(S): 58580
SPECIALTY SOCIETY(IES): ACOG
PRESENTER(S): Hathaway, Schuster, Attwood

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
58580	Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency	'010

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
58580	A 38-year-old female presents with heavy menstrual bleeding for six months. Examination reveals an eight-week size uterus. A human chorionic gonadotropin (hCG) test is negative and endometrial biopsy is normal. Transvaginal sonogram reveals multiple fibroids of which the largest is a 5.2 cm x 4.5 cm x 4.6 cm transmural myoma.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   ACOG convened a panel that included a physician trained on the new procedure. The panel developed the direct practice expense recommendations for CPT Code 58580 based on best practices and current AMA RUC/PE guidelines.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   CPT Code 58356 *Endometrial cryoablation with ultrasound guidance, including endometrial curettage, when performed* was selected as the physician work key reference code. The society included the current direct practice expense inputs on the PE spreadsheet as a reference code.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   N/A

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

   Gynecology will be the dominant provider in both the NF and F settings

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

   N/A – New procedure

CLINICAL STAFF ACTIVITIES

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

The society is requesting **Non-Facility** *"extensive use of clinical staff"* for this 010 day service (18 minutes). This new service is considered a major procedure. The clinical staff activities are described in Question 10 below.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

Review chart (3 min) and Greet patient and provide gowning (3 min) are being rolled up into CA009 Greet patient, provide gowning, ensure appropriate medical records are available

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

There were 5 minutes allocated to obtaining vital signs prior to CMS increasing to 5 minutes for all.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

Clinical staff complete all needed referral forms and obtain/correlate pre-procedure laboratory/radiologic results. Staff ensure the availability of all supplies/equipment will be available at time of scheduled procedure. The clinical staff will call the patient and review all pre-procedure education and pre-operative protocols, review current and planned postoperative medications, and confirm informed consent.

    b. Service period (includes pre, intra and post):

On the date of service the clinical staff will prepare the procedure room prior to patient entry. When the patient arrive staff will greet and provide patient with gown and room location. Initial vital signs are obtained, education and consent are reviewed. Staff assist in patient positioning prior to procedure start. One staff member is sterile and hip-to-hip with the surgeon throughout the procedure. A second staff member is present in the room for the procedure itself to maintain all non-sterile devices including the RF generator, ultrasound screen and light source. Immediately following the procedure, the primary staff member remains in the procedure room with the patient. Following monitoring,

clinical staff take post-operative vital signs, provide post procedure education, and clean the room/equipment.

c. Post-service period:

Clinical staff complete a postoperative follow up call and counseling after procedure and schedule post-operative visit with the provider. Staff assists during one typical 99213 level post-operative visit, including room set-up, vitals, chaperone for exam, and room cleaning following the visit.

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

For the intra-service period, there are two clinical staff performing duties. The first staff member is scrubbed into the procedure with the surgeon and available to the surgeon directly throughout the procedure. During this time the staff provides assistance with and handling of sterile surgical equipment. These activities include speculum placement, local injection delivery, tenaculum placement, cervical dilation. The staff is with the surgeon for improved positioning and visualization as needed when TFA device is inserted and deployed. Following ablation period, all instruments are moved and handed to the staff, monitoring for bleeding following each instrument. Staff will provide additional instrumentation to assist in bleeding control as needed until hemostasis is confirmed and vaginal speculum and foley catheter are removed at the completion of the intra service period. The second staff member is non-sterile, manages the RF generator and maintain/move other non-sterile equipment such as the light source or ultrasound screen.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

Our intra-service (of service period) is equal to 100% of the recommended physician work time.

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

RFA handpiece, sterile, disposable (Sonata)

RFA dispersive electrode (Sonata)
See attached

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

SA043 surgical instrument cleaning pack (1) – day of procedure. universal precautions and cleaning/sterilization of instruments needed for the procedure
SA048 multispecialty visit pack (2) – one for the day of the procedure and one for the f/u visit
SA051 pelvic exam pack (2) – one for day of the procedure (service period) and one is for the f/u visit

**All 3 packs are established packs as defined by CMS*

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, cleaning, surgical instruments	**SA043**	**pack**	1	**12.61**
gloves, non-sterile		pair	2	
gown, staff, impervious		item	1	
face shield, splash protection		item	1	
autoclave bag		item	1	
autoclave tape		yd	0.33	
enzymatic detergent		oz	1	
cleaning brush, instruments		item	1	

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, pelvic exam	**SA051**	**pack**		**20.16**
lubricating jelly (K-Y) (5gm uou)		item	1	
pad, feminine mini		item	1	
swab, procto 16in		item	2	
specula, vaginal		item	1	

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

RFA Generator System (Sonata)
See attached

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

RFA Generator System (Sonata) - Useful life 5 years, source IFU

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

On the spreadsheet there is not an option to select a formula for the NF and another formula for the F setting.

EQ138 instrument pack, medium ($1500 and up)
The following equipment items are necessary to perform the procedure and would be included in an instrument pack (cervical dilators, stabilizers/tenaculum, vaginal instruments for prep and cleaning vaginal retractors)
Default Formula

EQ168 exam, light
Custom Formula - Default + Monitoring + Office Visit

EF031 table, power
A power table is necessary to achieve appropriate angles to access the uterus and maximize the three dimensional nature of the ultrasound.
The patient will remain on the power table (and in the procedure room) for the post procedure recovery time.
Custom Formula – Default + Monitoring + Office Visit

NEW RF Generator System (Sonata)
Default Formula

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

Packs (details above)
SA043 pack, surgical instruments
SA048 pack, minimum multi-specialty visit
SA051 pack, pelvic exam

Universal Protection
1 for MD, 1 for the hip to hip nurse (OSHA)
SB024 gloves, sterile *(1 extra for the nurse setting up the room)*
SB033 mask, surgical
SB038 safety glasses

Anesthesia
SC028 needle, 18-26g 1.5-3.5in, spinal
SC051 syringe 10-12ml
SH021 bupivacaine 0.25% inj (Marcaine)

Foley Catheter Placement
SH050 lidocaine 4% soln, topical (Xylocaine)
SD024 catheter, Foley
SC053 syringe 20ml
SH068 sodium chloride 0.9% inj bacteriostatic (30ml uou) (*to fill the balloon)*

Patient Prep
SG056 gauze, sterile 4in x 4in *(half box of 10)*
3 for prep, 2 clean up
SJ042 povidone surgical scrub (Betadine)

Procedure
SD039 curette, suction, endometrial (Pipelle)
Measure uterine length
NEW RFA Handpiece (Sonata)
NEW RFA dispersive electrodes (Sonata)

Post Procedure Cleaning
SM021 sanitizing cloth-wipe (patient)

Not included (from the reference code)
SD215 probe, endometrial cryoablation (Her Option)

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)
NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

Post procedure monitoring: CA022 was increased from 15 to 30. SA023 was reduced from 60 to 0. The PE subcommittee approved post procedure monitoring while staff multitask, not 1:1.

The PE spreadsheet was corrected to include one SD024 (foley) to match the NF PE SOR.

	A	B	D	E	F	G	H	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**	
2						**58356**		**58580**	
3		***RUC Collaboration Website***				*Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed*		*Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency*	
4	**Clinical Activity Code**	**Meeting Date: January 2023 Revision Date (if applicable): Tab: Tab 9 Fibroids Specialty: OB/GYN**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**010**	**010**	**010**	**010**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$1,604.57**	**$ -**	**$ 2,806.03**	**$ 38.46**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**177**	**0**	**211**	**72**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**18**	**0**	**18**	**30**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**78**	**0**	**157**	**6**
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L051B	RN/Diagnostic Medical Sonographer	0.64	**45**			
12		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**36**	**0**	**36**	**36**
13		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 88.86**	**$ -**	**$ 96.01**	**$ 32.76**
14		**PRE-SERVICE PERIOD**							
15		**Start: Following visit when decision for surgery/procedure made**							
16	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455	5		5	5
17	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455	3		3	10
18	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455				5
19	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455	7		7	7
20	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455	3		3	3
21	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455				
22	CA007	Review patient clinical extant information and questionnaire	L037D	RN/LPN/MTA	0.455				
23	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455				
24			L037D	RN/LPN/MTA	0.455				
27		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
30		**End: When patient enters office/facility for surgery/procedure**							
31		**SERVICE PERIOD**							
32		**Start: When patient enters office/facility for surgery/procedure:**							
33		**Pre-Service (of service period)**							
34	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L037D	RN/LPN/MTA	0.455	6		3	
35	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455	5		5	
36	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455			5	
37	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455				
38	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455	2		2	
39	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455				
40	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455				
41	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L037D	RN/LPN/MTA	0.455	2		2	
42	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455				
43			L037D	RN/LPN/MTA	0.455				
46		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
49		**Intra-service (of service period)**							
50	CA018	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455	45		45	
51	CA018	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455			45	
52	CA018	Assist physician or other qualified healthcare professional---directly related to	L051B	RN/Diagnostic	0.64	45			
53	CA019	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455				
54	CA020	Assist physician or other qualified healthcare professional---directly related to	L037D	RN/LPN/MTA	0.455				
55	CA021	Perform procedure/service---NOT directly related to physician work time	L051B	RN/Diagnostic	0.64				
58	CA021	Perform procedure/service---NOT directly related to physician work time	L037D	RN/LPN/MTA	0.455				
59		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
62		**Post-Service (of service period)**							
63	CA022	Monitor patient following procedure/service, multitasking 1:4	L037D	RN/LPN/MTA	0.455			**30**	
64	CA023	Monitor patient following procedure/service, no multitasking	L037D	RN/LPN/MTA	0.455			**0**	
65	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455	3		3	
66	CA025	Clean scope	L037D	RN/LPN/MTA	0.455				
67	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455	15		15	
68	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D	RN/LPN/MTA	0.455				
69	CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D	RN/LPN/MTA	0.455				
70	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455				
71	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose	L037D	RN/LPN/MTA	0.455				
72	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455				
73	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate images	L037D	RN/LPN/MTA	0.455				
74	CA033	Perform regulatory mandated quality assurance activity (service period)	L037D	RN/LPN/MTA	0.455				
75	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG file,	L037D	RN/LPN/MTA	0.455				
76	CA035	Review home care instructions, coordinate visits/prescriptions	L037D	RN/LPN/MTA	0.455			2	
77	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**		**n/a**	6
78			L037D	RN/LPN/MTA	0.455				
81		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
84		**End: Patient leaves office/facility**							
85		**POST-SERVICE PERIOD**							
86		**Start: Patient leaves office/facility**							
87	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455				
88	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455				
89		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**
90		99211 16 minutes	16						
91		99212 27 minutes	27						
92		99213 36 minutes	36			1		1	1
93		99214 53 minutes	53						
94		99215 63 minutes	63						
95	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**36.0**	**0.0**	**36.0**	**36.0**
96			L037D	RN/LPN/MTA	0.455				
99		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
102		**End: with last office visit before end of global period**							

	A	B	D	E	F	G	H	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**	
2						**58356**		**58580**	
3		***RUC Collaboration Website***				*Endometrial cryoablation with ultrasonic guidance, including endometrial curettage, when performed*		*Transcervical ablation of uterine fibroid(s), including intraoperative ultrasound guidance and monitoring, radiofrequency*	
4	**Clinical Activity Code**	**Meeting Date: January 2023 Revision Date (if applicable): Tab: Tab 9 Fibroids Specialty: OB/GYN**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**010**	**010**	**010**	**010**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$1,604.57**	**$ -**	**$ 2,806.03**	**$ 38.46**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**177**	**0**	**211**	**72**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**18**	**0**	**18**	**30**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**78**	**0**	**157**	**6**
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L051B	RN/Diagnostic Medical Sonographer	0.64	**45**			
12		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**36**	**0**	**36**	**36**
103	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**					
104		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 1,412.29**	**$ -**	**$ 2,676.26**	**$ 5.02**
105	SA043	pack, cleaning, surgical instruments	12.61	pack		1		1	
106	SA048	pack, minimum multi-specialty visit	5.02	pack		2		2	1
107	SA051	pack, pelvic exam	20.16	pack		2		2	
108	SB024	gloves, sterile	0.91	pair		2		2	
109	SB033	mask, surgical	0.43	item		3		2	
110	SB038	safety glasses	1.92	item		2		2	
111	SC028	needle, 18-26g 1.5-3.5in, spinal	9.96	item		1		1	
112	SC051	syringe 10-12ml	0.21	item		1		1	
113	SC053	syringe 20ml	0.83	item		1		1	
114	SD024	catheter, Foley	10.85	item		1		1	
115	SD039	curette, suction, endometrial (Pipelle)	5.75	item		1		1	
116	SD215	probe, endometrial cryoablation (Her Option)	1295	item		1			
117	SG056	gauze, sterile 4in x 4in (10 pack uou)	1.2	item		1		0.5	
118	SH021	bupivacaine 0.25% inj (Marcaine)	0.5	ml		20		20	
119	SH050	lidocaine 4% soln, topical (Xylocaine)	0.18	ml		20		20	
120	SH068	sodium chloride 0.9% inj bacteriostatic (30ml uou)	0.82	item		1		1	
121	SJ042	povidone surgical scrub (Betadine)	0.02	ml		100		100	
122	SJ062	ultrasound transmission gel	0.03	ml		60		60	
123	SM021	sanitizing cloth-wipe (patient)	0.07	item		5		5	
124	**NEW1**	Dispersive electrode (Sonata)	30	item				2	
125	**NEW2**	RFA Handpiece, sterile (Sonata)	2500	item				1	
126		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*							
128	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**				
129		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 103.42**	**$ -**	**$ 33.76**	**$ 0.68**
130	EQ268	cryoablation machine (Her Option)	145960	Default	0.818648917	78			
131	EQ249	ultrasound color doppler, transducers and vaginal probe	119815.817	Default	0.453984425	78			
132	EQ170	light, fiberoptic headlight w-source	4036.943	Other Formula	0.01599516	114			
133	EQ138	instrument pack, medium ($1500 and up)	1500	Default	0.00697135	78		65	
134	EF031	table, power	5906.76	Other Formula	0.015674926	114		221	36
135	**NEW1**	RFA Generator System, including probe, cables and sterilization tray (Sonata)	118250	Default	0.448051514			65	
136	EQ168	light, exam	1232.887	Other Formula	0.003271745			221	36
137									
138									
139		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*							

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Suprachoroidal Injection – Tab 10

In September 2022, the CPT Editorial Panel approved the replacement of a Category III code with a Category I code to report suprachoroidal injection of a pharmaceutical agent. CPT code 67516 is a new 000-day global code that was created to describe the injection of medication into the potential space between the choroid and the sclera.

67516 ***Suprachoroidal space injection of pharmacologic agent (separate procedure)***
The RUC reviewed the survey results from 106 ophthalmologists, retina specialists and uveitis specialists and determined that the survey 25th percentile work RVU of 1.53 accurately reflects the physician work necessary for this service. The RUC recommends 17 minutes pre-service evaluation time, 1 minute pre-positioning time, 5 minutes scrub/dress/wait time, 5 minutes intra-service time, 5 minutes immediate post-service time, and 33 minutes total time. The RUC discussed the short intra-service period relative to the highly intense nature of this procedure.

The physician work associated with the precise placement of the needle tip into the potential suprachoroidal space, and the location of the injection itself differs significantly from that of other intraocular and peri-ocular injections. The medication is delivered into a potential space, the suprachoroidal space, to enable depot effect and minimize certain complications. Delivery in this potential space is technically more challenging, with a different set of complications (e.g., choroidal hemorrhage) than the other injections in and around the eye. This is consistent with the need to measure the distance from the limbus and with the physician personally drawing up the medication and performing the injection. The physician typically draws up the medication personally because of the importance of maintaining sterility with an injection into the eye, the importance of getting an appropriate fill with a new device, and the high cost of the medication. The 5 minutes of intra-service time assumes success with the 900-micron needle, which must be used first. If the 1100-micron needle were used first, it would risk too deep a penetration in patients with a thin sclera. This would result in an undesirable intravitreal injection, missing the intended suprachoroidal potential space and going into the eye, which also risks serious complications, such as retinal detachment. Success is typically achieved with the smaller needle after some time is spent manipulating the angle and amount of pressure applied to both the sclera and the plunger. More than 5 minutes would be required if attempts with the 900u needle failed, necessitating a switch to the 1100u needle.

The RUC compared CPT code 67516 to the top key reference code 67028 *Intravitreal injection of a pharmacologic agent (separate procedure)* (work RVU = 1.44, 20 minutes pre-service time, 4 minutes intra-service time, and 29 minutes total time) and noted that the survey code has more intra-service and total time than the reference service and is therefore appropriately valued higher. The RUC also compared the survey code to the second key reference code 65800 *Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous* (work RVU = 1.53, 18 minutes pre-service time, 5 minutes intra-service time, and 28 minutes total time) and noted that the typical amount of physician work and intra-service time are identical. For both reference codes, a majority of survey respondents ranked the surveyed code as somewhat more or much more intense and complex on the overall intensity/complexity measure and the mental effort/judgment, technical skill/physical effort and psychological stress measures. These rankings are consistent with the requirement for placing the needle at a more precise depth of 67516 than for either of the reference service procedures. Further, the RUC acknowledged that the high intensity at the recommended work value is typical for short intraocular procedures.

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For additional support, the RUC referenced MPC code 52000 *Cystourethroscopy (separate procedure)* (work RVU = 1.53, 20 minutes pre-service time, 10 minutes intra-service time and 40 minutes total time) noting that the codes have identical physician work values, yet the survey code has half the intra-service and post-service time as the reference code and is therefore more intense. The RUC further referenced CPT code 27197 *Closed treatment of posterior pelvic ring fracture(s), dislocation(s), diastasis or subluxation of the ilium, sacroiliac joint, and/or sacrum, with or without anterior pelvic ring fracture(s) and/or dislocation(s) of the pubic symphysis and/or superior/inferior rami, unilateral or bilateral; without manipulation* (work RVU = 1.53, 12 minutes pre-service time, 5 minutes intra-service time and 27 minutes total time) to demonstrate the higher intensity of short intra-operative procedures. Both the comparator and the surveyed code have short intra-service time and similar high intensity (0.2074 and 0.195 respectively). The RUC concluded that CPT code 67516 should be valued at the 25th percentile work RVU of 1.53 as supported by the survey. **The RUC recommends a work RVU of 1.53 for CPT code 67516.**

Practice Expense
The Practice Expense Subcommittee noted that the medication, procedure-specific needles and injection kit in which these are included are reported separately with a HCPCS J-code. They also noted that extensive clinical staff time is required prior to the service as it is not typically performed in combination with an Evaluation and Management (E/M) code. Therefore, the non-facility Extensive Use of Clinical Staff time standards for a 000-day global code were approved for CA001 *Complete pre-service diagnostic & referral form*, CA002 *Coordinate pre-surgery services/review test/exam results*, and CA005 *Complete pre-procedure phone calls & prescription*. **The RUC recommends the direct practice expense inputs as submitted by the specialty society.**

New Technology
There is currently only one FDA-approved medication for this procedure, triamcinolone acetonide, and it is approved for only one indication: macular edema associated with uveitis. The relevant HCPCS code is J-3299. Medicare claims volume for this indication is expected to be low. However, if other drugs for more common indications obtain FDA approval, claims volume may grow substantially. Thus, **CPT code 67516 will be placed on the New Technology list and will be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.** The RUC recommended that if there are new drugs that have an associated J-code that these also be considered by the Relativity Assessment Workgroup as part of the New Technology screen.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Eye and Ocular Adnexa** **Ocular Adnexa** **Orbit** **Other Procedures**				
67515		*Injection of medication or other substances into Tenon's capsule* *(For subconjunctival injection, use 68200)*		

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●67516	O1	Suprachoroidal space injection of pharmacologic agent (separate procedure) (Report medication separately)	000	1.53

67550 *Orbital implant (implant outside muscle cone); insertion*

67560 *removal or revision*

(For ocular implant (implant inside muscle cone), see 65093-65105, 65130-65175)

(For treatment of fractures of malar area, orbit, see 21355 et seq)

Category III Codes

~~0465T~~ ~~Suprachoroidal injection of a pharmacologic agent (does not include supply of medication)~~

~~(To report intravitreal injection/implantation, see 67025, 67027, 67028)~~

(0465T has been deleted)

(For suprachoroidal injection of a pharmacologic agent, use 67516)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:67516 Tracking Number Original Specialty Recommended RVU: **1.53**
Presented Recommended RVU: **1.53**
Global Period: 000 Current Work RVU: **N/A** RUC Recommended RVU: **1.53**

CPT Descriptor: 67516, Suprachoroidal space injection of pharmacologic agent (separate procedure) (Report medication separately)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old female with macular edema associated with non-infectious uveitis in the right eye is referred for suprachoroidal space injection of a medication.

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review medical record with particular attention to visual acuity, intraocular pressure, macular status, and indications for service. Review imaging studies of the eye to be treated such as optical coherence tomography, angiography, and photos. Confirm the eye to be considered for treatment. Examine that eye as needed to confirm the need for treatment. Obtain informed consent and answer any questions. Mark the eye to be treated. Place patient in supine position. Apply topical anesthetic drops. Insert a lid speculum. Administer a subconjunctival anesthetic injection over the suprachoroidal injection site. Apply topical antisepsis with povidone-iodine solution to the injection site and lid margins.

Description of Intra-Service Work: The hub adaptor for the needle is connected to the vial of medication to be administered. The medication is drawn up into the suprachoroidal injector. The adaptor is then exchanged for the 900-micron suprachoroidal needle. Any residual air bubbles are removed, and any excess medication is expressed. A caliper is used to measure 4 mm posterior to the limbus and mark the injection site. The injector is placed perpendicular to the sclera. Pressure is applied to dimple the conjunctiva and underlying sclera. While gentle pressure is applied to the plunger, the injector is manipulated to maintain perpendicularity and pressure until loss of resistance is noted. If no loss of resistance is achieved, pressure dimpling the sclera is increased while continuously repositioning the injector to maintain perpendicularity and find the suprachoroidal space. If there is no success with the 900-micron needle, it is removed and replaced with an 1100-micron needle and the same steps are repeated. Once loss of resistance is achieved, a slow push continues until all of the medication has been administered into the suprachoroidal space. A cotton swab is then placed over the injection site and pressure maintained to prevent reflux of the medication. The patient's eye is then rinsed with saline solution to remove any residual povidone-iodine solution. The lid speculum is removed.

Description of Post-Service Work: Indirect examination of the peripheral retina is performed to ensure there was no inadvertent intravitreal administration of medication. Instruct patient in postoperative care with topical medications. Review symptoms of potential complications. Create and sign operative note. Send report to referring physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	David Glasser, MD (pre facilitation); Ankoor Shah, MD; John Thompson, MD					
Specialty Society(ies):	American Academy of Ophthalmology; American Society of Retina Specialists					
CPT Code:	67516					
Sample Size:	1882	**Resp N:**	106			
Description of Sample:	1) Random sample of members of AAO with reported interest in retina, American Society of Retina Specialists, and American Uveitis Society, AND 2) Targeted sample of manufacturer-provided list of all physicians known to be trained in this procedure					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	0.00	**2.00**	5.00	200.00
Survey RVW:		0.90	1.53	**1.75**	2.15	6.00
Pre-Service Evaluation Time:				**20.00**		
Pre-Service Positioning Time:				**4.00**		
Pre-Service Scrub, Dress, Wait Time:				**5.00**		
Intra-Service Time:		1.00	3.00	**5.00**	8.00	30.00
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

6-NF Proc w local/topical anes care req wait time

CPT Code:	67516	**Recommended Physician Work RVU: 1.53**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**17.00**	**17.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**5.00**	**5.00**	**0.00**
Intra-Service Time:		**5.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

Select Post-Service Package

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
67028	000	1.44	**RUC Time**

CPT Descriptor Intravitreal injection of a pharmacologic agent (separate procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
65800	000	1.53	**RUC Time**

CPT Descriptor Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
90935	000	1.48	**RUC Time**	955,376

CPT Descriptor 1 Hemodialysis procedure with single evaluation by a physician or other qualified health care professional

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52000	000	1.53	**RUC Time**	760,641

CPT Descriptor 2 Cystourethroscopy (separate procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
27197	000	1.53	**CMS Time File**

CPT Descriptor Closed treatment of posterior pelvic ring fracture(s), dislocation(s), diastasis or subluxation of the ilium, sacroiliac joint, and/or sacrum, with or without anterior pelvic ring fracture(s) and/or dislocation(s) of the pubic symphysis and/or superior/inferior rami, unilateral or bilateral; without manipulation

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 64 **% of respondents:** 60.3 **%**

Number of respondents who choose 2nd Key Reference Code: 21 **% of respondents:** 19.8 **%**

TIME ESTIMATES (Median)

	CPT Code: 67516	Top Key Reference CPT Code: 67028	2nd Key Reference CPT Code: **65800**
Median Pre-Service Time	23.00	20.00	18.00
Median Intra-Service Time	5.00	4.00	5.00
Median Immediate Post-service Time	5.00	5.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**33.00**	**29.00**	**28.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	20%	59%	20%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	30%	70%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	12%	88%
Physical effort required	0%	38%	62%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	3%	25%	72%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	10%	52%	38%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	14%	86%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	14%	86%
Physical effort required	0%	38%	62%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	14%	10%	76%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

67516, *Suprachoroidal space injection of pharmacologic agent (separate procedure) (Report medication separately)* is a new 000-day global CPT code created to describe injection of medication into the potential space between the choroid and the sclera. The medication and procedure-specific needles and injection kit packaged with it to inject the medication are reported separately with a HCPCS J-code.

There is currently only one FDA-approved medication for this procedure, triamcinolone acetonide (Xipere®), and it is approved for only one indication: macular edema associated with uveitis. The relevant HCPCS code is J-3299. Claims volume for this indication is expected to be low. However, if other drugs for more common indications obtain FDA approval, claims volume may grow substantially. We recommend that this procedure be placed on the New Technology list for review after three years of claims data is available.

The physician work associated with the precise placement of the needle tip into the potential suprachoroidal space and the location of the injection itself differ significantly from that of other intraocular and peri-ocular injections. The medication is delivered into a potential space, the suprachoroidal space, to enable depot effect and minimize certain complications. Delivery in this potential space is technically more challenging, with a different set of complications (eg choroidal hemorrhage) than the other injections in and around the eye We therefore do not consider CPT 67516 to be in a family with other intra- or peri-ocular injections such as CPT 67028, *Intravitreal injection of a pharmacologic agent (separate procedure)*, CPT 67500, *Retrobulbar injection; medication (separate procedure, does not include supply of medication)*, or CPT 68200, *Subconjunctival injection*.

Because this is a new, and by nature a low volume procedure performed by limited numbers of ophthalmologists, we surveyed both a random and a targeted sample of physicians. We are reporting the results of each group separately and combined. Because approximately one third of responders reported having performed zero instances of the surveyed procedure within the preceding 12 months, we also report results for performers and non-performers.

Our targeted survey was randomly drawn from a list of physicians provided by the manufacturer of the approved product who have been trained or are in training to use the product. We received 30 responses from this group, 90% of whom found the vignette typical. We also randomly surveyed members of the American Academy of Ophthalmology, American Society of Retina Specialists, and American Uveitis Society, receiving 76 responses. The vignette was considered typical by 99% of these respondents. There was no overlap in respondents between the two groups (no one voted twice).

The survey median work value estimates were 1.68 (targeted), 1.79 (random), and 1.75 (combined) RVUs. The 25th percentile WRVUs were 1.50 (targeted), 1.59 (random), and 1.53 (combined). The survey median work value estimate was 1.78 RVU for performers and 1.73 RVU for non-performers. The 25th percentile WRVUs were 1.60 for performers and 1.50 for non-performers.

The survey median IST was 5 minutes in all 3 groups. The survey median pre-service evaluation, positioning, and scrub/dress/wait times were 17, 3, and 5 minutes in the targeted group, respectively, 24, 5, and 5 minutes in the random group, and 20, 4, and 5 minutes combined. The survey median post-service time was 5 minutes in all 3 groups. Median pre-, intra-, and post-service times in the performer and non-performer groups were identical to those in the combined survey.

The top key reference service chosen, CPT 67028, *Intravitreal injection of a pharmacologic agent (separate procedure)* (RUC 2019) was the same in both groups and was selected by 60% of all respondents. CPT 67028 has a work value of 1.44 RVU and an IST of 4 minutes. CPT 65800, *Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous* (RUC 2012) was chosen as the second key reference service by both groups (20% of all respondents) and has a work value of 1.53 RVU and an IST of 5 minutes. A majority of

respondents in each group ranked the surveyed code as somewhat more or much more intense and complex on the overall intensity/complexity measure and each of the submeasures. These rankings are consistent with the requirement for placing the needle at a more precise depth than for either of the reference service procedures.

The expert panel of members of AAO and ASRS, which is familiar with the procedure and the RUC process, reviewed the survey findings. The panel agreed with the median IST of 5 minutes. This is consistent with the need to measure the distance from the limbus, and with the physician personally drawing up the medication and performing the injection. The physician typically draws up the medication personally because of the importance of maintaining sterility with an injection into the eye, the importance of getting an appropriate fill with a new device, and the high cost of the medication.

The 5-minute IST assumes success with the 900-micron needle, which must be used first. If the 1100-micron needle is used first, it would risk too deep a penetration in patients with thin sclera. This would result in an undesirable intravitreal injection, missing the intended suprachoroidal potential space. Success is typically achieved with the shorter needle after some time is spent manipulating the angle and amount of pressure applied to both the sclera and to the plunger. More than 5 minutes would be required if attempts with the 900u needle failed, necessitating a switch to the 1100u needle.

The panel agreed with the survey pre-service times. Based on an informal survey and expert panel experience, the panel determined that the injection will not typically be performed on the same day as an office visit. Placing the procedure on the New Technology list will facilitate a claims data-based review of services performed with 67516.

Because the work values and time estimates between the targeted, random, performer, and non-performer subgroups were so similar and all groups chose identical key reference services with similar intensity/complexity comparisons, the panel used the combined survey data to develop a work value recommendation.

We chose pre-service package 6, non-facility (procedure with local/topical anesthesia care requiring wait time for anesthesia to take effect) and reduced the survey median pre-evaluation time from 20 to 17 minutes to match the package time. We reduced the survey median positioning time from 4 minutes to 1 minute to match the package and kept the package scrub/dress/wait time of 5 minutes, which matched the survey median. The survey median immediate post-service time of 5 minutes is needed to check for an inadvertent intravitreal injection, instruct the patient, prepare the operative report, and generate a report to the referring physician. Total time for the procedure is 33 minutes.

We are recommending the "combined respondents" survey's 25th percentile work value estimate of 1.53 RVU for CPT 67516. This value is supported by both key reference services. CPT 67028 carries a slightly lower work value of 1.44 RVU and an IST that is 1 minute shorter. CPT 65800 carries an identical work value of 1.53 RVU and an identical 5-minute IST. The panel acknowledges that the IWPUT at this work value is at the top of the database, which is typical for short intraocular procedures. IWPUTs tend to be less meaningful for very short procedures in the 5-minute range.

That said, there is one non-ophthalmic 5-minute 000-day global procedure in the database with an identical work value and IST. CPT 27197, *Closed treatment of posterior pelvic ring fracture(s), dislocation(s), diastasis or subluxation of the ilium, sacroiliac joint, and/or sacrum, with or without anterior pelvic ring fracture(s) and/or dislocation(s) of the pubic symphysis and/or superior/inferior rami, unilateral or bilateral; without manipulation* has a work value of 1.53 RVU and an IST of 5 minutes, identical to the recommended values for the surveyed code. The total time is 6 minutes shorter than the surveyed code. CPT 27197 was valued as a 090-day global by

the RUC in 2016. CMS valued it as a 000-day global and crosswalked the value to CPT 65800 (the second key reference service) with a RUC-approved work value of 1.53 RVU.

The panel recommends a work value of 1.53 RVU for CPT 67516, the survey 25th percentile, with times of 23/5/5 and a total time of 33 minutes. CPT 67516 should be added to the New Technology list.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0465T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Ophthalmology How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 2000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate

Specialty Ophthalmology Frequency 2000 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate

Specialty Ophthalmology Frequency 1000 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

---

Berenson-Eggers Type of Service (BETOS) Assignment
Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Eye procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 67028

SS Rec Summary

ISSUE: Suprachoroidal Injection

TAB: 10

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	67028	Intravitreal injection of a pharmacologic agent	000	2019	64	0.238	0.050			1.44			29	14	1	5			4			5															
2nd REF	65800	Paracentesis of anterior chamber of eye (separate	000	2012	21	0.217	0.055			1.53			28	12	1	5			5			5															
CURRENT	New Code	Suprachoroidal space injection of	000			-	-						0																								
SVY TARGETED	67516	Suprachoroidal space injection of	000		30	0.216	0.048	1.20	1.50	1.68	2.00	3.38	35	17	3	5	1	2	5	9	15	5										0	1	4	6	20
SVY RANDOM	67516	Suprachoroidal space injection of	000		76	0.198	0.041	0.90	1.59	1.79	2.45	6.00	44	24	5	5	1	3	5	7	30	5										0	0	1	3	200
SVY PERF	67516	Suprachoroidal space injection of	000		74	0.218	0.046	0.90	1.60	1.78	2.50	6.00	39	20	4	5	1	2	5	8	30	5										1	2	3	6	200
SVY NON-PERF	67516	Suprachoroidal space injection of	000		32	0.208	0.044	1.25	1.50	1.73	1.96	3.00	39	20	4	5	1	3	5	7	24	5										0	0	0	0	0
SVY COMBINED	67516	Suprachoroidal space injection of	000		106	0.212	0.045	0.90	1.53	1.75	2.15	6.00	39	20	4	5	1	3	5	8	30	5										0	0	2	5	200
REC	67516	Suprachoroidal space injection of	000			0.195	0.046			1.53			33	17	1	5			5			5														

FACILITY DIRECT PE INPUTS

CPT CODE(S):__67516__
SPECIALTY SOCIETY(IES):__AAO, ASRS_
PRESENTER(S):__David Glasser, Ankoor Shah, John Thompson_

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
67516	*Suprachoroidal space injection of pharmacologic agent (separate procedure) (Report medication separately)*	000

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
67516	A 45-year-old female with macular edema associated with non-infectious uveitis in the right eye is referred for suprachoroidal space injection of a medication.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The Academy convenes a consensus subcommittee utilizing the appropriate generalist and subspecialty representatives who sit on our Health Policy Committee that oversees our activities at RUC and CPT. Additionally, we queried other physicians across a range of geographic locations and practice types who have the appropriate expertise for this code. Informal surveys were performed to clarify typical practice when a plurality of options arose. The consensus committee considered the survey data and PE details in order to determine clinical time and applicable standard packages were also applied. The physicians on the consensus panel familiar with the service provided input on formulating the list of supplies and equipment.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   67028, intravitreal injection, was used as the reference code.

3. Is this code(s) typically reported with an E/M service?

   No.

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

   N/A – New Code.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure).

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No.

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

For all pre-service period inputs (CA001-008): Extensive coordination is required in order to ensure the logistics are in place for this service to be provided. Expensive and highly regulated medications must be made available, specifically ordered from specialty pharmacies, received, labeled, and logged into inventory tracking systems, and filed and stored until the time of use. Insurance coverage must be confirmed. The consent process is involved, and entails explaining the need for injecting a medication into the eye, a process which is not psychologically easy for patients to tolerate, and that introduces risk of endophthalmitis and potential loss of sight. For details regarding each input, please see question 14 below.

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

8. Please provide a brief description of the clinical staff work for the following:
   a. Pre-Service period:

Extensive clinical staff time is required prior to the service for this code that is not typically performed in combination with an E/M code. This staff time is in excess of that which usually is required of 000 global codes. As such, for Lines CA001, CA002, and CA005 the RUC-approved suggested inputs for codes requiring extensive clinical staff time have been used. CA004 is *less* than the RUC-approved suggested input for extensive clinical staff time. **CA001 –** Complete pre-service diagnostic and referral forms. Extensive clinical staff time is required in order to confirm insurance coverage. Confirming insurance coverage is critical as these costly medications provide a significant burden to patients if insurance does not cover them. In addition, this medication frequently requires a prior authorization that must be filled out by the clinical staff member in advance of the procedure. Moreover obtaining these approvals and the amount of required information has become more involved as alternative less expensive medications exist, and the ownness is on the practice to demonstrate the need for these more expensive medications. The RUC-approved standard input for extensive use of clinical staff time is 5 minutes. **CA002 –** Coordinate pre-surgery services (including test results). Extensive clinical staff time is required for this service. Upon receipt of the medication from the pharmacy, the, order for the medication in the inventory management system is closed, a label is printed and assigned to a particular drug, and the medication is logged into an inventory tracking system and stored, which are now a typical part of practice. Individual prescriptions are needed to obtain the medication (as listed in CA002), but the need to treat with patient flare ups on short notice provides logistical barriers. Time is required to coordinate these inventory logistics (CA002). These activities occur prior to the patient arriving for treatment. The RUC-approved standard input for extensive use of clinical staff time is 3 minutes. **CA004 –** Provide pre-service education / obtain consent. Extensive clinical staff time is needed to both educate the patient regarding the process of the injection, as well as to obtain consent for this intraocular procedure. The

consent process is involved, and entails explaining the need for injecting a medication into the eye, a process which is not psychologically easy for patients to tolerate, and that introduces risk of endophthalmitis, suprachoroidal hemorrhage, and potential loss of sight. This input is markedly less than RUC approved recommended input for extensive use of clinic staff, which is 7 minutes.

CA005 – Complete pre-procedure phone calls and prescription. Extensive clinical staff time is required for providing pre-procedure phone calls and prescription, including ordering this prescription in advance of the service in order for it to be shipped. This medication must be specially ordered with a phone call for each patient in advance of the procedure for it to be shipped in and this requires more time to order than the typical medication that is auto-ordered via the E.H.R. and readily available at standard pharmacies. Once this is completed the staff member will initiate an open order in the inventory management system. The RUC-approved standard input for extensive use of clinical staff time is 3 minutes.

b. Service period (includes pre, intra and post):

N/A

c. Post-service period:

N/A

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment? **N/A**

12. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment? **N/A**

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

14. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

N/A

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

N/A

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:
    N/A

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):
    N/A

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?
    N/A

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:
    N/A

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:
    N/A

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:
    N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition to those revisions, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

FACILITY DIRECT PE INPUTS

CPT CODE(S):__67516__
SPECIALTY SOCIETY(IES):__AAO, ASRS_
PRESENTER(S):__David Glasser,
Ankoor Shah, John Thompson_

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

NONFACILITY DIRECT PE INPUTS

CPT CODE(S):_67516___
SPECIALTY SOCIETY(IES):_AAO, ASRS__
PRESENTER(S):_David, Glasser, Ankoor Shah, John Thompson

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
67516	*Suprachoroidal space injection of pharmacologic agent (separate procedure) (Report medication separately)*	000

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
67516	A 45-year-old female with macular edema associated with non-infectious uveitis in the right eye is referred for suprachoroidal space injection of a medication.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The Academy convenes a consensus subcommittee utilizing the appropriate generalist and subspecialty representatives who sit on our Health Policy Committee that oversees our activities at RUC and CPT. Additionally, we queried other physicians across a range of geographic locations and practice types who have the appropriate expertise for this code. Informal surveys were performed to clarify typical practice when a plurality of options arose. The consensus committee considered the survey data and PE details in order to determine clinical time and applicable standard packages were also applied. The physicians on the consensus panel familiar with the service provided input on formulating the list of supplies and equipment.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   67028, intravitreal injection, was used as the reference code.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   Not reported with an E/M in either facility or non-facility setting.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

   Ophthalmology. Estimate >90% in the non-facility setting. The dominant provider is the same in facility and non-facility setting.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

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PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

N/A – New Code.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

   No.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

   For all pre-service period inputs (CA001-008): Extensive coordination is required in order to ensure the logistics are in place for this service to be provided. Expensive and highly regulated medications must be made available, specifically ordered from specialty pharmacies, received, labeled, and logged into inventory tracking systems, and filed and stored until the time of use. Insurance coverage must be confirmed. The consent process is involved, and entails explaining the need for injecting a medication into the eye, a process which is not psychologically easy for patients to tolerate, and that introduces risk of endophthalmitis and potential loss of sight.

   For details regarding each input, please see question 14 below.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

   N/A

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

   N/A

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

    Extensive clinical staff time is required prior to the service for this code that is not typically performed in combination with an E/M code. This staff time is in excess of that which usually is required of 000 global codes. As such, for Lines CA001, CA002, and CA005 the RUC-approved suggested inputs for codes requiring extensive clinical staff time have been used. CA004 is *less* than the RUC-approved suggested input for extensive clinical staff time.

    CA001 – Complete pre-service diagnostic and referral forms. Extensive clinical staff time is required in order to confirm insurance coverage. Confirming insurance coverage is critical as these costly medications provide a

significant burden to patients if insurance does not cover them. In addition, this medication frequently requires a prior authorization that must be filled out by the clinical staff member in advance of the procedure. Moreover obtaining these approvals and the amount of required information has become more involved as alternative less expensive medications exist, and the ownness is on the practice to demonstrate the need for these more expensive medications. The RUC-approved standard input for extensive use of clinical staff time is 5 minutes.

CA002 – Coordinate pre-surgery services (including test results). Extensive clinical staff time is required for this service. Upon receipt of the medication from the pharmacy, the, order for the medication in the inventory management system is closed, a label is printed and assigned to a particular drug, and the medication is logged into an inventory tracking system and stored, which are now a typical part of practice. Individual prescriptions are needed to obtain the medication (as listed in CA002), but the need to treat with patient flare ups on short notice provides logistical barriers. Time is required to coordinate these inventory logistics (CA002). These activities occur prior to the patient arriving for treatment. The RUC-approved standard input for extensive use of clinical staff time is 3 minutes.

CA004 – Provide pre-service education / obtain consent. Extensive clinical staff time is needed to both educate the patient regarding the process of the injection, as well as to obtain consent for this intraocular procedure. The consent process is involved, and entails explaining the need for injecting a medication into the eye, a process which is not psychologically easy for patients to tolerate, and that introduces risk of endophthalmitis, suprachoroidal hemorrhage, and potential loss of sight. This input is markedly less than RUC approved recommended input for extensive use of clinic staff, which is 7 minutes.

CA005 – Complete pre-procedure phone calls and prescription. Extensive clinical staff time is required for providing pre-procedure phone calls and prescription, including ordering this prescription in advance of the service in order for it to be shipped. This medication must be specially ordered with a phone call for each patient in advance of the procedure for it to be shipped in and this requires more time to order than the typical medication that is auto-ordered via the E.H.R. and readily available at standard pharmacies. Once this is completed the staff member will initiate an open order in the inventory management system. The RUC-approved standard input for extensive use of clinical staff time is 3 minutes.

b. Service period (includes pre, intra and post):

CA009 – standard, non-facility time required for greeting patient, providing gowning, ensuring appropriate records are available.

CA013 – standard non-facility time used to prepare room, equipment, and supplies.

CA014 – standard non-facility time used to confirm order, confirm the correct eye that will be injected, and mark the eye, as well as log out the medication on the medication-tracking software that monitors the expensive medications.

CA016 – standard non-facility time used for initial positioning of the patient in preparation for the injection. The patient is typically placed in a supine position and elevated for this code.

CA017 – standard non-facility time used for applying topical anesthesia. The process of anesthetizing the eye is more complex for this code, given the psychologically impactful nature of a partial trans-scleral injection and the absence of intravenous sedation. Topical proparacaine drops are instilled to ensure the cornea, palpebral and bulbar conjunctiva and conjunctival fornices are adequately anesthetized prior to betadine instillation, as betadine is highly caustic and can cause substantial pain when applied to the ocular surface. The technician will draw up the subconjunctival lidocaine injection. (The physician then subsequently uses subconjunctival lidocaine injections to fully anesthetize the sclera under the conjunctiva and decompress the globe. This is all performed prior to the final marking, final drop of proparacaine, final betadine instillation and injection).

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CA018 – the technician assists the physician with the entirety of the service during the intraservice time. The technician would pass over all equipment in a sterile manner similar to a circulating nurse in an operating room setting where sterile packages are opened by the person with non-sterile gloves. Essentially all of the process of handing supplies and instruments to the physician through the process described above and in the work SOR (eg. opening sterile lid speculum package, suprachoridal needles and injector, holding the vial for medication (as technician is non-sterile), passing the cotton tips, etc.)

CA024 – standard non-facility time is used for cleaning the room and disposing of used supplies.

c. Post-service period:

N/A

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

The technician assists the physician with the entirety of the service during the intraservice time. The technician would pass over all equipment in a sterile manner similar to a circulating nurse in an operating room setting. Essentially all of the process of handing supplies and instruments to the physician through the process described above and in the work SOR (eg. opening sterile lid speculum package, suprachoridal needles and injector, holding the vial for medication (as technician is non-sterile), passing the cotton tips, etc.)

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment? **N/A**

16. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment? **N/A**

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

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PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

N/A.

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

Line 102 – Non-sterile gloves used by the technician to prepare procedure tray and handoff/receive equipment.

Line 103 – Sterile gloves are used by the physician when injecting subconjunctival lidocaine and the intravitreal agent

Line 104 – surgical masks placed on the technician, physician and on the patient to reduce risk of endophthalmitis. Several recent studies have shown that in addition to eyelash flora, oral flora are the most common source of endophthalmitis; additional COVID-era based trials showed reduced overall endophthalmitis with universal masking for injections of the eye. The increase of masks compared to reference code as all people (not just the patient and physician) in the room near the procedure are typically masked.

Line 106 – One cotton-tipped applicator is used to place the lid speculum in sterile fashion after the lashes have been cleaned. One cotton-tipped applicator is also used to tamponade after the injection to reduce the risk of reflux and to hold for hemostasis.

Line 107 – Phenylepheine is instilled typically to dilate for the physician to examine the retina as described in the physician work SOR

Line 108– Topical proparacaine is instilled and multiple times to anesthetize the conjunctiva prior to subconjunctival injection, prior to lid speculum placement, and a final proparacaine drop is instilled prior to the final betadine placement immediately before the injection. The amount accounts for a minimum of 3 drops.

Line 109 – Tropicamide 1% ophth (Mydriacyl). Dilating drops are instilled to examine the eye as described in the physician work SOR.

Line 110 – betadine swabs are used to sterilize the eyelashes and eyelids to reduce the risk of endophthalmitis. (A recent publication showed the two most common sources of endophthalmitis are eyelash and lid flora and oral flora.)

Line 111 – Individual use betadine. Regulations require single use disposable containers to be used for sterilization prior to intraocular injections, rather than re-using a large betadine dropper for multiple patients. Betadine is used to clean the ocular surface twice in this procedure – once after conjunctival anesthesia, and once again just prior to the injection following subconjunctival anesthesia.

Line 112 – 0.5ml of Lidocaine is used for the subconjunctival anesthesia after initial rounds of proparacaine drops have been administered.

Line 113 – Used to draw up lidocaine.

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Line 114 – 30G needle is used to inject subconjunctival lidocaine

Line 115 – 1ml syringe is used to inject the drawn-up lidocaine in the subconjunctival space.

Line 116 – BSS is copiously used to flush and remove any residual betadine in the eye. Betadine is extremely painful, and irritating is left in the eye with effects lasting hours to days. The patient's head is tilted while it is flushed.

Line 117 – Two non-sterile 4x4 gauze pieces are used to catch the BSS as the patient's head is tilted to the side while being rinsed to prevent it from dripping everywhere.

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

No.

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

Line 123 – Exam lane, default formula. The lane is where the entirety of the procedure pre-service, intraservice, and post-service time is performed. The eye is dilated and a post-injection dilated exam is typical to ensure no inadvertent intravitreal leakage of medication. The equipment in the exam lane is not able to be used for other purposes during the entirety of the service.

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PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

	A	B	D	E	F	G	H	I	J
1	**RUC Practice Expense Spreadsheet**					**Reference**		**RECOMMENDED**	
2						**67028**		**67516**	
3		***RUC Collaboration Website***				Intravitreal injection of Pharmacological agent		Suprachoroidal Space Injection of Pharmacological Agent	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 10 Supcrachoidal Space Injection of Pharmacological Agent** **Specialty: AAO, ASRS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**000**	**000**	**000**	**000**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 24.68**	**$ 6.30**	**$ 26.08**	**$ 6.30**
8		**TOTAL CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**31.0**	**14.0**	**32.0**	**14.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**14.0**	**14.0**	**14.0**	**14.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**17.0**	**0.0**	**18.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 13.95**	**$ 6.30**	**$ 14.40**	**$ 6.30**
13		**PRE-SERVICE PERIOD**							
14		**Start: Following visit when decision for surgery/procedure made**							
15	CA001	Complete pre-service diagnostic and referral forms	L038A	COMT/COT/RN/CST	0.45	5	5	5	5
16	CA002	Coordinate pre-surgery services (including test results)	L038A	COMT/COT/RN/CST	0.45	3	3	3	3
17	CA003	Schedule space and equipment in facility	L038A	COMT/COT/RN/CST	0.45				
18	CA004	Provide pre-service education/obtain consent	L038A	COMT/COT/RN/CST	0.45	3	3	3	3
19	CA005	Complete pre-procedure phone calls and prescription	L038A	COMT/COT/RN/CST	0.45	3	3	3	3
20	CA006	Confirm availability of prior images/studies	L038A	COMT/COT/RN/CST	0.45				
21	CA007	Review patient clinical extant information and questionnaire	L038A	COMT/COT/RN/CST	0.45				
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L038A	COMT/COT/RN/CST	0.45				
23			L038A	COMT/COT/RN/CST	0.45				
26		*Other activity: please include short clinical description here and type new in column A*	L038A	COMT/COT/RN/CST	0.45				
29		**End: When patient enters office/facility for surgery/procedure**							
30		**SERVICE PERIOD**							
31		**Start: When patient enters office/facility for surgery/procedure:**							
32		**Pre-Service (of service period)**							
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L038A	COMT/COT/RN/CST	0.45	3	0	3	0
34	CA010	Obtain vital signs	L038A	COMT/COT/RN/CST	0.45				
35	CA011	Provide education/obtain consent	L038A	COMT/COT/RN/CST	0.45				
36	CA012	Review requisition, assess for special needs	L038A	COMT/COT/RN/CST	0.45				
37	CA013	Prepare room, equipment and supplies	L038A	COMT/COT/RN/CST	0.45	2	0	2	0
38	CA014	Confirm order, protocol exam	L038A	COMT/COT/RN/CST	0.45	1	0	1	0
39	CA015	Setup scope (nonfacility setting only)	L038A	COMT/COT/RN/CST	0.45				
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L038A	COMT/COT/RN/CST	0.45	2	0	2	0
41	CA017	Sedate/apply anesthesia	L038A	COMT/COT/RN/CST	0.45	2	0	2	0
42			L038A	COMT/COT/RN/CST	0.45				
45		*Other activity: please include short clinical description here and type new in column A*	L038A	COMT/COT/RN/CST	0.45				
48		**Intra-service (of service period)**							
49	CA018	Assist physician or other qualified healthcare professional---directly related to physician work	L038A	COMT/COT/RN/CST	0.45	4	0	5	0
50	CA019	Assist physician or other qualified healthcare professional---directly related to physician work	L038A	COMT/COT/RN/CST	0.45				
51	CA020	Assist physician or other qualified healthcare professional---directly related to physician work	L038A	COMT/COT/RN/CST	0.45				
52	CA021	Perform procedure/service---NOT directly related to physician work time	L038A	COMT/COT/RN/CST	0.45				
55			L038A	COMT/COT/RN/CST	0.45				
56		*Other activity: please include short clinical description here and type new in column A*	L038A	COMT/COT/RN/CST	0.45				
59		**Post-Service (of service period)**							
60	CA022	Monitor patient following procedure/service, multitasking 1:4	L038A	COMT/COT/RN/CST	0.45				
61	CA023	Monitor patient following procedure/service, no multitasking	L038A	COMT/COT/RN/CST	0.45				
62	CA024	Clean room/equipment by clinical staff	L038A	COMT/COT/RN/CST	0.45	3	0	3	0
63	CA025	Clean scope	L038A	COMT/COT/RN/CST	0.45				
64	CA026	Clean surgical instrument package	L038A	COMT/COT/RN/CST	0.45				
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L038A	COMT/COT/RN/CST	0.45				
66	CA028	Review/read post-procedure x-ray, lab and pathology reports	L038A	COMT/COT/RN/CST	0.45				
67	CA029	Check dressings, catheters, wounds	L038A	COMT/COT/RN/CST	0.45				
68	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose page	L038A	COMT/COT/RN/CST	0.45				
69	CA031	Review examination with interpreting MD/DO	L038A	COMT/COT/RN/CST	0.45				
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate images into work	L038A	COMT/COT/RN/CST	0.45				
71	CA033	Perform regulatory mandated quality assurance activity (service period)	L038A	COMT/COT/RN/CST	0.45				
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG file, etc.)	L038A	COMT/COT/RN/CST	0.45				
73	CA035	Review home care instructions, coordinate visits/prescriptions	L038A	COMT/COT/RN/CST	0.45				
74	CA036	Discharge day management	L038A	COMT/COT/RN/CST	0.45	**n/a**	**n/a**	**n/a**	**n/a**
75			L038A	COMT/COT/RN/CST	0.45				
78		*Other activity: please include short clinical description here and type new in column A*	L038A	COMT/COT/RN/CST	0.45				
81		**End: Patient leaves office/facility**							
82		**POST-SERVICE PERIOD**							
83		**Start: Patient leaves office/facility**							
84	CA037	Conduct patient communications	L038A	COMT/COT/RN/CST	0.45				
85	CA038	Coordinate post-procedure services	L038A	COMT/COT/RN/CST	0.45				
86		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**
87		99211 16 minutes	16						
88		99212 27 minutes	27						
89		99213 36 minutes	36						
90		99214 53 minutes	53						
91		99215 63 minutes	63						
92	CA039	Post-operative visits (total time)	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**
93			L038A	COMT/COT/RN/CST	0.45				
96		*Other activity: please include short clinical description here and type new in column A*	L038A	COMT/COT/RN/CST	0.45				
99		**End: with last office visit before end of global period**							

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3		***RUC Collaboration Website***				Intravitreal injection of Pharmacological agent		Suprachoroidal Space Injection of Pharmacological Agent	
4	**Clinical Activity Code**	**Meeting Date: January 2023 Revision Date (if applicable): Tab: 10 Supcrachoidal Space Injection of Pharmacological Agent Specialty: AAO, ASRS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**000**	**000**	**000**	**000**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 24.68**	**$ 6.30**	**$ 26.08**	**$ 6.30**
8		**TOTAL CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**31.0**	**14.0**	**32.0**	**14.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**14.0**	**14.0**	**14.0**	**14.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**17.0**	**0.0**	**18.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**
100	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**					
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 8.34**	**$ -**	**$ 9.20**	**$ -**
102	SB022	gloves, non-sterile	0.3	pair		1		1	
103	SB024	gloves, sterile	0.91	pair		1		1	
104	SB033	mask, surgical	0.43	item		2		3	
105	SC109	needle, 32g	0.59	item		1			
106	SG081	applicator, cotton-tipped, sterile, 6in	0.0562	item		4		2	
107	SH056	phenylephrine 2.5% ophth (Mydfrin)	5.46	ml		0.05		0.05	
108	SH058	proparacaine 0.5% ophth (Ophthaine, Alcaine)	2.3533	ml		1		0.15	
109	SH073	tropicamide 1% ophth (Mydriacyl)	0.83	ml		0.05		0.05	
110	SJ043	povidone swabsticks (3 pack uou)	0.48	item		1		1	
111	SJ094	povidone soln (Betadine), single-use dropper	2.31	item		1		1	
112	SH047	lidocaine 1%-2% inj (Xylocaine)	0.06	ml				0.50	
113	SC027	needle, 18-19g, filter	0.21	item				1	
114	SC031	needle, 30g	0.54	item				1	
115	SC052	syringe 1ml	0.26	item				1	
116	SH078	balanced salt soln (BSS) (15ml uou)	2.03	item				1	
117	SG051	gauze, non-sterile 4in x 4in	0.03	item				2	
118									
119		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*							
120									
121	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**				
122		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 2.39**	**$ -**	**$ 2.48**	**$ -**
123	EL005	lane, exam (oph)	43884.68	Default	0.137829036	17	0	18	0
124	ED043	refrigerator, vaccine, temperature monitor w-alarm, security mounting w-sensors, NIST certificates	1000	Default	0.002653727	17	0		
125									
126									
127									
128									
129		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*							
130									
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AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Fractional Flow Reserve with CT – Tab 11

In September 2022, the CPT Editorial Panel approved the replacement of four Category III codes with a Category I code to report non-invasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the dataset from a coronary computed tomography angiography. Specifically, non-invasive Fractional Flow Reserve with CT (FFRCT) calculates the severity of coronary artery disease in symptomatic patients and is used to enhance physician decision-making for treatment planning either medical therapy or revascularization after the initial coronary computed tomographic angiography (cCTA) is obtained.

75580 ***Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional***
The RUC reviewed the survey results from 130 cardiologists and radiologists and determined that the survey 25th percentile somewhat overestimated the physician work typically required to perform this service. The RUC recommends a direct work RVU crosswalk to CPT code 93289 *Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements* (work RVU= 0.75, 10 minutes intra-service time and 24 minutes total time). The RUC reduced the survey pre-service evaluation time by 2 minutes to account for any pre-service physician work overlap with the original cCTA. The RUC also noted that administrative work or pre-authorization discussions are not included in pre-service time. The RUC recommends the following survey times: 5 minutes pre-service time, 11 minutes intra-service time, and 6 minutes immediate post-service time.

The RUC extensively discussed the potential overlap of physician work, as it is not necessarily the same physician who performs the initial cCTA and the interpretation. The specialty societies clarified that performing both procedures on the same day is not typical. FFRCT requires separate training and expertise such that the interpretation and report are often performed by different providers at different times. While the raw data is obtained with the cCTA, the interpretative work is performed at a subsequent date. Additionally, FFRCT is a distinctly different service than the cCTA. While the interpretation of the FFRCT includes review of the cCTA, there is no overlap or duplication of work in the two services. One cCTA is typical but must be of a high enough quality in order to perform the FFR. The interpretation is then based on the combination of the initial cCTA and the model. The specialties clarified that the report itself is a 3D interactive model with numbers that the interpreting cardiologist or radiologist can manipulate and analyze to determine the severity of coronary artery disease. The RUC discussed the new supply item, FFRCT Software Analysis, that is used to create the 3D model of the patient's coronary arteries non-invasively to provide novel assessment of coronary artery anatomy, areas of disease, and aid in reporting hemodynamic significance of any stenoses. In addition, the specialties noted and the RUC concurred that standard practice is changing for patients with active chest pain; it has shifted dramatically because the predictive accuracy of the CT angiogram and the FFRCT is far more accurate than stress-testing. In most centers, stress-testing is being replaced by FFRCT to discriminate if there is an important lesion in the coronary arteries. Finally, it was noted that the dominant specialty performing this service is cardiology. The RUC concurred that applying CPT code 93289 as a direct crosswalk to CPT code 75580 is appropriate.

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To justify the crosswalk, the RUC compared the surveyed code to the top key reference code 78452 *Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection* (work RVU = 1.62, 20 minutes intra-service time and 40 minutes total time) which is a clinically similar code also used to evaluate cardiac function. The reference code has greater overall times, which is required because it includes evaluation of a greater number of structures and variables compared to the surveyed code and is therefore appropriately valued higher.

The RUC also compared the surveyed code to the second highest key reference code 93308 *Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study* (work RVU = 0.53, 10 minutes intra-service time and 20 minutes total time), noting that it is a good clinical comparator. The surveyed code has one minute more intra-service time and is more intense as it involves consideration of a larger amount of diagnostic data in formulating the interpretation and recommendations compared to the key reference code, justifying the higher work value for 75580.

For additional support, the RUC referenced MPC code 76700 *Ultrasound, abdominal, real time with image documentation; complete* (work RVU = 0.81, 11 minutes intra-service time and 21 minutes total time) and noted that the ultrasound code typically requires the same intra-service time as the survey code but is a more intense service to perform and is therefore appropriately valued higher. The RUC concluded that CPT code 75580 should be valued based on a direct work RVU crosswalk to CPT code 93289 and agreed the crosswalk value slightly below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 0.75 for CPT code 75580.**

75574 Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed)

The specialty societies developed recommendations to value newly created CPT code 75580 but did not survey or develop new work or practice expense recommendations for existing CPT code 75574. The specialty societies submitted a letter to explain why they believe that code 75574 is not part of the family and that performance of 75574 with 75580 is not typical. The specialties indicated that the 2020 Medicare claims data which shows deleted FFRCT category III code 0504T reported with cCTA CPT code 75574 67% of the time is not accurate or reflective of the way the services are typically provided to patients in 2023. While the raw data is obtained on any given day, the specialties noted that the interpretative work is typically performed on a subsequent date. The RUC concluded that, although most of the time the FFR is performed with a recently completed cCTA, the converse is not true as the volume of 75574 was more than 20 times higher than 0504T. Therefore, the RUC does not believe that the cCTA code must be surveyed and believes that any overlap has been eliminated. The RUC also noted that CPT code 75574 was reviewed by the Relativity Assessment Workgroup in 2021 and the RUC determined the growth was appropriate with no further action based on the High-Volume Growth screen. **The RUC accepts the specialty societies' request not to survey CPT code 75574 and will not offer a recommendation.**

Practice Expense

The Practice Expense Subcommittee discussed the new supply input *FFRCT Software Analysis* and confirmed that the $1,100 is a per patient cost and that the software is not owned by the physician's practice, thus is not reusable. The Subcommittee emphasized the benefit of creating HCPCS codes for this type of high-cost supply item as the cost of the supply will be added to each study. The Subcommittee also noted that imaging and

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diagnostic services are comprised of two components: a professional component (PC) and a technical component (TC). For CPT code 75580, the PC and TC may be furnished independently or by different physicians or facilities, or they may be furnished together as a global service. **The RUC recommends the direct practice expense inputs as submitted by the specialty society. In addition, the RUC recommends that a PC/TC split be applied for CPT code 75580.**

New Technology
CPT code 75580 will be placed on the New Technology list and will be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Radiology **Diagnostic Radiology (Diagnostic Imaging)** **Heart**				
(f)75574	P1	Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed) (For ~~noninvasive estimated coronary fractional flow reserve [FFR] derived from coronary computed tomography angiography data, see 0501T, 0502T, 0503T, 0504T~~ non-invasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional, use 75580) (For automated quantification and characterization of coronary atherosclerotic plaque, see 0623T, 0624T, 0625T, 0626T)	XXX	*No Recommendation*

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●75580	P2	Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional (Report 75580 only once per coronary computed tomography angiogram) (When noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional, is performed on the same day as the coronary computed tomography angiography, use 75580 in conjunction with 75574)	XXX	0.75

Category III Codes

~~0501T Noninvasive estimated coronary fractional flow reserve (FFR) derived from coronary computed tomography angiography data using computation fluid dynamics physiologic simulation software analysis of functional data to assess the severity of coronary artery disease; data preparation and transmission, analysis of fluid dynamics and simulated maximal coronary hyperemia, generation of estimated FFR model, with anatomical data review in comparison with estimated FFR model to reconcile discordant data, interpretation and report~~

~~0502T data preparation and transmission~~

~~0503T analysis of fluid dynamics and simulated maximal coronary hyperemia, and generation of estimated FFR model~~

~~0504T anatomical data review in comparison with estimated FFR model to reconcile discordant data, interpretation and report~~

~~(Report 0501T, 0502T, 0503T, 0504T one time per coronary CT angiogram)~~

~~(Do not report 0501T in conjunction with 0502T, 0503T, 0504T, 0523T)~~

~~(For automated quantification and characterization of coronary plaque using coronary computed tomographic angiography data, see 0623T, 0624T, 0625T, 0626T)~~

(0501T, 0502T, 0503T, 0504T have been deleted)

(For noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional, use 75580)

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# 0623T	*Automated quantification and characterization of coronary atherosclerotic plaque to assess severity of coronary disease, using data from coronary computed tomographic angiography; data preparation and transmission, computerized analysis of data, with review of computerized analysis output to reconcile discordant data, interpretation and report*
…	
#0626T	*review of computerized analysis output to reconcile discordant data, interpretation and report*
	(Use 0623T, 0624T, 0625T, 0626T one time per coronary computed tomographic angiogram)
	(Do not report 0623T in conjunction with 0624T, 0625T, 0626T)
	(Do not report 0623T, 0624T, 0625T, 0626T in conjunction with 76376, 76377)
	(For noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional, use 75580)
#+0523T	*Intraprocedural coronary fractional flow reserve (FFR) with 3D functional mapping of color-coded FFR values for the coronary tree, derived from coronary angiogram data, for real-time review and interpretation of possible atherosclerotic stenosis(es) intervention (List separately in addition to code for primary procedure)*
	(Use 0523T in conjunction with 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461)
	(Do not report 0523T more than once per session)
	(Do not report 0523T in conjunction with 75580, 76376, 76377, 93571, 93572~~, 0501T, 0502T, 0503T, 0504T~~)
0710T	*Noninvasive arterial plaque analysis using software processing of data from non-coronary computerized tomography angiography; including data preparation and transmission, quantification of the structure and composition of the vessel wall and assessment for lipid-rich necrotic core plaque to assess atherosclerotic plaque stability, data review, interpretation and report*
	(Do not report 0710T in conjunction with 0711T, 0712T, 0713T)
0711T	*data preparation and transmission*
0712T	*quantification of the structure and composition of the vessel wall and assessment for lipid-rich necrotic core plaque to assess atherosclerotic plaque stability*
0713T	*data review, interpretation and report*
	(Do not report 0710T, 0711T, 0712T, 0713T in conjunction with ~~0501T, 0502T, 0503T, 0504T~~ 75580, 0623T, 0624T, 0625T, 0626T)

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December 12, 2022

Ezequiel Silva III, MD
Chair, RVS Update Committee
American Medical Association
330 N. Wabash Avenue
Chicago, IL 60611

RE: Tab 11 Fractional Flow Reserve with CT

Dear Dr. Silva,

The societies developing work RVU recommendations for Tab 11 have submitted work and practice expense materials to value newly created CPT code 75580 *(Analysis derived from coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional, noninvasive estimate of fractional flow reserve)* at this meeting. The societies did not survey or develop new work recommendations for existing CPT code 75574 *(Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed))* and explain that approach here.

CPT code 75580 describes a new analysis and physician interpretation of existing data that has already been collected and interpreted under CPT code 75574. A calculation of fractional flow reserve (FFR) uses coronary computed tomography angiography (CCTA) data to non-invasively provide information regarding the extent of artery narrowing and whether the narrowing impacts blood flow. Fractional Flow Reserve with Computed Tomography (FFRCT) calculates the severity of coronary artery disease in symptomatic patients. FFRCT is used to enhance physician decision-making pertaining to treatment planning either medical therapy or revascularization well after original CCTA is obtained.

It was stated several times at the CPT meeting that FFRCT and 75574 are typically performed on different days—and often by a different physician. However, RUC data for 2020 show that FFRCT is billed with CCTA 67% of the time. That is the reason 75574 was listed on the LOI in tandem with 75580. However, the societies do not believe that the utilization data for the Category 3 CPT code is reflective of the way the services are typically provided to patients in 2022.

FFRCT codes were only implemented in 2018. Medicare data for 2021 is not yet available to see if the early trend in fee-for-service data has changed. Early adoption by those captured in Medicare data does not comport with the experience described by Medicare claims data because traditional Medicare does not have prior authorization for this service.

Nearly all of these services require prior authorization. In the experience of the advisors and colleagues with whom inquiries were made, insurer approval takes several days. To avoid billing the patient incorrectly, prior authorization is obtained prior to creating a new order and submitting the case for analysis. Since traditional Medicare is only about a third of the relevant patient population, 75574 on the same day as 75580 is not typical.

Second, the patient is notified that the FFRCT is being ordered and is counseled that they might incur a deductible (as would apply to any imaging test) for which the patient needs to give consent before moving forward.

Third, FFRCT requires separate training and expertise that majority of the time leads to the reads done by different providers at different times that is not part of core training for radiologists/cardiologists.

Additionally, FFRCT is a distinctly different service than the CCTA. While the interpretation of the FFRCT does include review of the CCTA, there is no overlap or duplication of work in the two services. The two services examine different elements.

The RUC generally defers to the specialties to make their own determinations as to what code(s) are part of the family, based on their clinical expertise and knowledge. There may well be reasons to review 75574 in the future, but performance of 75580 with 75574 is not typical and is not a reason to review 75574 at this time.

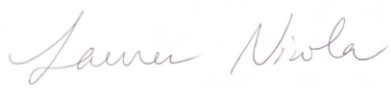
Thank you for your consideration of this matter. We are happy to discuss further at the meeting in January if helpful.

Sincerely,

Kanae Mukai, MD
SCCT RUC Advisor



Lauren Nicola, MD
ACR RUC Advisor



Richard Wright, MD
ACC RUC Advisor



January 3, 2023

Ezequiel Silva III, MD
Chair, AMA/Specialty Society RVS Update committee
Relative Value Systems, American Medical Association
330 N. Wabash Ave., Suite 39300
Chicago, IL 60611

RE: Level of Interest for CPT codes 75574 and 75580 Fractional Flow Reserve with CT

Dear Dr. Silva,

The Society of Interventional Radiology (SIR) appreciates the opportunity to comment on Tab 11 Fractional Flow Reserve with CT to be presented at the upcoming RUC January 2023 meeting in Naples, FL.

Interventional radiologists are not the dominant specialty performing the fractional flow reserve with CT; however, recent claims data for CPT® 75574 and Category III codes 0501T and 0504T support they are performed by some. To appropriately represent members who do perform this procedure, SIR Advisors are providing comments related to the recommended values for the new CPT® 75580.

Regarding the reference codes per the survey, one-third of respondents selected CPT® code 78452 as the top reference code. Respondents indicated code 75580 was nearly equal to or somewhat more complex than code 78452 and nearly identical or equally more mental effort, technical skills, and psychological stress. Respondents indicated code 75580 in relation to the second CPT® code 93308, the new code was nearly identical in complexity, but also had more mental effort, technical skills, and psychological stress.

The survey data indicates most of the respondents indicated code 75580 was either identical to or more intense than CPT® code 78452. If the median work RVU of 1.44 was recommended this would result in a IWPUT of 0.104, which is higher than 0.059 for CPT® code 78452, and total time of 24 minutes (75580) vs. 40 minutes (78452) and creates additional issues. The surveying societies provided rationale that additional time is needed for CPT® code 78452 to evaluate a greater number of structures and variables, compared to 75580. SIR agrees with the rationale provided by the societies and the recommended 25th percentile work RVU of 0.84, IWPUT of 0.050 with total time of 24 minutes. We believe this provides an appropriate rank order with both first and second key reference codes.

Thank you for your consideration of comments by SIR for Tab 11 Fractional Flow Reserve with CT, CPT® code 75580 and 74475.

Sincerely,



Minhajuddin S. Khaja, MD, MBA

SIR RUC Advisor

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:75580 Tracking Number P2 Original Specialty Recommended RVU: **0.84**
Presented Recommended RVU: **0.75**
Global Period: XXX Current Work RVU: RUC Recommended RVU: **0.75**

CPT Descriptor: Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60-year-old female, complaining of chest pains after exercising previously underwent a coronary computed tomographic angiography (cCTA) that showed coronary artery plaque and lumen narrowing of moderate severity (eg, 60% of the diameter narrowed) in the left anterior descending and right coronary arteries.

Percentage of Survey Respondents who found Vignette to be Typical: 98%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review the medical record and pertinent clinical history. Review the indication for fractional flow reserve analysis, including the necessary diagnostic information in the order, and confirm appropriateness. Review prior applicable imaging studies, including adequacy of the coronary computed tomographic angiography (cCTA) study to be used for estimate of fractional flow reserve. Explain recommendation for fractional flow reserve using coronary computed tomography (FFRCT) to the patient and obtain informed consent.

Description of Intra-Service Work: Supervise the CT technologist to ensure extraction of the appropriate coronary CTA data and images from the PACS (picture archiving and communication system) and ensure that the appropriate conforming image subsets are identified and collected. Review the computer platform delivered CT derived FFRCT preliminary report, which involves the transformation of the static CT images into quantitative and qualitative diagnostic information about the function of the coronary arteries, distinct from the diagnostic output of the underlying coronary CTA. Once the data are processed and returned to the physician, the physician accesses the Web-based interactive viewer. This allows the physician to examine and query the entire model and capture noninvasive estimated coronary FFR values anywhere within the coronary tree. The physician reviews the anatomy and compares it with the estimated FFR model to reconcile discordant data, evaluate multiple and sequential lesions, and determine possible false-positive and false-negative result. This approach allows the imager and the interventional cardiologist to determine the location of the disease burden and the lesion with the most hemodynamic significance, allowing for a targeted interventional approach that yields the most benefit to the patient. A final report is prepared, notated, and documented in patient's record. The study results are communicated to the patient and the referring physician to facilitate appropriate patient management.
Dictate the final report in PACS for the patient’s medical record. Enter a note into the patient’s chart.

Description of Post-Service Work: Review, edit and sign the report. Discuss results with referring provider, and patient as applicable.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023		
Presenter(s):	Lauren Nicola, MD; Andy Moriarity, MD; Richard Wright, MD; Ed Tuohy, MD; Kanae Mukai, MD		
Specialty Society(ies):	ACR, ACC, SCCT		
CPT Code:	75580		
Sample Size:	3857	**Resp N:**	130
Description of Sample:	The ACR performed a purely random sample of 375 physicians from its membership as well as a random sample of a subset of 375 physicians from its membership who identified as performing thoracic, cardiovascular, and CT procedures (total of 750 members). The ACC survey pool consisted of 1,000 cardiologists from their Imaging Section. The SCCT surveyed 2107 cardiologists and radiologists from their membership.		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	11.00	**30.00**	74.00	2600.00
Survey RVW:	0.10	0.84	**1.44**	1.70	17.50
Pre-Service Evaluation Time:			**7.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	5.00	**11.00**	20.00	60.00

Immediate Post Service-Time:	**6.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	75580	**Recommended Physician Work RVU: 0.75**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**11.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**

Immediate Post Service-Time:	**6.00**	**0.00**	**6.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
78452	XXX	1.62	**RUC Time**

CPT Descriptor Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93308	XXX	0.53	**RUC Time**

CPT Descriptor Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93282	XXX	0.85	**RUC Time**	79,726

CPT Descriptor 1 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	731,528

CPT Descriptor 2 Ultrasound, abdominal, real time with image documentation; complete

Other Reference CPT Code	Global	Work RVU	Time Source
78306	XXX	0.86	**RUC Time**

CPT Descriptor Bone and/or joint imaging; whole body

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 42 **% of respondents:** 32.3 **%**

Number of respondents who choose 2nd Key Reference Code: 19 **% of respondents:** 14.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 75580	Top Key Reference CPT Code: 78452	2nd Key Reference CPT Code: **93308**
Median Pre-Service Time	5.00	10.00	5.00
Median Intra-Service Time	11.00	20.00	10.00
Median Immediate Post-service Time	6.00	10.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**22.00**	**40.00**	**20.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	2%	12%	36%	29%	21%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	12%	43%	45%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	17%	40%	43%
Physical effort required	17%	64%	19%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	17%	43%	40%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	11%	47%	21%	21%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	68%	11%	21%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	63%	16%	21%
Physical effort required	47%	53%	0%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	42%	26%	32%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

CPT code 75580 *(Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional)* is a new Category I code which was converted from Category III codes 0501T *(Noninvasive estimated coronary fractional flow reserve (FFR) derived from coronary computed tomography angiography data using computation fluid dynamics physiologic simulation software analysis of functional data to assess the severity of coronary artery disease; data preparation and transmission, analysis of fluid dynamics and simulated maximal coronary hyperemia, generation of estimated FFR model, with anatomical data review in comparison with estimated FFR model to reconcile discordant data, interpretation and report)*, 0502T *(Noninvasive estimated coronary fractional flow reserve (FFR) derived from coronary computed tomography angiography data using computation fluid dynamics physiologic simulation software analysis of functional data to assess the severity of coronary artery disease; data preparation and transmission)*, 0503T *(Noninvasive estimated coronary fractional flow reserve (FFR) derived from coronary computed tomography angiography data using computation fluid dynamics physiologic simulation software analysis of functional data to assess the severity of coronary artery disease; analysis of fluid dynamics and simulated maximal coronary hyperemia, and generation of estimated FFR model)*, and 0504T *(Noninvasive estimated coronary fractional flow reserve (FFR) derived from coronary computed tomography angiography data using computation fluid dynamics physiologic simulation software analysis of functional data to assess the severity of coronary artery disease; anatomical data review in comparison with estimated FFR model to reconcile discordant data, interpretation and report)* for Fractional Flow Reserve using coronary Computed Tomography angiography data to non-invasively provide information regarding the extent of artery narrowing and whether the narrowing impacts blood flow. Specifically, non-invasive FFRCT calculates the severity of coronary artery disease in symptomatic patients. Importantly, non-invasive calculated coronary fractional flow is used to enhance physician decision-making pertaining to treatment planning either medical therapy or revascularization. Since 2018, there has been significant adoption of FFRCT throughout the United States.

The American College of Radiology (ACR), American College of Cardiology (ACC), and Society of Cardiovascular Computed Tomography (SCCT) convened an expert panel familiar with these services to provide value and time recommendations for the January 2023 RUC meeting.

Survey Process

The ACR, ACC, and SCCT surveyed CPT code 75580 for this meeting.

The ACR performed a purely random sample of 375 physicians from its membership as well as a random sample of a subset of 375 physicians from its membership who identified as performing thoracic, cardiovascular, and CT procedures (total of 750 members). The ACC survey pool consisted of 1,000 cardiologists from their Imaging Section. The SCCT surveyed 2107 cardiologists and radiologists from their membership.

Work RVU and Time Recommendations

The expert panel recommends using a crosswalk methodology to value code 75580 to code 93289 *(Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements)* at 0.75 wRVU, the survey 25th percentile value. The societies recommend 5 minutes pre-time, a reduction of the survey median pre time at 7 minutes to avoid any overlap in pre-service work captured by code 75574 *(Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and*

morphology, assessment of cardiac function, and evaluation of venous structures, if performed)). Lastly, the societies recommend maintaining the survey median times of 11 minutes of intra-service and 6 minutes post-service, respectively.

Key Reference Services

Our recommended work RVU of 0.75 compares favorably to the most commonly chosen key reference service, CPT code 78452 *(Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection)* which is a clinically similar code also used to evaluate cardiac function. Specifically, the recommended times and RVU result in a comparable IWPUT and WPUT for the code times which reflects the similar clinical intensity of the services. CPT code 78452 has greater overall times of 10 minutes pre-service, 20 minutes intra-service, and 10 minutes post-service which appropriately reflects the increased time needed for the service 78452 evaluates a greater number of structures and variables, compared to 75580. Additionally, the recommended 0.75 work RVU is appropriately lower than that of key reference code 78452 at 1.62 work RVU based on overall intensity and differences in the times.

The second key reference service code, CPT code 93308 *(Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study)* also supports the recommendation. Service times (5 minutes pre-service, 10 minutes intra-service, and 5 minutes post-service) of 93308 note slightly higher times for the surveyed code (5 minutes pre-service, 11 minutes intra-service, and 6 minutes post-service). The recommended 0.75 work RVU for the75580 is appropriately higher than that of key reference code 93308 at 0.53 work RVU and has an appropriately higher IWPUT, as 75580 involves consideration of a larger amount of diagnostic data in formulating the interpretation and recommendations compared to the key reference code.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
93308	Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study	0.53	5	10	5	20	0.031	0.027
75580	**Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional**	**0.75**	**5**	**11**	**6**	**22**	**0.046**	**0.034**
78452	Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or	1.62	10	20	10	40	0.059	0.041

	pharmacologic) and/or redistribution and/or rest reinjection							

MPC Codes

The recommended work RVU of 0.75 compares favorably with 93282 *(Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system),* which is a cardiology code with 1 minute more of intra-service time and 6 minutes more total time compared to the 75580, which supports the higher work RVU for 93282. Additional MPC code recommendations include imaging codes 76700 *(Ultrasound, abdominal, real time with image documentation; complete)* and 78306 *(Bone and/or joint imaging; whole body)*. The ultrasound code 76700 is an imaging MPC code with identical intra-service time of 11 minutes, and slightly less total time, resulting in an appropriately lower work RVU compared to the75580. MPC code 78306 has an overall higher IWPUT because a greater number of pathologic conditions are considered for this examination resulting in a higher overall intensity of the service times in comparison to 75580.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
75580	**Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional**	**0.75**	**5**	**11**	**6**	**22**	**0.046**	**0.034**
76700	Ultrasound, abdominal, real time with image documentation; complete	0.81	5	11	5	21	0.053	0.039
93282	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system	0.85	6	12	10	28	0.041	0.030
78306	Bone and/or joint imaging; whole body	0.86	5	10	5	20	0.064	0.043

Summary

In summary, our expert panel recommends the crosswalk of 93289 to value 0.75 work RVU and survey times of 5 minutes pre-service, 11 minutes intra-service, and 6 minutes post-service. The recommended value

compares favorably with the key reference services, 78452 and 93308, as well as the MPC codes 76700, 93282, and 78306, and maintains relativity within the RBRVS.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 0501T, 0502T, 0503T, 0504T

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Diagnostic Radiology How often? Commonly

Specialty Cardiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 12300
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This service described by CPT code 75580 is estimated to be provided 12,300 times nationally in a one-year period.

Specialty Diagnostic Radiology Frequency 3000 Percentage 24.39 %

Specialty Cardiology Frequency 7080 Percentage 57.56 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,100
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. The service described by CPT code 75580 is estimated to be provided 4100 times in a one-year period to Medicare patients.

Specialty Diagnostic Radiology Frequency 1000 Percentage 24.39 %

Specialty Cardiology Frequency 2360 Percentage 57.56 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment
Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Imaging

BETOS Sub-classification:
Advanced imaging

BETOS Sub-classification Level II:
CAT/CT/CTA: Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 78451

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

SS Rec Summary

ISSUE: Fractional Flow Reserve with CT

TAB: 11

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	C-inpt or obs/dis 91 92 33 32 31	C-inpt or obs/dis 38 39	Office 15 14 13 12 11	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	78452	Myocardial perfusion imaging, tomographic (SPECT) (including	XXX	Feb-09	42	0.059	0.041			1.62			40	10					20			10								
2nd REF	93308	Echocardiography, transthoracic, real-time with image	XXX	Apr-16	19	0.031	0.027			0.53			20	5					10			5								
CURRENT	0501T	Noninvasive estimated coronary	XXX			-	-			0.00			0																
CURRENT	0502T	Noninvasive estimated coronary	XXX			-	-			0.00			0																
CURRENT	0503T	Noninvasive estimated coronary	XXX			-	-			0.00			0																
CURRENT	0504T	Noninvasive estimated coronary	XXX			-	-			0.00			0																
SVY - ACR Combined	75580	Noninvasive estimate of coronary fractional flow reserve derived	XXX		16	0.112	0.065	1.15	1.31	1.50	1.72	2.50	23	7			3	9	11	23	40	5				0	4	11	50	100
SVY - ACR Subset	75580	Noninvasive estimate of coronary fractional flow reserve derived	XXX		12	0.093	0.062	1.15	1.26	1.43	1.59	2.50	23	6			3	7	13	23	40	4				0	5	11	56	100
SVY - ACR Random	75580	Noninvasive estimate of coronary fractional flow reserve derived	XXX		4	0.123	0.065	1.40	1.57	1.69	1.79	1.90	26	10			10	10	11	18	40	5				0	2	16	35	50
SVY - ACC/SCCT	75580	Noninvasive estimate of coronary fractional flow reserve derived	XXX		114	0.098	0.054	0.10	0.75	1.41	1.70	17.50	26	7			1	5	11	20	60	8				0	15	35	82	2600
SVY	75580	Noninvasive estimate of coronary fractional flow reserve derived	XXX		130	0.104	0.060	0.10	0.84	1.44	1.70	17.50	24	7			1	5	11	20	60	6				0	11	30	74	2600
REC	75580	Noninvasive estimate of coronary fractional flow reserve derived	XXX			0.046	0.034			0.75			22	5					11			6								
XWALK	93289	Interrogation device evaluation (in person) with analysis, review	XXX	Oct-16		0.045	0.032			0.75			24	5					10			8.5								

NONFACILITY DIRECT PE INPUTS **CPT CODE: 75580**

SPECIALTY SOCIETIES: ACR, ACC, SCCT

PRESENTERS: Lauren Nicola, MD; Andy Moriarity, MD; Richard Wright, MD; Ed Tuohy, MD; Kanae Mukai, MD

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
75580	Noninvasive estimate of coronary fractional flow reserve derived from augmentative software analysis of the data set from a coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional	XXX

Vignette(s) (*vignette required even if PE only code(s)*):

CPT Code	Vignette
75580	A 60-year-old female, complaining of chest pains after exercising previously underwent a coronary computed tomographic angiography (cCTA) that showed coronary artery plaque and lumen narrowing of moderate severity (eg, 60% of the diameter narrowed) in the left anterior descending and right coronary arteries.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The American College of Radiology, American College of Cardiology, and the Society of Cardiovascular Computed Tomography convened a panel that included a number of experts familiar with this service to evaluate the direct practice expense inputs for Fractional Flow Reserve with CT.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   The specialty societies are including CPT code 75574 as a reference code, as it is the underlying CT study from which the data for 75580 is derived for later analysis.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   No. This code is not typically reported with an E/M service.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

   0501T: Cardiology at 80.1%. This specialty is also dominant for the global.
   0502T: Cardiology at 54.1%. This specialty is also dominant for the global.
   0503T: Independent Diagnostic Testing Facility at 99.5%. This specialty is also dominant for the global.
   0504T: Diagnostic Radiology at 56.5%. Cardiology is the dominant provider for the global.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

N/A.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No. This is a new code.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A.

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

N/A.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

    b. Service period (includes pre, intra and post):

The technologist educates the patient and obtains informed consent specific to the FFR, in addition to the CCTA. The technologist separately confirms the order and protocol the exam for FFR in addition to the order/protocol for 75574. The technologist uploads the necessary images from the CCTA to the FFR server. Once the analysis is complete, the technologist uploads the processed images and report back into PACS for review by the physician. The nurse administers an additional dose of beta blocker and nitroglycerin and then monitors the patient. The technologist QCs images in PACS before alerting the physician that these images are ready for review. The technologist notifies the physician that the

FFRCT is ready and discusses any issues with the physician. Lastly, the technologist scans documents into PACS and completes the FFRCT exam in the RIS.

c. Post-service period:

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

The technologist coordinates with the physician to reconstruct the images on the scanner and QCs the images in PACS before submitting the case to the FFR server. The technologist receives and uploads the FFRCT report for physician interpretation. To optimize visualization of the arteries necessary for the FFR analysis, the nurse administers a second dose of nitrate as part of image acquisition. The first dose is included in code 75574.

CA011: Technologist educates the patient and obtains informed consent specific to the FFR, in addition to the CCTA. This is necessary because the patient may receive a separate bill/co-pay for the FFR.
CA014: The technologist must separately confirm the order and protocol the exam for FFR in addition to the order/protocol for 75574.
CA021: The CT technologist uploads the necessary images from the CCTA to the FFR server. Once the analysis is complete, the technologist uploads the processed images and report back into PACS for review by the physician. Additionally, when FFR is ordered, the nurse must administer beta blocker for rate control and an additional dose of nitroglycerin in order to achieve vasodilation for image quality. The patient must then be monitored by the nurse for 5 minutes. An initial dose of nitro is included in the PE inputs for 75574; this time represents the incremental work of the nurse for the FFRCT.
CA030: Technologist QCs images in PACS before alerting the physician that these images are ready for review.
CA031: Technologist notifies the physician that the FFRCT is ready and discusses any issues with the physician.
CA032: Technologist scans documents into PACS and completes the FFRCT exam in the RIS.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A.

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A.

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

FFRCT Software Analysis- supply used to create a 3D image of patient's coronary arteries non-invasively to provide novel assessment of coronary artery anatomy, areas of disease, and aid in reporting hemodynamic significance of any stenoses.

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

No.

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

N/A.

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A.

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A.

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A.

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

Technologist PACS Workstation (ED050) – PACS Formula, equal to service period clinical staff time **Professional PACS Workstation (ED053)** – equals ½ of physician pre-time + physician intra time

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

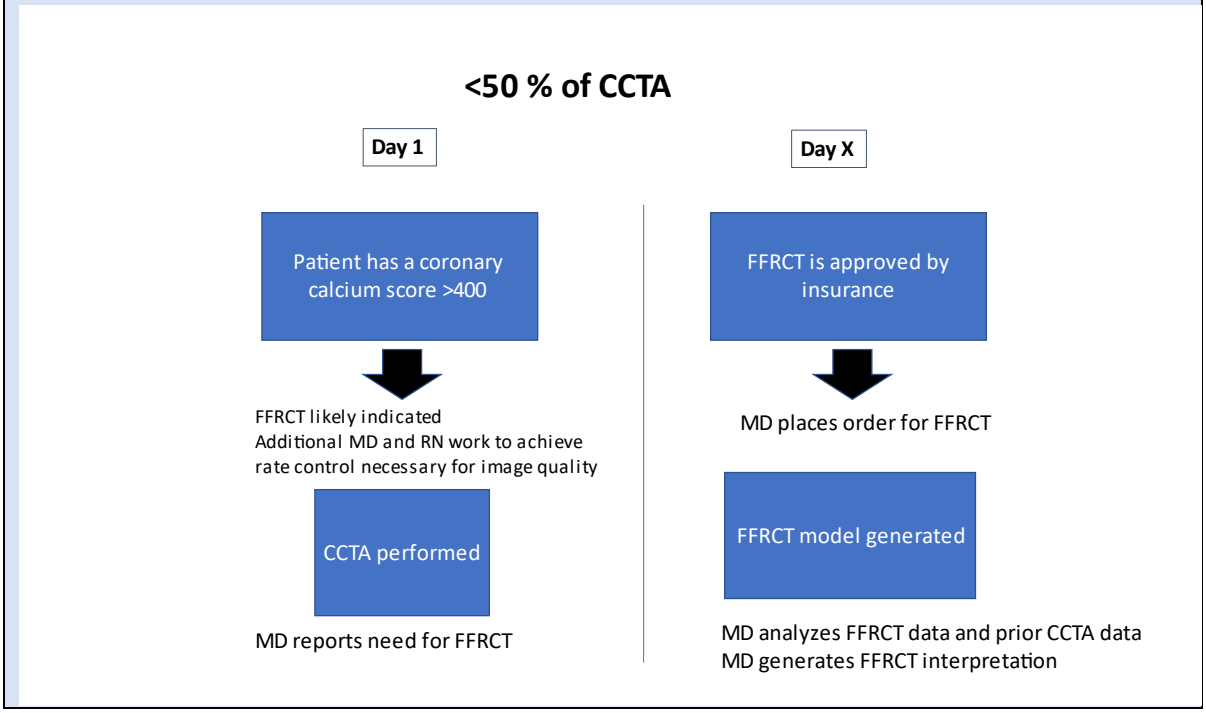
24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A.

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

Reviewer questions suggested it remained somewhat challenging to understand the typical workflow for patients undergoing FFRCT. We hope this diagram of how the physician and clinical staff interact with the patient on the day the CCTA scan is obtained followed by the physician work on the day the FFRCT order is placed will help the Subcommittee.



ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the

modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

	A	B	D	E	F	G	H	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**RECOMMENDED**	
2						**75574**		**75580**	
3		***RUC Collaboration Website***				**(October 2013)**			
4	**Clinical Activity Code**	**Meeting Date: January 2023 Revision Date (if applicable): Tab: 11 Specialty: ACR, ACC, SCCT**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**	Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and		Analysis derived from coronary computed tomography angiography, with interpretation and report by a physician or other qualified health care professional, noninvasive estimate of	
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**XXX**		**XXX**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 240.34**	**$ -**	**$ 1,112.44**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**L037D**	**RN/LPN/MTA**	0.455	**18.0**	**0.0**		**0.0**
9			**L046A**	**CT**	0.622	**62.0**	**0.0**	**13.0**	**0.0**
10			**L051A**	**RN**	0.635	**36.0**	**0.0**	**5.0**	**0.0**
11		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**L037D**	**RN/LPN/MTA**	0.455	**2.0**	**0.0**		**0.0**
12		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**L037D**	**RN/LPN/MTA**	0.455	**16.0**	**0.0**		**0.0**
13			**L046A**	**CT**	0.622	**62.0**	**0.0**	**13.0**	**0.0**
14			**L051A**	**RN**	0.635	**36.0**	**0.0**	**5.0**	**0.0**
15		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**L037D**	**RN/LPN/MTA**	0.455	**0.0**	**0.0**		**0.0**
16		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 69.61**	**$ -**	**$ 11.26**	**$ -**
17		**PRE-SERVICE PERIOD**							
18		**Start: Following visit when decision for surgery/procedure made**							
19	CA001	Complete pre-service diagnostic and referral forms							
20	CA002	Coordinate pre-surgery services (including test results)							
21	CA003	Schedule space and equipment in facility							
22	CA004	Provide pre-service education/obtain consent							
23	CA005	Complete pre-procedure phone calls and prescription							
24	CA006	Confirm availability of prior images/studies							
25	CA007	Review patient clinical extant information and questionnaire							
26	CA008	Perform regulatory mandated quality assurance activity (pre-service)	**L037D**	**RN/LPN/MTA**	0.455	**2**			
33		**End: When patient enters office/facility for surgery/procedure**							
34		**SERVICE PERIOD**							
35		**Start: When patient enters office/facility for surgery/procedure:**							
36		**Pre-Service (of service period)**							
37	CA009	Greet patient, provide gowning, ensure appropriate medical records are available							
38	CA010	Obtain vital signs							
39	CA011	Provide education/obtain consent	**L046A**	**CT Technologist**	0.622			**2**	
40	CA012	Review requisition, assess for special needs							
41	CA013	Prepare room, equipment and supplies							
42	CA014	Confirm order, protocol exam	**L046A**	**CT Technologist**	0.622			**1**	
43	CA015	Setup scope (nonfacility setting only)							
44	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient							
45	CA017	Sedate/apply anesthesia							
52		**Intra-service (of service period)**							
53	CA018	Assist physician or other qualified healthcare professional---directly related to physician work time							
54	CA019	Assist physician or other qualified healthcare professional---directly related to physician work time							
55	CA020	Assist physician or other qualified healthcare professional---directly related to physician work time							
56	CA021	Perform procedure/service---NOT directly related to physician work time	**L037D**	**RN/LPN/MTA**	0.455	**16**			
57	CA021	Perform procedure/service---NOT directly related to physician work time	**L046A**	**CT Technologist**	0.622	**62**		**5**	
58	CA021	Perform procedure/service---NOT directly related to	**L051A**	**RN**	0.635	**36**		**5**	
63		**Post-Service (of service period)**							
64	CA022	Monitor patient following procedure/service, multitasking							
65	CA023	Monitor patient following procedure/service, no multitasking							
66	CA024	Clean room/equipment by clinical staff							
67	CA025	Clean scope							
68	CA026	Clean surgical instrument package							
69	CA027	Complete post-procedure diagnostic forms, lab and x-ray							
70	CA028	Review/read post-procedure x-ray, lab and pathology reports							
71	CA029	Check dressings, catheters, wounds							
72	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose page	**L046A**	**CT Technologist**	0.622			**2**	
73	CA031	Review examination with interpreting MD/DO	**L046A**	**CT Technologist**	0.622			**2**	
74	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate images into work queue.	**L046A**	**CT Technologist**	0.622			**1**	

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15		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**L037D**	**RN/LPN/MTA**	0.455	**0.0**	**0.0**		**0.0**
75	CA033	Perform regulatory mandated quality assurance activity							
76	CA034	Document procedure (non-PACS) (e.g. mandated							
77	CA035	review home care instructions, coordinate							
78	CA036	Discharge day management				**n/a**		**n/a**	
85		**End: Patient leaves office/facility**							
86		**POST-SERVICE PERIOD**							
104	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**					
105		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 13.90**	**$ -**	**$ 1,100.00**	**$ -**
106	**SA048**	pack, minimum multi-specialty visit	5.02	pack		1			
107	**SC019**	iv tubing (extension)	0.84	foot		1			
108	**SC027**	needle, 18-19g, filter	0.21	item		3			
109	**SC051**	syringe 10-12ml	0.21	item		1			
110	**SD145**	cannula, anterior chamber, 18-27g	3.21	item		1			
111	**SG021**	bandage, strip 0.75in x 3in (Bandaid)	0.41	item		1			
112	**SG050**	gauze, non-sterile 2in x 2in	0.56	item		1			
113	**SH065**	sodium chloride 0.9% flush syringe	0.68	item		2			
114	**SH068**	sodium chloride 0.9% inj bacteriostatic (30ml uou)	0.82	item		1			
115	**SJ019**	electrode adhesive disk	0.21	item		3			
116	**SJ020**	electrode conductive gel	0.05	ml		1			
117	**SJ053**	swab-pad, alcohol	0.04	item		4			
118	**NEW**	FFRCT Software Analysis	1100	item				1	
121	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**				
122		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 156.83**	**$ -**	**$ 1.17**	**$ -**
123	**ED050**	Technologist PACS workstation	5557	PACS	0.022018	62		13	
124	**ED053**	Professional PACS Workstation	15467.671	Other Formula	0.061286	35		15	
125	**EQ088**	contrast media warmer	552		0.001782	2			
126	**EQ298**	Coronary CTA Post Process Software	65000		0.246286	29			
127	**EQ315**	Left Ventricular Function Software	45000		0.174381	29			
128	**EQ317**	Monitoring Equipment	126000		0.477416	43			
129	**ER072**	64 Slice CT Scanner	665842.59		2.52289	43			
130	**ER079**	Power Injector for CT Contrast	36359.112		0.140896	43			
131	**ER081**	Calcium Scoring Software	55000		0.208396	29			

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Percutaneous Coronary Interventions – Tab 12

Referral to the CPT Editorial Panel

In October 2010, CPT code 92980 *Transcatheter placement of an intracoronary stent(s), percutaneous, with or without other therapeutic intervention, any method; single vessel* was identified by the Relativity Assessment Workgroup (RAW) via the MPC List screen. The RAW requested that the specialty societies survey this code for RUC review. Subsequently, the specialty society referred the code to the CPT Editorial Panel to revise the family of procedures to more accurately describe the current physician work involved in PCI. At the October 2011 CPT meeting, the Panel approved 13 new codes to describe PCI services. The societies surveyed the family and the RUC submitted recommendations to the Centers for Medicare & Medicaid Services (CMS) in January 2012. Instead of accepting the RUC recommendations, CMS opted to assign bundled status to all the add-on codes for the additional branches off the major coronary arteries (codes 92921, 92929, 92934, 92938, 92944). In addition, CMS increased values and intra-times of all the base codes using a mathematical formula to include a fraction of the time and value of the add-on codes, based on the billed together data available at the time. For example, using 2011 Medicare claims data, CMS anticipated that the service described by add-on code 92921 would be performed with the procedure described by base code 92920 27.4% of the time. To bundle the work value of the add-on code into base code 92920, CMS multiplied the RUC recommendation for the add-on code of 4.00 by 27.4% (or 1.10) and added that fractional value to the RUC recommendation for the base code (9.00+1.10=10.10). The value of moderate sedation, which was bundled into the base codes, was systematically removed when separate moderate sedation CPT codes were created for CPT 2017.

In September 2022, the CPT Editorial Panel created one new Category I CPT code for percutaneous coronary lithotripsy. Sixteen other percutaneous coronary intervention (PCI) codes were considered part of the code family.

For the January 2023 RUC meeting, the specialty societies opted to survey nine of the sixteen codes. The specialty societies opted to not survey the add-on codes in the family that describe intervention in additional branches off major coronary arteries. CMS and payers have never recognized these add-on codes as separately payable services, therefore they have no Medicare utilization. The specialty societies noted they did not want to confuse respondents by asking them to survey codes with which they are not familiar or to lengthen the survey for services that are not separately reportable. As part of the societies' plans for future updates to this family of codes, the societies noted their intention is to delete add-on codes for PCI in additional branches.

After reviewing the survey results in preparation for the January 2023 RUC meeting, the surveying specialty societies requested, and the RUC agreed, to submit a recommendation only for the new add-on code 92972 for CPT 2024 and referred the entire percutaneous coronary intervention code family to the CPT Editorial Panel for restructuring for the CPT 2025 cycle.

The specialty societies noted that their intent is to update the CPT code structure for PCI services to incorporate the bundling of the branch services and to account for modern technology and changes in the techniques used to provide these services.

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The specialties also explained that PCI is now typically performed through the radial artery, reflecting best practice recommendations from the field. Research has shown the radial approach to be safer for patients despite being technically more challenging for the operator. The main advantage is a significant reduction in the risk of patient bleeding. At the time of the prior survey, PCI was typically performed via the femoral artery, with a very small minority of cases performed through the radial artery; PCI via the radial artery was just emerging in this country.

The RUC recommends that existing CPT codes 92920, 92921, 92924, 92925, 92928, 92929, 92933, 92934, 92937, 92938, 92941, 92943, 92944, 92973, 92975, 92977 and new add-on code 92972 be referred to the CPT Editorial Panel for revision in the 2025 CPT cycle. It is the expectation of the RUC that the specialties will submit their code change application for the September 2023 CPT meeting and survey new and/or revised codes within the 2025 CPT cycle.

92972 ***Percutaneous transluminal coronary lithotripsy (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 139 interventional cardiologists and noted that the survey respondents overestimated the typical physician work required to perform this add-on code. Therefore, the RUC recommended a direct work RVU crosswalk to CPT Code 37249 *Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; each additional vein (List separately in addition to code for primary procedure)* (work RVU= 2.97, intra-service and total time of 30 minutes) and noted that both services typically involve the same amount of intra-service and total time and similar physician work intensity.

Code 92972 is a new Category I code to report intravascular lithotripsy (IVL) as an add-on to other PCI services. IVL is a new revascularization treatment option, in which pulsating sonic pressure waves pass through soft tissue and selectively interact strongly with high-density calcium, producing significant shear stresses that have the ability to fracture the calcium. Arterial calcification is associated with increased cardiovascular risks. Intimal arterial calcification (IAC), considered a representation of underlying atherosclerotic plaque burden, has long been held responsible for this association, whereas increasing interest is directed towards medial arterial calcification (MAC). IVL is designed to modify both intimal and medial calcium across a wide range of vascular applications to increase vessel compliance, restore vessel mobility and provide new versatile treatment options for patients. Coronary IVL received pre-market approval on February 12, 2021 from the FDA for lithotripsy-enabled, low-pressure balloon dilatation of severely calcified, stenotic de novo coronary arteries prior to stenting.

The RUC compared the surveyed code to reference CPT code 67335 *Placement of adjustable suture(s) during strabismus surgery, including postoperative adjustment(s) of suture(s) (List separately in addition to code for specific strabismus surgery)* (work RVU= 3.23, intra-service and total time of 30 minutes) and CPT code 32668 *Thoracoscopy, surgical; with diagnostic wedge resection followed by anatomic lung resection (List separately in addition to code for primary procedure)* (work RVU= 3.00, intra-service and total time of 30 minutes) and noted that all three services typically involve an identical amount of time and similar physician work intensities to perform. The RUC concluded that CPT code 92972 should be valued based on a direct work RVU crosswalk to CPT code 37249 and agreed the crosswalk value below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 2.97 for CPT code 92972.**

Practice Expense
No direct practice expense inputs are recommended for CPT code 92972 as it is a facility-based add-on service.

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CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation

Cardiovascular
Therapeutic Services and Procedures
Coronary Therapeutic Services and Procedures

Codes 92920-92944, describe percutaneous revascularization services performed for occlusive disease of the coronary vessels (major coronary arteries, coronary artery branches, or coronary artery bypass grafts). These percutaneous coronary intervention (PCI) codes are built on progressive hierarchies with more intensive services inclusive of lesser intensive services. These PCI codes all include the work of accessing and selectively catheterizing the vessel, traversing the lesion, radiological supervision and interpretation directly related to the intervention(s) performed, closure of the arteriotomy when performed through the access sheath, and imaging performed to document completion of the intervention in addition to the intervention(s) performed. These codes include angioplasty (eg, balloon, cutting balloon, wired balloons, cryoplasty), atherectomy (eg, directional, rotational, laser), and stenting (eg, balloon expandable, self-expanding, bare metal, drug eluting, covered). Each code in this family includes balloon angioplasty, when performed. Diagnostic coronary angiography may be reported separately under specific circumstances. Percutaneous transluminal coronary lithotripsy may be reported using ~~0715T~~ 92972 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975, as appropriate.

Diagnostic coronary angiography codes (93454-93461)and injection procedure codes (93563-93564) should notbe used with percutaneous coronary revascularizationservices (92920-92944) to report:

1. Contrast injections, angiography, roadmapping, and/or fluoroscopic guidance for the coronaryintervention,

2. Vessel measurement for the coronary intervention, or

3. Post-coronary angioplasty/stent/atherectomyangiography, as this work is captured in thepercutaneous coronary revascularization services codes (92920-92944).

Diagnostic angiography performed at the time of a coronary interventional procedure may be separately reportable if:

1. No prior catheter-based coronary angiography study is available, and a full diagnostic study is performed, and a decision to intervene is based on the diagnostic angiography, or

2. A prior study is available, but as documented in the medical record:

    a. The patient's condition with respect to the clinical indication has changed since the prior study, or

    b. There is inadequate visualization of the anatomy and/or pathology, or

    c. There is a clinical change during the procedure that requires new evaluation outside the target area of intervention.

Diagnostic coronary angiography performed at a separate session from an interventional procedure is separately reportable.

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Major coronary arteries: The major coronary arteries are the left main, left anterior descending, left circumflex, right, and ramus intermedius arteries. All PCI procedures performed in all segments (proximal, mid, distal) of a single major coronary artery through the native coronary circulation are reported with one code. When one segment of a major coronary artery is treated through the native circulation and treatment of another segment of the same artery requires access through a coronary artery bypass graft, the intervention through the bypass graft is reported separately.

Coronary artery branches: Up to two coronary artery branches of the left anterior descending (diagonals), left circumflex (marginals), and right (posterior descending, posterolaterals) coronary arteries are recognized. The left main and ramus intermedius coronary arteries do not have recognized branches for reporting purposes. All PCI(s) performed in any segment (proximal, mid, distal) of a coronary artery branch is reported with one code. PCI is reported for up to two branches of a major coronary artery. Additional PCI in a third branch of the same major coronary artery is not separately reportable.

Coronary artery bypass grafts: Each coronary artery bypass graft represents a coronary vessel. A sequential bypass graft with more than one distal anastomosis represents only one graft. A branching bypass graft (eg, Y graft) represents a coronary vessel for the main graft, and each branch off the main graft constitutes an additional coronary vessel. PCI performed on major coronary arteries or coronary artery branches by access through a bypass graft is reported using the bypass graft PCI codes. All bypass graft PCI codes include the use of coronary artery embolic protection devices when performed.

Only one base code from this family may be reported for revascularization of a major coronary artery and its recognized branches. Only one base code should be reported for revascularization of a coronary artery bypass graft, its subtended coronary artery, and recognized branches of the subtended coronary artery. If one segment of a major coronary artery and its recognized branches is treated through the native circulation, and treatment of another segment of the same vessel requires access through a coronary artery bypass graft, an additional base code is reported to describe the intervention performed through the bypass graft. The PCI base codes are 92920, 92924, 92928, 92933, 92937, 92941, and 92943. The PCI base code that includes the most intensive service provided for the target vessel should be reported. The hierarchy of these services is built on an intensity of service ranked from highest to lowest as 92943 = 92941 = 92933 > 92924 > 92937 = 92928 > 92920.

PCI performed during the same session in additional recognized branches of the target vessel should be reported using the applicable add-on code(s). The add-on codes are 92921, 92925, 92928, 92934, 92938, and 92944 and follow the same principle in regard to reporting the most intensive service provided. The intensity of service is ranked from highest to lowest as 92944 = 92938 > 92934 > 92925 > 92929 > 92921.

PCI performed during the same session in additional major coronary or in additional coronary artery bypass grafts should be reported using the applicable additional base code(s). PCI performed during the same session in additional coronary artery branches should be reported using the applicable additional add-on code(s).

If a single lesion extends from one target vessel (major coronary artery, coronary artery bypass graft, or coronary artery branch) into another target vessel, but can be revascularized with a single intervention bridging the two vessels, this PCI should be reported with a single code despite treating more than one vessel. For example, if a left main coronary lesion extends into the proximal left circumflex coronary artery and a single stent is placed to treat the entire lesion, this PCI should be reported as a single vessel stent (92928). In this example, a code for additional vessel treatment (92929) would not be additionally reported.

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When bifurcation lesions are treated, PCI is reported for both vessels treated. For example, when a bifurcation lesion involving the left anterior descending artery and the first diagonal artery is treated by stenting both vessels, 92928 and 92929 are both reported. Target vessel PCI for acute myocardial infarction is inclusive of all balloon angioplasty, atherectomy, stenting, manual aspiration thrombectomy, distal protection, and intracoronary rheolytic agent administration performed. Mechanical thrombectomy is reported separately. Chronic total occlusion of a coronary vessel is present when there is no antegrade flow through the true lumen, accompanied by suggestive angiographic and clinical criteria (eg, antegrade "bridging" collaterals present, calcification at the occlusion site, no current presentation with ST elevation or Q wave acute myocardial infarction attributable to the occluded target lesion). Current presentation with ST elevation or Q wave acute myocardial infarction attributable to the occluded target lesion, subtotal occlusion, and occlusion with dye staining at the site consistent with fresh thrombus are not considered chronic total occlusion. Codes 92973 (percutaneous transluminal coronary thrombectomy, mechanical), 92974 (coronary brachytherapy), 92978 and 92979 (intravascular ultrasound/optical coherence tomography), 93571 and 93572 (intravascular Doppler velocity and/or pressure [fractional flow reserve (FFR) or coronary flow reserve (CFR)]), and ~~0715T~~ 92972 (percutaneous transluminal coronary lithotripsy), are add-on codes for reporting procedures performed in addition to coronary and bypass graft diagnostic and interventional services, unless included in the base code. Non-mechanical, aspiration thrombectomy is not reported with 92973, and is included in the PCI code for acute myocardial infarction (92941), when performed. (To report transcatheter placement of radiation delivery device for coronary intravascular brachytherapy, use 92974) (For intravascular radioelement application, see 77770, 77771, 77772) (For nonsurgical septal reduction therapy [eg, alcohol ablation], use 93799)				
(f)92920	Q1	Percutaneous transluminal coronary angioplasty; single major coronary artery or branch ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023
(f)+92921	Q2	each additional branch of a major coronary artery (List separately in addition to code for primary procedure) (Use 92921 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943)	ZZZ	Refer to CPT September 2023
(f)92924	Q3	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023

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(f)+92925	Q4	each additional branch of a major coronary artery (List separately in addition to code for primary procedure) (Use 92925 in conjunction with 92924, 92928, 92933, 92937, 92941, 92943)	ZZZ	Refer to CPT September 2023
(f)92928	Q5	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023
(f)+92929	Q6	each additional branch of a major coronary artery (List separately in addition to code for primary procedure) (Use 92929 in conjunction with 92928, 92933, 92937, 92941, 92943)	ZZZ	Refer to CPT September 2023
(f)92933	Q7	Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023
(f)+92934	Q8	each additional branch of a major coronary artery (List separately in addition to code for primary procedure) (Use 92934 in conjunction with 92933, 92937, 92941, 92943)	ZZZ	Refer to CPT September 2023
(f)92937	Q9	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023

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(f)+92938	Q10	each additional branch subtended by the bypass graft (List separately in addition to code for primary procedure) (Use 92938 in conjunction with 92937)	ZZZ	Refer to CPT September 2023
(f)92941	Q11	Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy, and angioplasty, including aspiration thrombectomy when performed, single vessel (For additional vessels treated, see 92920-92938, 92943, 92944) (For transcatheter intra-arterial hyperoxemic reperfusion/supersaturated oxygen therapy [SSO_2], use 0659T) ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023
(f)92943	Q12	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023
(f)+92944	Q13	each additional coronary artery, coronary artery branch, or bypass graft (List separately in addition to code for primary procedure) (Use 92944 in conjunction with 92924, 92928, 92933, 92937, 92941, 92943) (To report transcatheter placement of radiation delivery device for coronary intravascular brachytherapy, use 92974) (For intravascular radioelement application, see 77770, 77771, 77772)	ZZZ	Refer to CPT September 2023
+●92972	Q14	Percutaneous transluminal coronary lithotripsy (List separately in addition to code for primary procedure) (Use 92972 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975)	ZZZ	**2.97** Refer to CPT September 2023

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(f)✚92973	Q15	Percutaneous transluminal coronary thrombectomy mechanical (List separately in addition to code for primary procedure) (Use 92973 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975, 93454-93461, 93563, 93564) (Do not report 92973 for aspiration thrombectomy)	ZZZ	Refer to CPT September 2023
#✚*92974*	*Transcatheter placement of radiation delivery device for subsequent coronary intravascular brachytherapy (List separately in addition to code for primary procedure)* *(Use 92974 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 93454-93461)* *(For intravascular radioelement application, see 77770, 77771, 77772)*			
(f)92975	Q16	Thrombolysis, coronary; by intracoronary infusion, including selective coronary angiography ~~(For percutaneous transluminal coronary lithotripsy, use 0715T)~~	000	Refer to CPT September 2023
(f)92977	Q17	by intravenous infusion (For thrombolysis of vessels other than coronary, see 37211-37214) (For cerebral thrombolysis, use 37195)	XXX	Refer to CPT September 2023
Category III Codes				
0659T	*Transcatheter intracoronary infusion of supersaturated oxygen in conjunction with percutaneous coronary revascularization during acute myocardial infarction, including catheter placement, imaging guidance (eg, fluoroscopy), angiography, and radiologic supervision and interpretation* *(Use 0659T in conjunction with 92941)* *(Do not report 0659T in conjunction with 92920, 92924, 92928, 92933, 92937, 92943)*			
~~✚●0715T~~	~~Percutaneous transluminal coronary lithotripsy (List separately in addition to code for primary procedure)~~ ~~(Use 0715T in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975)~~ (0715T has been deleted) (To report percutaneous transluminal coronary lithotripsy, use 92972)			

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:92972 Tracking Number Q14 Original Specialty Recommended RVU: **3.90**
Presented Recommended RVU: **3.90**
Global Period: ZZZ Current Work RVU: **NA** RUC Recommended RVU: **2.97**

CPT Descriptor: Percutaneous transluminal coronary lithotripsy (list separately in addition to code for primary procedure) (use 9x070 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: a 62-year-old male with a history of left anterior descending coronary stent placement presents with exertional chest pain despite appropriate medical therapy. coronary angiography (coded separately) reveals severe in-stent restenosis, and imaging shows a circumferential calcified ring in the distal portion of the stent. he is sent to an angioplasty center and the lesion is treated with intravascular lithotripsy to allow appropriate stent expansion with balloon dilation.
[note: this is an add-on service. only consider the additional physician work related to percutaneous transluminal coronary lithotripsy.]

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: Based on separately reportable diagnostic coronary angiography, the presence of severe coronary artery calcium (CAC) is observed. The appropriate diameter coronary IVL catheter is selected. The coronary IVL catheter is inserted over the standard guidewire and advanced to the target location using fluoroscopy and marker bands. Once the coronary IVL catheter is placed, the integrated balloon is inflated to 4-atm, or enough pressure to make contact with the vessel wall. The first lithotripsy cycle of pulses is then delivered. Once the cycle is complete, the integrated balloon is then inflated to its nominal pressure of 6-atm. The balloon is then deflated. The mid LAD segment is also treated with the 3.0 mm × 20 mm balloon inflated at 8 atmosphere for 50 seconds. Final angiogram shows good angiographic results in LAD with residual stenosis of 30%, no overt dissection and TIMI 3 flow. No special patient care is needed post-op.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Dr. Richard Wright, Dr. Ed Tuohy, Dr. Mark Hoyer, Dr. Afnan Tariq					
Specialty Society(ies):	ACC, SCAI					
CPT Code:	92972					
Sample Size:	2500	**Resp N:**	139			
Description of Sample:	Random sample of ACC and SCAI members that identified as interventional cardiologists					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	5.00	**10.00**	20.00	100.00
Survey RVW:		1.00	3.90	**5.00**	9.49	40.00
Pre-Service Evaluation Time:				**0.00**		
Pre-Service Positioning Time:				**0.00**		
Pre-Service Scrub, Dress, Wait Time:				**0.00**		
Intra-Service Time:		7.00	20.00	**30.00**	45.00	130.00
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	92972	**Recommended Physician Work RVU: 2.97**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
92974	ZZZ	3.00	**RUC Time**

CPT Descriptor Transcatheter placement of radiation delivery device for subsequent coronary intravascular brachytherapy (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
37233	ZZZ	6.50	**RUC Time**

CPT Descriptor Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
34812	ZZZ	4.13	**RUC Time**	9,013

CPT Descriptor 1 Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
63048	ZZZ	3.47	**RUC Time**	128,927

CPT Descriptor 2 Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; each additional vertebral segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 42 **% of respondents:** 30.2 **%**

Number of respondents who choose 2nd Key Reference Code: 31 **% of respondents:** 22.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 92972	Top Key Reference CPT Code: 92974	2nd Key Reference CPT Code: 37233
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	30.00	42.50	60.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**30.00**	**42.50**	**60.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	2%	7%	43%	29%	19%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	16%	52%	32%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	10%	54%	36%
Physical effort required	12%	49%	39%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	7%	40%	53%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	3%	29%	32%	35%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	3%	27%	70%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	10%	37%	53%
Physical effort required	7%	41%	52%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	3%	17%	80%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

CPT Changes

The family of percutaneous coronary intervention (PCI) codes was last reviewed by the RUC at the January 2012 meeting, when the code family was updated to reflect bundling after CMS identified MPC codes not reviewed in the prior 5 years as potentially misvalued. The codes were reviewed for this meeting after the CPT Editorial Panel approved creation of a single add-on code that describes the work of coronary intravascular lithotripsy (IVL), a technology to modify lesions that

did not exist at the time of the prior review. That code change application was submitted by a device manufacturer, and the societies worked aggressively to execute a survey that was not anticipated. Work to incorporate this technology was slated by our CPT committees for the subsequent cycle.

Survey Approach

One result of the unanticipated review was a decision to streamline the survey in order to increase the likelihood of completion. In consultation with RUC staff, we opted to not survey the add-on codes in the family that describe intervention in additional branches off major coronary arteries. CMS and payers have never recognized these add-on codes as separately payable services and they have no utilization. We did not want to confuse respondents by asking them to survey codes with which they are not familiar, or to lengthen the survey for services that are not actually paid. As part of the societies' plans for future updates to this family of codes, we intended to delete those add-on codes for PCI in additional branches. Therefore, we recommend affirmation or contractor pricing or bundling for those codes, whichever is most appropriate for the circumstances.

Current RVUs

As referenced above, CMS does not recognize the add-on codes as separately payable. However, the agency did bundle them into the underlying PCI codes. In doing so, it also added small amounts of work and time, proportionate to predicted utilization. Also, since the last time these codes were valued, work and time were removed when changes were made for moderate sedation billing. The summary spreadsheet shows the original RUC recommended value, the CMS adjustments for bundling, the adjustments for moderate sedation, and finally the current values.

Background: PCI Evolution

The recommendations for this tab do not produce an increase in RVUs and do not require a compelling evidence argument. However, these services have changed in a way that merits consideration of a change in technique that informs the results of the survey. PCI is now typically performed through the radial artery, reflecting best practice recommendations from the field. https://onlinelibrary.wiley.com/doi/10.1002/ccd.28672 Research has shown the radial approach to be safer for patients despite being technically more challenging for the operator. The main advantage is a significant reduction in bleeding risk as well as some improvement in other factors. https://pubmed.ncbi.nlm.nih.gov/33507598/ At the time of the prior survey, PCI was typically performed via the femoral artery, with a very small minority of cases performed through the radial artery; PCI via the radial artery was just emerging in this country. PCI via the radial artery requires additional preservice time that is discussed further below. This approach also requires different skills and techniques that are more difficult to perform than access through the femoral artery. While safer for the patient, the service is more technically challenging for the operator. In contrast to the femoral approach, using the radial access creates more potential roadblocks in terms of procedural execution that requires additional catheter manipulations. The radial artery cannot connect directly to the heart in a straight-line fashion, having a loop in it. This can influence the catheter availability and support for doing angioplasty. In some instances, one will fall back to a femoral position. There can also be trouble getting the catheter into the aorta and then into ascending aorta, so it goes into coronaries and not the valve as opposed to into the leg. Catheters don't always have ability to support push and backup in the same way as femoral access, making those manipulations more challenging. Some catheters also can't engage anomalous coronary arteries.

There have been some changes in catheters have improved certain elements of procedures that may also explain some reduction in time, such as catheters that allow us to access things radially that we didn't have previously and others that allow for easier canulation of a vessel without as many catheter changes as in the past, reducing lower acuity procedure time. These allow access to lesions that were previously not able to be treated, such as certain grafts, anomalous coronaries, or tortuous anatomy. There has been a procedural shift to more comprehensive lesion preparation. We also see patients undergoing PCI who are generally older and have more comorbidities than a decade ago. Attention to stricter appearance on statins and other medicines has eliminated many patients who otherwise may have been treated with lower acuity PCI. Those remaining are more complex. Positioning for radial increases the risk of radiation and precautions. More time is spent closer to the image intensifier at different angles as opposed to standing farther back when patient is in the femoral area. Now we are closer to the heart and reaching across the patient's chest.

All of these factors lead to services that are both more intense/complex while also successfully decreasing the intra-procedure time the patient is on the table.

Recommendations Methodology

We struggled with how best to incorporate the bundling of the add-on branch codes. Because of the lack of recognition of the CPT-defined and previously RUC-valued add-on codes for interventions in branch vessels, we offer work recommendations at the survey 25th-percentile values for these codes with the addition of the same work increments CMS added when it bundled the branch intervention services into the base codes in 2013. We chose the survey 25th-percentile work RVUs as the starting point because this approach generally kept the recommended values below the current values. In instances where this approach did not keep the recommendations below the current values and times were similar or lower, we recommend the current value. As we move to the codes that are based on patient characteristics with use of any intervention—of/through a CABG, during AMI, and of a chronic total occlusion—where times are similar or higher, we recommend the current values for two codes where the survey 25th would be an increase and the survey 25th with a higher value for one code that shows a significant increase in time that reflects a different patient population than a decade ago. (Though that recommendation doesn't require a compelling evidence argument since the overall recommendations are budget neutral, we'll discuss that change in patient population for the chronic total occlusion code later.) In a similar manner, we added the bundled times to our recommendations in the same manner that CMS did in 2013 to account for work in the branch codes that would otherwise go unrecognized.

This approach produces the following recommendations for the family that would produce budget neutral savings of nearly 94,000 RVUs.

Code	Description	Rec.	Curr. Value	Rec. Pre	Rec. Intra	Rec. Post	Rec. Total
92920	Angioplasty	9.60	9.85	43	53	28	124
92921	Angioplasty, additional	0.00	0.00		30		30
92924	Atherectomy w/ angioplasty	11.74	11.74	43	69	28	140
92925	Atherectomy w/ angioplasty, additional	0.00	0.00		45		45
92928	Stent w/ angioplasty	10.57	10.96	43	60	28	131
92929	Stent w/ angioplasty, additional	0.00	0.00		30		30
92933	Atherectomy w/ stent w/ angioplasty	11.97	12.29	43	77	28	148
92934	Atherectomy w/ stent w/ angioplasty, additional	0.00	0.00		45		45
92937	Any revasc of CABG w/ w/out distal protection	10.95	10.95	43	77	28	148
92938	Any revasc of CABG w/ w/out distal protection, additional	0.00	0.00		60		60
92941	Any revasc of AMI total/subtotal occlusion	12.31	12.31	43	70	28	141
92943	Any revasc of chronic total occlusion w/ w/out thrombectomy	14.24	12.31	43	122	28	193
92944	Any revasc of chronic total occlusion w/ w/out thrombectomy, additional	0.00	0.00		60		60
92973	Thrombectomy add-on	2.97	3.28		30		30

Obsolete Codes

The RUC also identified codes 92975 and 92977 for thrombolysis as part of this family. With the extremely low volume and obsolete nature of these codes (78 and 2 units, respectively), the societies did not survey these. Instead, we recommend contractor pricing until they can be updated to reflect current practice or deleted.

Preservice Time

For each of the codes, we recommend additions to preservice package 2 (Difficult patient/straightforward procedure without anesthesia care). While these are 000 codes provided to patients with short or no hospital stay, the certain elements of preservice time are more akin to that of a service that utilizes general anesthesia.

		FACILITY			PCI	Notes
		2	**3**	**4**	**2+**	
	Total Pre-Service Time	**25**	**51**	**63**	**43**	
	CATEGORY SUBTOTALS					
A	Pre-Service Evaluation (IWPUT =0.0224)	18	33	40	34	
B	Pre-Service Positioning (IWPUT = 0.0224)	1	3	3	3	
C	Pre-Service Scrub, Dress and Wait (IWPUT =0.0081)	6	15	20	6	
	DETAILS					
A	History and Exam (Performance and review of appropriate Pre-Tests)	10	10	15	10	Standard
A	Prepare for Procedure (Check labs, plan, assess risks, review procedure)	2	2	4	2	Standard
A	Communicate with patient and/or family (Discuss procedure/ obtain consent)	3	5	5	10	+7 for elaborate consenting on multi-page form discussing PCI variabilities and possibility of conversion to surgery
A	Communicate with other professionals	0	5	5	0	Standard
A	Check/set-up room, supplies and equipment	1	5	5	5	+4 Utilize time similar to procedures with anesthesia to assess complex array of catheter, stents, and other supplies/equipment
A	Check/ prepare patient readiness (Gown, drape, prep, mark)	1	5	5	6	+5 Both radial and femoral approaches are draped and ultrasound is performed to assess viability of sites.
A	Prepare/ review/ confirm procedure	1	1	1	1	Standard
B	Perform/ supervise patient positioning	1	3	3	3	+2 Utilize time similar to procedures with anesthesia to position patient comfortably on the table with arm in uncomfortable position. Heart is positioned to allow for intraprocedural imaging. Additional gowning procedures to minimize radiation.
C	Administer local/topical anesthesia	1	0	0	1	Standard
C	Observe (wait anesthesia care)	0	10	15	0	Standard
C	Dress and scrub for procedure	5	5	5	5	Standard

92972

This is a new Category I code to report intravascular lithotripsy (IVL) as an add-on to other PCI services. IVL is a new revascularization treatment option that pulsatile sonic pressure waves that pass through soft tissue and selectively interact strongly with high-density calcium, producing significant shear stresses that have the ability to fracture the calcium. Arterial calcification is associated with increased cardiovascular risks. Intimal arterial calcification (IAC), considered a representation of underlying atherosclerotic plaque burden, has long been held responsible for this

association, whereas increasing interest is directed towards medial arterial calcification (MAC). IVL is designed to modify both intimal and medial calcium across a wide range of vascular applications to increase vessel compliance, restore vessel mobility and provide new versatile treatment options for patients. Coronary IVL received PMA approval February 12, 2021 from the FDA for lithotripsy-enabled, low-pressure balloon dilatation of severely calcified, stenotic de novo coronary arteries prior to stenting.

ACC and SCAI convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with the service. The panel reviewed this ZZZ code and recommends the survey median intra-service time with no preservice or post-service time.

The key reference service is 92974, transcatheter placement of a radiation delivery device for subsequent coronary intravascular brachytherapy. 43% of key reference respondents found surveyed code 92972 to be of similar intensity/complexity, while 48% found it to be somewhat more or much more intense/complex. The second key reference service is 37233, angioplasty and atherectomy of an additional tibial/peroneal additional vessel. 68% of respondents found surveyed code 92972 to be of somewhat more or much more intense/complex, while 29% felt it to be identical.

The second KRS is helpful in valuing the new code for coronary IVL. We can determine from the survey that if 92972 is half the time of 37233, that value is 3.25. With respondents indicating 92972 to be more intense, that would comport with a higher value. The survey 25th-percentile wRVU would make sense from that perspective. We did seek and find additional 30-minute procedural add-on codes that suggest 3.90 may be about right for this new technology and newly defined service. A thoracoscopy code and stereotactic radiosurgery code that both have 30 minutes of time bracket the 25th-percentile value at 4.12 and 3.48, respectively, as shown in the summary spreadsheet.

As such, the societies **recommend the survey 25th-percentile wRVU of 3.90 with times of 0/30/0** for this add-on code**.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 41489
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. The IVL manufacturer reported this amount as the number of IVL procedures performed in the most recently available 12 month period (June 2021-May 2022) in their CPT Code Change Application.

Specialty Interventional Cardiology Frequency 41489 Percentage 100.00 %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 34,021 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. The IVL manufacturer reported this amount as the number of IVL procedures performed on Medicare patients in the most recently available 12 month period (June 2021-May 2022) in their CPT Code Change Application.

Specialty Interventional Cardiology Frequency 34021 Percentage 100.00 %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage %

Do many physicians perform this service across the United States? Yes

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Coronary angioplasty (PTCA)

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 92928

SS Rec Summary

ISSUE: Percutaneous Coronary Interventions
TAB: 12

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	92974	ZZZ	Transcatheter placement of radiation deliv	2001	42	0.071	0.071			3.00			42.5	0	0	0			43			0					
2nd REF	37233	ZZZ	Revascularization, endovascular, open or	2010	31	0.108	0.105			6.50			62	1	0	0			60			1					
CURRENT	92799		Unlisted cardiovascular service or procedure			-	-						0														
SVY	92972	ZZZ	Percutaneous transluminal coronary lithotripsy (list separately in addition to code for primary procedure)		139	0.167	0.167	1.00	3.90	5.00	9.49	40.00	30	0	0	0	7	20	30	45	130		0	5	10	20	100
REC	92972	ZZZ	Percutaneous transluminal coronary lithotripsy (list separately in addition to code for primary procedure) (use 92972 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975)			0.099	0.099			2.97			30						30								
XWALK	37249	ZZZ	Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the			0.099	0.099			2.97			30						30								

December 13, 2022

Scott Manaker, MD
AMA/RVS Update PE Subcommittee
American Medical Association
330 N. Wabash Avenue
Chicago, IL 60611

Re: Tab 12 Percutaneous Coronary Interventions

Dear Dr. Manaker:

Tab 12 on the January 2023 RUC agenda addresses 17 codes. One of these is a new code, which describes intravascular lithotripsy, 92972. This code will be provided exclusively in the facility setting with a ZZZ global period. As such, the Society for Cardiovascular Angiography and Interventions and the American College of Cardiology recommend no direct practice expense inputs for this code in Tab 12.

The RUC also identified 16 established codes as part of this family. These include 92920, 92921, 92924, 92925, 92928, 92929, 92933, 92934, 92937, 92938, 92941, 92943, 92973, 92975 and 92977. All of these codes are exclusively performed in the facility setting with either a 000, XXX, or ZZZ global periods. As such, the Society for Cardiovascular Angiography and Interventions and the American College of Cardiology recommend no direct practice expense inputs for these codes in Tab 12.

Thank you for your consideration of this information as you prepare for the upcoming meeting. Please contact Matt Minnella at mminnella@acc.org if you have any questions.

Sincerely,



Afnan Tariq, MD
SCAI RUC Advisor



Richard Wright, MD
ACC RUC Advisor

AMA/Specialty Society RVS Update Committee Summary of Recommendations
Gender Equity Payment

January 2023

Pelvic Exam (PE Only) – Tab 13

In response to the January 2022 Relativity Assessment Workgroup (RAW) discussion on gender equity payment, a RUC member commented that the preventive medicine services codes 99381-99397 could be reviewed by the RAW for potential gender based misvaluation. The member stated that preventive medicine services are valued by age, not gender, and provided an example that care for a 30-year-old male and 30-year-old female have significant differences such as the need for gynecological care. These differences impact the time, physician work, and practice expense for a preventive visit based on the patient's gender suggesting the need for further review of gender-based variations of care. The RUC concluded to refer this item to the RAW for further review of gender-based differences in preventive medicine services. In April 2022, presenters from the American College of Obstetricians and Gynecologists (ACOG) indicated, and the RAW agreed, that there may be additional resources associated when a pelvic examination is performed. The RAW agreed that this issue should be referred to the CPT Editorial Panel to consider the specialty's request for additional code(s) to describe pelvic examinations.

In September 2022, the CPT Editorial Panel created a new CPT code for reporting a pelvic exam. During creation of the code, the specialty societies noted that, "the additional physician or qualified healthcare professional (QHP) work included in performing the pelvic exam at the same time the physician or QHP is performing a problem-oriented E/M service would be captured in the E/M code (99202-99205, 99212-99215 and 99242-99245) selection. For example, if the physician or QHP is using time as the E/M code selection criteria, the time to perform the pelvic exam would count toward the time used to select the appropriate level of E/M service. The same would be true if the physician or QHP was using medical decision making as their E/M code selection criteria." The CPT Editorial Panel agreed, thus the new code is a practice expense only code that captures the direct practice expenses associated with performing a pelvic exam in the non-facility setting. The Practice Expense (PE) Subcommittee reviewed the practice expense inputs at the January 2023 RUC meeting.

99459 ***Pelvic exam (List separately in addition to code for primary procedure) (Use 99459 in conjunction with 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99242, 99243, 99244, 99245, 99383, 99384, 99385, 99386, 99387, 99393, 99394, 99395, 99396, 99397)***
The PE Subcommittee discussed the direct practice expense inputs and made no modifications to the specialty societies' submission. The PE Subcommittee noted that the 4 minutes of clinical staff time for 99459 were appropriate as CA018 *Assist physician or other qualified healthcare professional---directly related to physician work time (100% of physician intra-service time)* captures the time associated with chaperoning a pelvic exam. The specialty societies' supporting evidence identifies the best clinical practices for a chaperone to be present for all breast, genital, and rectal examinations regardless of the sex or gender of the person performing the examination. There are no additional clinical activities recommended as the physician work of performing the pelvic exam is included in the primary code. There is one standard supply pack, SA051 *pack, pelvic exam*, which was deemed appropriate for performing a pelvic exam. Additionally, there are only two equipment items, EQ168 *light, exam,* and EF023 *table, exam,* deemed appropriate as they are standard inputs for use in the physician office setting and the light is necessary for the pelvic exam. **The RUC recommends the direct practice expense inputs as submitted by the specialty societies.**

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Evaluation and Management **Other Evaluation and Management Services**				
✚●99459	R1	Pelvic exam (List separately in addition to code for primary procedure) (Use 99459 in conjunction with 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99242, 99243, 99244, 99245, 99383, 99384, 99385, 99386, 99387, 99393, 99394, 99395, 99396, 99397)	ZZZ	0.00 (PE Only)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

NONFACILITY DIRECT PE INPUTS **CPT CODE(S):**99459
SPECIALTY SOCIETY(IES): ACOG, AAFP, ANA, AUA
PRESENTER(S): Hathaway, Schuster, Adamson, VanKeuren, Turk

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
99459	Pelvic exam (List separately in addition to code for primary procedure) (Use 99459 in conjunction with 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99242, 99243, 99244, 99245, 99383, 99384, 99385, 99386, 99387, 99393, 99394, 99395, 99396, 99397)	ZZZ

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
99459	A 35-year-old patient presents with post-coital and irregular vaginal bleeding that has worsened over the last 6 months and is not controlled with hormonal medications. [Note: This is an add-on service. Only consider the additional resources related to the pelvic exam.]

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   ACOG, AAFP, ANA and AUA convened a panel that included a number of experts familiar with performing pelvic exams in the non-facility setting. Several members of the panel conducted informal time in motion studies to estimate the clinical labor chaperone time for conducting a pelvic exam. The panel developed the direct practice expense recommendations for CPT Code 99459 based on best practices and current AMA RUC/PE guidelines.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   CPT Code 99459 is a new PE only code to capture the direct practice expenses associated with performing a pelvic exam in the NF setting. CPT Code 99459 is an add-on code. It will be reported with an E/M service or a preventative medicine service. It will not be reported with gynecologic/obstetric procedures. The PE spreadsheet includes the current direct practice expense inputs for E/M code 99213 and preventative medicine code 99395. The specialties also included CPT 96139 *Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method: each additional 30 minutes* on the spreadsheet as a reference code. CPT Code 96139 is a recently RUC reviewed, PE only, add-on code.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   CPT Code 99459 will be reported with an E/M or a preventative medicine service.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

CPT Code 99459 is a new service. It is a PE only code (NF only). Dominant provider TBD.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

N/A

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

N/A

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

N/A

    b. Service period (includes pre, intra and post):

CPT Code 99459 captures the clinical time associated with chaperoning a pelvic exam.

    c. Post-service period:

N/A

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly*

related to physician work time or *Perform procedure/service---NOT directly related to physician work time:*

CPT Code 99459 captures the clinical time associated with chaperoning a pelvic exam. The clinical time recommendations represent 100% of the estimated physician time to conduct the pelvic exam.

(The work of performing the pelvic exam will be captured in an E/M or preventative medicine code.)

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

SA051 pack, pelvic exam is included on the PE spreadsheet. It is an established pack defined by CMS.

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, pelvic exam	**SA051**	**pack**		**20.16**
lubricating jelly (K-Y) (5gm uou)		item	1	

pad, feminine mini	item	1
swab, procto 16in	item	2
specula, vaginal	item	1

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

No

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

EF023 table, exam – default formula
EQ168 light, exam – default formula

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

58301 Removal of intrauterine device (IUD)

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

Chaperone
On the basis of the principles outlined in Committee Opinion #796 Sexual Misconduct, the American College of Obstetricians and Gynecologists (ACOG) makes that a chaperone be present for all breast, genital, and rectal examinations. The need for a chaperone is irrespective of the sex or gender of the person performing the examination and applies to examinations performed in the outpatient and inpatient settings, including labor and delivery, as well as during diagnostic studies such as transvaginal ultrasonography and urodynamic testing.

Chaperones should clearly understand their responsibilities to protect patients' privacy and the confidentiality of health information. OB-GYN also should ensure that an opportunity exists for private conversation with patients so that the presence of a chaperone does not inhibit the communication of information important to the clinical encounter. Although chaperones may deter or discourage sexual misconduct by physician, sexual misconduct still can occur in their presence. Chaperones should, therefore, be trained in the requirements of best clinical practices as stated previously and empowered to report concerning behavior through a process independent of health care provider being chaperoned. Family members should not be used as chaperones and should be present for physical examination only if requested by the patient. Use of trainees (eg. Medical students or residents) as chaperones generally is discouraged unless they are trained in appropriate clinical practices and empowered to report concerns about health care provider's behavior during an examination.

See Attached

Related HCPCS Codes
New Code 99459 will be reported with G0101, Q0091, G0402, G0438 and G0439 if a pelvic pack is used, as those codes do not currently include SA051 pack, pelvic exam. These HCPCS codes were not included in the CPT parenthetical because it is not AMA's practice to include CMS HCPCS codes in the CPT Manual.

Medicare		Non Medicare
G0101+Q0091	=	993xx (preventative care)

G0101 Cervical or vaginal cancer screening; pelvic and clinical breast examination
Q0091 Screening papanicolaous smear; obtaining, preparing and conveyance of cervical or vaginal smear to laboratory

It is not typical to report an E/M code with G0101/Q0091 (<22%). If an E/M code is reported, it is for another indication/issue.

G0402 Welcome to Medicare – Billed the first year eligible for Medicare.
G0438 Annual Wellness Visit – If G0402 is not billed the first year of Medicare, then G0438 is reported for the first annual wellness visit.
Then, the following years, G0439 is reported.
These codes are typically reported by primary care/internal medicine. An OB/GYN **CAN** report the services if they meet all the requirements and are addressing/managing all the patients' care. This is not typical.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)
NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

	A	B	D	E	F	G	H	I	J
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**	
2						**96139**		**99213**	
3		***RUC Collaboration Website***				*Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; each additional 30 minutes*		*Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision*	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 13 Pelvic Exam (PE Only)** **Specialty: ACOG, AAFP, ANA & AUA**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**ZZZ**		**XXX**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 24.28**	**$ -**	**$ 22.25**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**30.0**	**0.0**	**36.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**4.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**30.0**	**0.0**	**27.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**5.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 13.65**	**$ -**	**$ 16.38**	**$ -**
13		**PRE-SERVICE PERIOD**							
14		**Start: Following visit when decision for surgery/procedure made**							
15	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455				
16	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455				
17	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455				
18	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455				
19	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455				
20	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455				
21	CA007	Review patient clinical extant information and questionnaire	L037D	RN/LPN/MTA	0.455				
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455				
23	CA048	Identify need for imaging, lab or other test result(s) and ensure information has been obtained -	L037D	RN/LPN/MTA	0.455			4	
26		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
29		**End: When patient enters office/facility for surgery/procedure**							
30		**SERVICE PERIOD**							
31		**Start: When patient enters office/facility for surgery/procedure:**							
32		**Pre-Service (of service period)**							
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L037D	RN/LPN/MTA	0.455			3	
34	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455			5	
35	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455				
36	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455				
37	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455			2	
38	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455				
39	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455				
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L037D	RN/LPN/MTA	0.455			2	
41	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455				
42	CA049	Identify need for imaging, lab or other test result(s) and ensure information has been obtained -	L037D	RN/LPN/MTA	0.455			2	
43	CA050	Review and document history, systems and medications (to be used with E/M only)	L037D	RN/LPN/MTA	0.455			5	
44			L037D	RN/LPN/MTA	0.455				
47		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
50		**Intra-service (of service period)**							
51	CA018	Assist physician or other qualified healthcare professional---directly related to physician work	L037D	RN/LPN/MTA	0.455				
52	CA019	Assist physician or other qualified healthcare professional---directly related to physician work	L037D	RN/LPN/MTA	0.455				
53	CA020	Assist physician or other qualified healthcare professional---directly related to physician work	L037D	RN/LPN/MTA	0.455				
54	CA021	Perform procedure/service---NOT directly related to physician work time	L037D	RN/LPN/MTA	0.455	30			
57			L037D	RN/LPN/MTA	0.455				
58		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
61		**Post-Service (of service period)**							
62	CA022	Monitor patient following procedure/service, multitasking 1:4	L037D	RN/LPN/MTA	0.455				
63	CA023	Monitor patient following procedure/service, no multitasking	L037D	RN/LPN/MTA	0.455				
64	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455			3	
65	CA025	Clean scope	L037D	RN/LPN/MTA	0.455				
66	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455				
67	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D	RN/LPN/MTA	0.455				
68	CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D	RN/LPN/MTA	0.455				
69	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455				
70	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose page	L037D	RN/LPN/MTA	0.455				
71	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455				
72	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate images into work	L037D	RN/LPN/MTA	0.455				
73	CA033	Perform regulatory mandated quality assurance activity (service period)	L037D	RN/LPN/MTA	0.455				
74	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG file, etc.)	L037D	RN/LPN/MTA	0.455				
75	CA035	Review home care instructions, coordinate visits/prescriptions	L037D	RN/LPN/MTA	0.455				
76	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**		**n/a**	
77	CA051	Education/instruction/counseling (to be used with E/M only)	L037D	RN/LPN/MTA	0.455			3	
78	CA052	Coordinate home or outpatient care (to be used with E/M only)	L037D	RN/LPN/MTA	0.455			2	
79			L037D	RN/LPN/MTA	0.455				
82		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
85		**End: Patient leaves office/facility**							
86		**POST-SERVICE PERIOD**							
87		**Start: Patient leaves office/facility**							
88	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455			5	
89	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455				
90		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**
96	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**
97			L037D	RN/LPN/MTA	0.455				
100		*Other activity: please include short clinical description here and type new in column A*	L037D	RN/LPN/MTA	0.455				
103		**End: with last office visit before end of global period**							

	A	B	D	E	F	G	H	I	J
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**	
2						**96139**		**99213**	
3		***RUC Collaboration Website***				*Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; each additional 30 minutes*		*Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision*	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 13 Pelvic Exam (PE Only)** **Specialty: ACOG, AAFP, ANA & AUA**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**ZZZ**		**XXX**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 24.28**	**$ -**	**$ 22.25**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**30.0**	**0.0**	**36.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**4.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**30.0**	**0.0**	**27.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**5.0**	**0.0**
104	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**					
105		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 10.55**	**$ -**	**$ 5.54**	**$ -**
106	SK130	WAIS-IV Record Form	5.25	item		1			
107	SK131	WAIS-IV Response Booklet #1	3.3	item		1			
108	SK132	WMS-IV Response Booklet #2	2	item		1			
109	SA047	pack, EM visit	5.468	pack				1	
110	SM022	sanitizing cloth-wipe (surface, instruments, equipment)	0.07	item				1	
111	SA051	pack, pelvic exam	20.16	pack					
114	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**				
115		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 0.08**	**$ -**	**$ 0.34**	**$ -**
116	EQ189	otoscope-ophthalmoscope (wall unit)	618.093	Default	0.00164025			27	
117	EF048	Portable stand-on scale	1343.85	Default	0.00356621			2	
118	EF023	table, exam	4737.727	Default	0.010538571			27	
119	EF031	table, power	5906.76	Default	0.015674926				
120	EQ168	light, exam	1232.887	Default	0.003271745				
121	EQ387	Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) Kit (less forms)	971.3	Default	0.002577565	30			

	A	B	K	L	M	N
1	**RUC Practice Expense Spreadsheet**		**CURRENT**		**RECOMMENDED**	
2			**99395**		**99459**	
3		***RUC Collaboration Website***	*Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory*		*Pelvic Exam*	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 13 Pelvic Exam (PE Only)** **Specialty: ACOG, AAFP, ANA & AUA**				
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**XXX**		**ZZZ**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 30.47**	**$ -**	**$ 22.04**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**53.0**	**0.0**	**4.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**3.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**44.0**	**0.0**	**4.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**6.0**	**0.0**	**0.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 24.12**	**$ -**	**$ 1.82**	**$ -**
13		**PRE-SERVICE PERIOD**				
14		**Start: Following visit when decision for surgery/procedure made**				
15	CA001	Complete pre-service diagnostic and referral forms				
16	CA002	Coordinate pre-surgery services (including test results)				
17	CA003	Schedule space and equipment in facility				
18	CA004	Provide pre-service education/obtain consent				
19	CA005	Complete pre-procedure phone calls and prescription				
20	CA006	Confirm availability of prior images/studies				
21	CA007	Review patient clinical extant information and questionnaire				
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	3			
23	CA048	Identify need for imaging, lab or other test result(s) and ensure information has been obtained -				
26		*Other activity: please include short clinical description here and type new in column A*				
29		**End: When patient enters office/facility for surgery/procedure**				
30		**SERVICE PERIOD**				
31		**Start: When patient enters office/facility for surgery/procedure:**				
32		**Pre-Service (of service period)**				
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	3			
34	CA010	Obtain vital signs	5			
35	CA011	Provide education/obtain consent	9			
36	CA012	Review requisition, assess for special needs				
37	CA013	Prepare room, equipment and supplies	2			
38	CA014	Confirm order, protocol exam				
39	CA015	Setup scope (nonfacility setting only)				
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	2			
41	CA017	Sedate/apply anesthesia				
42	CA049	Identify need for imaging, lab or other test result(s) and ensure information has been obtained -				
43	CA050	Review and document history, systems and medications (to be used with E/M only)	13			
44						
47		*Other activity: please include short clinical description here and type new in column A*				
50		**Intra-service (of service period)**				
51	CA018	Assist physician or other qualified healthcare professional---directly related to physician work			4	
52	CA019	Assist physician or other qualified healthcare professional---directly related to physician work				
53	CA020	Assist physician or other qualified healthcare professional---directly related to physician work				
54	CA021	Perform procedure/service---NOT directly related to physician work time	5			
57						
58		*Other activity: please include short clinical description here and type new in column A*				
61		**Post-Service (of service period)**				
62	CA022	Monitor patient following procedure/service, multitasking 1:4				
63	CA023	Monitor patient following procedure/service, no multitasking				
64	CA024	Clean room/equipment by clinical staff	3			
65	CA025	Clean scope				
66	CA026	Clean surgical instrument package				
67	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions				
68	CA028	Review/read post-procedure x-ray, lab and pathology reports				
69	CA029	Check dressings, catheters, wounds				
70	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose page				
71	CA031	Review examination with interpreting MD/DO				
72	CA032	Scan exam documents into PACS. Complete exam in RIS system to populate images into work				
73	CA033	Perform regulatory mandated quality assurance activity (service period)				
74	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG file, etc.)				
75	CA035	Review home care instructions, coordinate visits/prescriptions				
76	CA036	Discharge day management	**n/a**		**n/a**	
77	CA051	Education/instruction/counseling (to be used with E/M only)				
78	CA052	Coordinate home or outpatient care (to be used with E/M only)	2			
79						
82		*Other activity: please include short clinical description here and type new in column A*				
85		**End: Patient leaves office/facility**				
86		**POST-SERVICE PERIOD**				
87		**Start: Patient leaves office/facility**				
88	CA037	Conduct patient communications				
89	CA038	Coordinate post-procedure services	6			
90		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**	**# visits**
96	CA039	Post-operative visits (total time)	**0.0**	**0.0**	**0.0**	**0.0**
97						
100		*Other activity: please include short clinical description here and type new in column A*				
103		**End: with last office visit before end of global period**				

	A	B	K	L	M	N
1	**RUC Practice Expense Spreadsheet**		**CURRENT**		**RECOMMENDED**	
2			**99395**		**99459**	
3		***RUC Collaboration Website***	*Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory*		*Pelvic Exam*	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 13 Pelvic Exam (PE Only)** **Specialty: ACOG, AAFP, ANA & AUA**				
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**XXX**		**ZZZ**	
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 30.47**	**$ -**	**$ 22.04**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**53.0**	**0.0**	**4.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**3.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**44.0**	**0.0**	**4.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**6.0**	**0.0**	**0.0**	**0.0**
104	**Supply Code**	**MEDICAL SUPPLIES**				
105		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ 5.47**	**$ -**	**$ 20.16**	**$ -**
106	SK130	WAIS-IV Record Form				
107	SK131	WAIS-IV Response Booklet #1				
108	SK132	WMS-IV Response Booklet #2				
109	SA047	pack, EM visit	1			
110	SM022	sanitizing cloth-wipe (surface, instruments, equipment)				
111	SA051	pack, pelvic exam			1	
114	**Equipment Code**	**EQUIPMENT**				
115		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 0.88**	**$ -**	**$ 0.06**	**$ -**
116	EQ189	otoscope-ophthalmoscope (wall unit)	51			
117	EF048	Portable stand-on scale				
118	EF023	table, exam			4	
119	EF031	table, power	51			
120	EQ168	light, exam			4	
121	EQ387	Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) Kit (less forms)				

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

ACOG COMMITTEE OPINION

Number 796 *(Replaces Committee Opinion No. 373, August 2007)*

Committee on Ethics

This Committee Opinion was developed by the American College of Obstetrician and Gynecologists' Committee on Ethics in collaboration with committee member David I. Shalowitz, MD, MSHP.

Sexual Misconduct

ABSTRACT: The practice of obstetrics and gynecology includes interaction in times of intense emotion and vulnerability for patients and involves sensitive physical examinations and medically necessary disclosure of private information about symptoms and experiences. The patient–physician relationship is damaged when there is either confusion regarding professional roles and behavior or clear lack of integrity that allows sexual exploitation and harm. Sexual misconduct by physicians is an abuse of professional power and a violation of patient trust. Although sexual misconduct is uncommon in clinical care, even one episode is unacceptable. Routine use of chaperones, in addition to the other best practices outlined in this Committee Opinion, will help assure patients and the public that obstetrician–gynecologists are maximizing efforts to create a safe environment for all patients.

Recommendations and Conclusions

On the basis of the principles outlined in this Committee Opinion, the American College of Obstetricians and Gynecologists (ACOG) makes the following recommendations and conclusions:

- Sexual misconduct by an obstetrician–gynecologist is an abuse of power and a violation of patients' trust. Sexual or romantic interaction between an obstetrician–gynecologist and a current patient is always unethical, is grounds for investigation and sanction, and in some cases should be considered for criminal prosecution.
- It is unethical for obstetrician–gynecologists to misuse the trust, knowledge, or influence from a professional relationship in pursuing a sexual or romantic relationship with a former patient.
- Physical examinations should be explained appropriately, undertaken only with the patient's consent, and performed with the minimum amount of physical contact required to obtain data for diagnosis and treatment. Draping should be used to minimize patients' exposure during examinations. Patients should be offered the opportunity to ask questions or raise concerns about any element of the examination.
- It is recommended that a chaperone be present for all breast, genital, and rectal examinations. The need for a chaperone is irrespective of the sex or gender of the person performing the examination and applies to examinations performed in the outpatient and inpatient settings, including labor and delivery, as well as during diagnostic studies such as transvaginal ultrasonography and urodynamic testing.
- Obstetrician–gynecologists are obligated ethically and professionally to report sexual misconduct or suspected sexual misconduct by any health care professional to appropriate authorities, such as supervisors, department chairs or other institutional officials, peer review organizations, and professional licensing boards. Law enforcement should be involved in cases of sexual or physical assault.
- Institutions should have clear guidelines that allow clinical staff to report sexual misconduct or suspected sexual misconduct without concern for retaliation. Patients, family members, and loved ones should have the opportunity to express concerns about interactions with clinical staff without fear of adversely affecting clinical care.
- Medical students and trainees in obstetrics and gynecology should be educated about the inherent power imbalance in the patient–physician relationship, avoidance of sexually offensive or denigrating language, risk factors for sexual misconduct, and procedures for reporting suspected misconduct.

Introduction

The practice of obstetrics and gynecology includes interaction in times of intense emotion and vulnerability for patients and involves sensitive physical examinations and medically necessary disclosure of private information about symptoms and experiences. The relationship between obstetrician–gynecologists and their patients therefore requires a high level of trust and professional responsibility. The patient–physician relationship is damaged when there is either confusion regarding professional roles and behavior or clear lack of integrity that allows sexual exploitation and harm. Sexual misconduct by an obstetrician–gynecologist is an abuse of power and a violation of patients' trust (1).

Although sexual misconduct is uncommon in clinical care, even one episode is unacceptable. The ethical prohibition of sexual misconduct is forceful, and its application in medical practice is essential (2). This Committee Opinion has been revised to incorporate current data on the prevalence of physician sexual misconduct, to delineate ACOG's expectations for obstetrician–gynecologists' interactions with their patients to ensure that all patients are cared for safely and professionally (2), and to provide clinical best practice recommendations to support obstetrician–gynecologists' mission to provide the highest quality health care to their patients.

Background

Definition

The Federation of State Medical Boards categorizes the range of behaviors that constitute sexual misconduct into "sexual impropriety" (behavior, gestures, or expressions that are seductive, sexually suggestive, disrespectful of patient privacy, or sexually demeaning to a patient) and "sexual violation" (physical sexual contact between a physician and patient, whether or not initiated or consented to by the patient, and engaging in any conduct with a patient that is sexual or may be reasonably interpreted as sexual) (Box 1) (3). Examination of the breast or genitals without appropriate consent from a patient or surrogate decision maker qualifies as sexual misconduct under both of these categories. Sexual misconduct may be grounds for disciplinary action, and sexual misconduct that falls under the category of sexual violation also may meet the criteria for criminal prosecution (eg, sexual assault). The U.S. Department of Justice defines s*exual assault* as "any nonconsensual sexual act proscribed by Federal, tribal, or State law, including when the victim lacks capacity to consent" (4). Sexual assault encompasses a continuum of sexual activity that ranges from sexual coercion to contact abuse (unwanted kissing, touching, or fondling) to rape (5, 6).

Scope of the Problem

It is difficult to estimate accurately the incidence of sexual misconduct. Available data rely heavily on patient reporting, and it is estimated that less than 10% of patients subjected to sexual misconduct report their experience (7). One prominent report by *The Atlanta Journal-Constitution* identified 3,100 individual physicians named in sexual misconduct reports brought to state medical boards between 1999 and 2016. *The Atlanta Journal-Constitution* identified an additional 450 physicians from allegations during 2016 and 2017 (8). Additionally, between 2003 and 2013, 1,039 physicians had at least one sexual misconduct-related report filed with the National Practitioner Data Bank by hospitals, state medical boards, or other eligible entities (9). A review of cases brought to the American Medical Association (AMA) Council on Ethical and Judicial Affairs between 2004 and 2008 found that 32 of 298 cases were related to possible sexual misconduct (10). However, this number may be an underestimate because sanctions related to sexual misconduct may not be identified as such (11).

Limited data suggest that the greatest number of reported allegations of sexual misconduct involves physicians who practice family medicine, psychiatry, internal medicine, and obstetrics and gynecology (12, 13). An analysis of 101 cases of sexual abuse of patients by physicians revealed a strong, consistent association with male physician gender (100% of cases), age more than 39 years (92%), lack of board certification (72% of cases involving "nonconsensual sex"), consistent examination of patients without a chaperone (85%), and practice in nonacademic medical settings (94%) (14).

Sexual misconduct by clinicians during labor and delivery may be more prevalent than previously thought. A large survey of U.S. and Canadian obstetric support personnel raised concern that clinicians may at times use sexually degrading language with laboring women or perform genital examinations or procedures without appropriate consent or despite the patient's refusal (15). Again, although sexual misconduct during obstetric care likely is uncommon, the experience of sexual violation during childbirth may be associated with long-lasting consequences for patients' mental health. Intimate examinations and procedures performed without consent or under circumstances perceived by the patient to be coercive are associated with psychological trauma during childbirth (16, 17). Likewise, patients may find being physically exposed to more personnel than necessary for their clinical care during childbirth to be a dehumanizing and traumatic experience (16). Patients who experience childbirth as a traumatic event are at high risk of developing depression and posttraumatic stress disorder in the postpartum period (18). Although the interpretation and generalizability of these data are limited by the studies' methods, patients' vulnerability to perceived sexual violation during childbirth deserves special consideration, especially given the sometimes intensive and acute nature of intrapartum care.

Box 1. Examples of Physician Sexual Misconduct From the Federation of State Medical Boards

Sexual Impropriety

Sexual impropriety may comprise behavior, gestures, or expressions that are seductive, sexually suggestive, disrespectful of patient privacy, or sexually demeaning to a patient that may include, but are not limited to, the following:

- Neglecting to employ disrobing or draping practices respecting the patient's privacy, or deliberately watching a patient dress or undress
- Performing an intimate examination or consultation without clinical justification or appropriate consent
- Subjecting a patient to an intimate examination in the presence of medical students or other parties without the patient's informed consent or in the event such informed consent has been withdrawn
- Examination or touching of genital mucosal areas without the use of gloves
- Inappropriate comments about or to the patient, including but not limited to, making sexual comments about a patient's body or underclothing, making sexualized or sexually demeaning comments to a patient, criticizing the patient's sexual orientation, making nonclinically relevant comments about potential sexual performance during an examination
- Using the patient–physician relationship to solicit a date or romantic relationship
- Initiation by the physician of conversation regarding the sexual problems, preferences, or fantasies of the physician
- Requesting details of sexual history or sexual likes or dislikes when not clinically indicated for the type of examination or consultation

Sexual Violation

Sexual violation may include physical sexual contact between a physician and patient, whether or not initiated by the patient, and engaging in any conduct with a patient that is sexual or may be reasonably interpreted as sexual, including but not limited to the following:

- Sexual intercourse, genital-to-genital contact
- Oral-to-genital contact
- Oral-to-anal contact, genital-to-anal contact
- Kissing in a romantic or sexual manner
- Touching breasts, genitals, or any sexualized body part for any purpose other than appropriate examination or treatment, or when the patient has refused or has withdrawn consent
- Encouraging the patient to masturbate in the presence of the physician*
- Masturbation by the physician while the patient is present
- Offering to provide practice-related services, such as drugs, in exchange for sexual favors

*ACOG recognizes the value of physician-guided sexual health counseling in the proper clinical context by an appropriately trained provider.

Modified from Federation of State Medical Boards. Federation of State Medical Boards. Addressing sexual boundaries: guidelines for state medical boards. Adopted as policy by the House of Delegates of the Federation of State Medical Boards. May 2006. Euless (TX): FSMB; 2006. Available at: https://www.fsmb.org/siteassets/advocacy/policies/grpol_sexual-boundaries.pdf.

Ethical and Professional Guidelines

Romantic or Sexual Relationships With Current Patients

Sexual or romantic interaction between an obstetrician–gynecologist and a current patient is always unethical, is grounds for investigation and sanction, and in some cases should be considered for criminal prosecution. Such interactions may exploit patients' vulnerability, compromise physicians' ability to make objective judgments about patients' health care, and ultimately be detrimental to patients' long-term health (19, 20). Furthermore, an uncomfortable or traumatic experience in a physician's office may become a major barrier to seeking needed health care in the future.

Sexual or romantic behavior by a physician toward a current patient constitutes misconduct regardless of whether a patient appears to initiate or consent to such behavior. Physicians' professional codes of ethics have historically precluded the initiation of romantic or sexual contact with a patient because such a relationship is likely to compromise the physician's objectivity regarding treatment decision making and may exploit a power differential for personal gain (1, 21). The inherent imbalance of power in the patient–physician relationship makes coercion or its appearance more likely; for example, there may be an explicit or implicit suggestion that continued care is contingent on the patient's willingness to accept sexual contact. Additionally, obstetrician–gynecologists should be aware of the possibility that a patient's apparent desire for a romantic or sexual relationship with a treating

physician may be a manifestation of a transference reaction related to gratitude for clinical care (22, 23). For these reasons, a patient's apparent consent to enter into a romantic or sexual relationship with a treating physician does not make the relationship permissible.

Romantic or Sexual Relationships With Former Patients

Consensual romantic or sexual relationships between physicians and former patients are ethically challenging because of the potential for these relationships to be unduly influenced by the power dynamic accompanying the former patient–physician relationship. The Committee on Ethics agrees with the AMA that it is unethical for obstetrician–gynecologists to misuse the trust, knowledge, or influence from a professional relationship in pursuing a sexual or romantic relationship with a former patient (21). For example, it would be unethical for an obstetrician–gynecologist to coerce a former patient into a romantic or sexual relationship under the threat of disclosing private information obtained during treatment. Treating a person who is not a current patient, but with whom the obstetrician–gynecologist has a current romantic or sexual relationship, may not be sexual misconduct but instead may violate ethical proscriptions against treating family members (24).

Obligation to Report Misconduct

In addition to involving harm to the victim, an episode of sexual misconduct may not be isolated and could indicate a history of misconduct toward other patients or a risk of future misconduct. Furthermore, physician misconduct damages public trust in medical professionals. The ACOG Code of Professional Ethics states that "obstetrician–gynecologists should strive to address through the appropriate procedures the status of those physicians who demonstrate questionable competence, impairment, or unethical or illegal behavior. In addition, the obstetrician–gynecologist should cooperate with appropriate authorities to prevent the continuation of such behavior" (1). Therefore, to protect patients and colleagues, obstetrician–gynecologists are obligated ethically and professionally to report sexual misconduct or suspected sexual misconduct by any health care professional to appropriate authorities, such as supervisors, department chairs or other institutional officials, peer review organizations, and professional licensing boards. Law enforcement should be involved in cases of sexual or physical assault (see the "Definition" section earlier in this document). Additional guidance on reporting unethical behavior by colleagues is available from the AMA and the Federation of State Medical Boards (25–27).

Best Practices for Clinical Care

The American College of Obstetricians and Gynecologists is invested in ensuring that the standards for an obstetrician–gynecologist's behavior in a clinical encounter are transparent. In some situations, patients may have experienced sexual misconduct as part of an obstetric or gynecologic encounter but not recognized or reported it as such. Conversely, patients may perceive an interaction as sexual or romantic when in fact there was no such intent on the part of the obstetrician–gynecologist. The following clinical best practices are recommended to decrease the risk of misunderstandings related to the provision of appropriate clinical care and to increase patients' ability to recognize and report inappropriate interactions in the clinical setting.

Maintaining Appropriate Boundaries

Regardless of intent, any clinical or nonclinical contact with a patient that may be perceived as a romantic or sexual overture should be avoided. For example, clinical evaluation of a patient outside of a usual clinical setting may blur the boundaries between professional and nonprofessional interactions and, therefore, is discouraged; however, exceptions may include emergency care or a medically indicated home visit. Likewise, obstetrician–gynecologists should strictly avoid sexual innuendo, sexually suggestive humor, and sexually provocative remarks in professional settings. Nonclinical communication with current patients, including interactions by telephone, e-mail, text-messaging, or social media, should be approached with caution, and professional boundaries should be maintained at all times (28).

Under some circumstances, limited physical contact between physician and patient (eg, hugging or holding a patient's hand) may be a valuable, therapeutic expression of support. However, obstetrician–gynecologists should be careful to ensure that patients are open to such contact and that its duration is appropriately limited. If inappropriate contact is initiated by a patient, obstetrician–gynecologists should feel empowered to separate themselves from the patient, reinforce professional boundaries, and request assistance if needed.

Physical Examinations

Physical examinations should be explained appropriately, undertaken only with the patient's consent, and performed with the minimum amount of physical contact required to obtain data for diagnosis and treatment. Draping should be used to minimize patients' exposure during examinations. Patients should be offered the opportunity to ask questions or raise concerns about any element of the examination. The Committee on Ethics re-emphasizes that patients capable of decision making must provide consent for all procedures, and that patients have the right to refuse any and all examinations and procedures (29). Best practices for physical examination also apply to diagnostic tests involving instrumentation of the genital, urinary, or lower gastrointestinal tracts, such as transvaginal ultrasonography or urodynamics.

Photography and Video Recordings

Patients must consent to any photograph or video taken of them, and consent should be documented in the medical record. Photographs of pathology and unclothed or internal anatomy must be de-identified to the extent possible and used only for clinical documentation or academic purposes, including education of colleagues and trainees and publication in peer-reviewed medical literature. Identifiable images should be stored and sent (if necessary) in a secure manner, and images no longer being used for the above purposes should be destroyed securely.

Trauma-Informed Care

For some patients with a history of sexual trauma, even commonly used gestures and language may trigger memories of past physical or sexual abuse and may cause discomfort or fear during a clinical encounter. Because trauma often involves an experience of powerlessness, it is important to refrain from behaviors that a patient may perceive as overpowering or threatening (30–33). Common triggers include leaning over a patient during a discussion or pelvic examination, using commands such as "try to relax" before an internal examination, and exposing or touching parts of a patient's body during a physical examination without adequate warning (32, 33). All obstetrician–gynecologists should become familiar with the principles of trauma-informed care and seek to integrate them into general practice (34). Issues related to the care of survivors of sexual abuse, intimate partner violence, and reproductive and sexual coercion are detailed in other ACOG documents (35–37).

Chaperones

The presence of a third party, or "chaperone," in the examination room can provide reassurance to the patient about the professional context and content of the examination and the intent of the obstetrician–gynecologist. The chaperone also serves as a witness to the events taking place should there be any misunderstanding or concern for misconduct. In the obstetric setting, chaperones may decrease the risk of patient-perceived trauma during childbirth by advocating for patients and serving as a deterrent to potentially inappropriate behavior. The American College of Obstetricians and Gynecologists previously recommended an "opt-in" approach regarding the presence of chaperones, in which a chaperone was required if mandated by a clinical practice's policy or if requested by the patient or obstetrician–gynecologist. Given the profoundly negative effect of sexual misconduct on patients and the medical profession and the association between misconduct and the absence of a chaperone, ACOG now believes that the routine use of chaperones is needed for the protection of patients and obstetrician–gynecologists. Therefore, it is recommended that a chaperone be present for all breast, genital, and rectal examinations. The need for a chaperone is irrespective of the sex or gender of the person performing the examination and applies to examinations performed in the outpatient and inpatient settings, including labor and delivery, as well as during diagnostic studies such as transvaginal ultrasonography and urodynamic testing. Chaperones currently are required by the U.S. Veterans Health Administration health care system, and routine use of chaperones is considered essential by the Royal College of Obstetricians and Gynaecologists (38, 39).

Exceptions should be made in circumstances in which it is likely that failure to examine the patient would result in significant and imminent harm to the patient, such as during a medical emergency. If a patient declines a chaperone, it should be explained that the chaperone is an integral part of the clinical team whose role includes assisting with the examination and protecting the patient and the physician. Any concerns the patient has regarding the presence of a chaperone should be elicited and addressed if feasible. If, after counseling, the patient refuses the chaperone, this decision should be respected and documented in the medical record. Under such circumstances, obstetrician–gynecologists may defer breast, genital, or rectal examinations for the protection of the patient and the physician. If an unchaperoned examination is performed, the rationale for proceeding should be documented. This approach allows patients to opt out of a chaperoned examination if they feel strongly but does not compel physicians to examine the patient without the protection of a chaperone, except in the case of a medical emergency, as discussed previously.

Chaperones should clearly understand their responsibilities to protect patients' privacy and the confidentiality of health information. Obstetrician–gynecologists also should ensure that an opportunity exists for private conversation with patients so that the presence of a chaperone does not inhibit the communication of information important to the clinical encounter. Although chaperones may deter or discourage sexual misconduct by physicians (14), sexual misconduct still can occur in their presence. Chaperones should, therefore, be trained in the requirements of best clinical practices as stated previously and empowered to report concerning behavior through a process independent of the health care provider being chaperoned. Family members should not be used as chaperones and should be present for physical examination only if requested by the patient (40). Use of trainees (eg, medical students or residents) as chaperones generally is discouraged unless they are trained in appropriate clinical practices and empowered to report concerns about the health care provider's behavior during an examination.

Implementation of Routine Chaperoning

The Committee on Ethics recognizes that recommending the routine use of chaperones for obstetric, gynecologic, and diagnostic examinations may require some practices

to adjust staffing procedures. There also may be concern about the time and resources needed to implement changes and their potential effect on patient care. Although these concerns merit study, there is robust evidence of the detrimental effects of sexual misconduct on patients' well-being, the patient–physician relationship, and public perception of the medical profession. Therefore, there is a need for obstetrician–gynecologists and clinical practices to institute routine chaperoning as an ethical best practice measure to reduce the risk of sexual misconduct (41). Steps taken to prioritize patients' safety and comfort likely will improve public trust in obstetric and gynecologic care and may thereby improve patients' willingness to seek care when indicated.

Institutional Responsibilities

Examination areas should protect patients' privacy, and staffing should be adequate to permit routine use of chaperones for physical examination and procedures. Institutions and clinical practices also should consider providing patients with a "what to expect" guide before obstetric or gynecologic appointments so that patients are prepared for their clinical encounters and better able to recognize deviations from proper medical practice. For example, see ACOG's related patient education resource, *Your First Gynecologic Visit* (42).

Institutions should have clear guidelines that allow clinical staff to report sexual misconduct or suspected sexual misconduct without concern for retaliation. Patients, family members, and loved ones should have the opportunity to express concerns about interactions with clinical staff without fear of adversely affecting clinical care. All such reports should be promptly and thoroughly investigated, and appropriate disciplinary or remedial action, or both, should be taken.

Medical Education

Teaching physicians are expected to be exemplars of appropriate behavior for trainees; likewise, residents and fellows-in-training should model best practices for medical students and other trainees. Relevant elements of the clinical examination should be highlighted specifically when appropriate (eg, draping methods, explanation of examination to patient, use of trauma-sensitive language, appropriate use of chaperones, and solicitation of questions and permission to proceed with an examination). Trainees taking part in patient care should be introduced, and the patient should be given the opportunity to agree to their participation. Breast, genital, and rectal examinations (including examinations under anesthesia) that are for educational purposes only may not be performed without patients' specific informed consent (43).

Medical students and trainees in obstetrics and gynecology should be educated about the inherent power imbalance in the patient–physician relationship, avoidance of sexually offensive or denigrating language, risk factors for sexual misconduct, and procedures for reporting suspected misconduct (44–47). Although education may not eliminate the possibility of misconduct, formalized clinical and didactic training will help to make best clinical practices routine and may assist obstetrician–gynecologists in managing the boundaries between clinical care and inappropriate behavior and in identifying and reporting when these boundaries have been crossed by others.

Conclusion

Sexual misconduct by physicians is an abuse of professional power and a violation of patient trust. Such behavior jeopardizes the well-being of patients and carries immense potential for harm. Obstetrician–gynecologists should implement best clinical practices to ensure that patients are afforded a safe environment for their health care. Routine use of chaperones, in addition to the other best practices outlined in this Committee Opinion, will help assure patients and the public that obstetrician–gynecologists are maximizing efforts to create a safe environment for all patients. Obstetrician–gynecologists are ethically obligated to model responsible clinical practices and to report sexual misconduct or suspected sexual misconduct. Health care institutions, likewise, should provide resources to support best clinical practices and to ensure that patients are protected to the greatest extent possible.

References

1. American College of Obstetricians and Gynecologists. Code of professional ethics of the American College of Obstetricians and Gynecologists. Washington, DC: ACOG; 2018. Available at: https://www.acog.org/-/media/Departments/National-Officer-Nominations-Process/ACOGcode.pdf?dmc=1&ts=20190213T1516113641. Retrieved September 17, 2019.
2. American College of Obstetricians and Gynecologists. Sexual misconduct. Statement of Policy. Washington, DC: American College of Obstetricians and Gynecologists; 2019. Available at: https://www.acog.org/-/media/Statements-of-Policy/Public/97SexualMisconduct-February-2019Rev.pdf. Retrieved September 17, 2019.
3. Federation of State Medical Boards. Addressing sexual boundaries: guidelines for state medical boards. Adopted as policy by the House of Delegates of the Federation of State Medical Boards. May 2006. Euless (TX): FSMB; 2006. Available at: https://www.fsmb.org/siteassets/advocacy/policies/grpol_sexual-boundaries.pdf. Retrieved April 9, 2019.
4. U. S. Department of Justice. Sexual assault. Washington, DC: DOJ; 2019. Available at: https://www.justice.gov/ovw/sexual-assault. Retrieved April 9, 2019.
5. Basson R, Baram DA. Sexuality, sexual dysfunction, and sexual assault. In: Berek JS, editor. Berek & Novak's gynecology. 15th ed. Philadelphia (PA): Lippincott Williams & Wilkins; 2012:270–304.

6. Sexual assault. ACOG Committee Opinion No. 777. American College of Obstetricians and Gynecologists. Obstet Gynecol 2019;133:e296–302.

7. Tillinghast E, Cournos F. Assessing the risk of recidivism in physicians with histories of sexual misconduct [published erratum appears in J Forensic Sci 2001;46:421]. J Forensic Sci 2000;45:1184–9.

8. Teegardin C. How the doctors and sex abuse project came about. Atlanta (GA): The Atlanta Journal-Constitution; 2016. Available at: http://doctors.ajc.com/about_this_investigation. Retrieved April 9, 2019.

9. AbuDagga A, Wolfe SM, Carome M, Oshel RE. Cross-sectional analysis of the 1039 U.S. physicians reported to the National Practitioner Data Bank for Sexual Misconduct, 2003-2013. PLoS One 2016;11:e0147800.

10. Arora KS, Douglas S, Goold SD. What brings physicians to disciplinary review? A further subcategorization. AJOB Empir Bioeth 2014;5:53–60.

11. Grant D, Alfred KC. Sanctions and recidivism: an evaluation of physician discipline by state medical boards. J Health Polit Policy Law 2007;32:867–85.

12. Enbom JA, Parshley P, Kollath J. A follow-up evaluation of sexual misconduct complaints: the Oregon Board of Medical Examiners, 1998 through 2002. Am J Obstet Gynecol 2004;190:1642–50, discussion 1650–3, 6A.

13. Kohatsu ND, Gould D, Ross LK, Fox PJ. Characteristics associated with physician discipline: a case-control study. Arch Intern Med 2004;164:653–8.

14. DuBois JM, Walsh HA, Chibnall JT, Anderson EE, Eggers MR, Fowose M, et al. Sexual violation of patients by physicians: a mixed-methods, exploratory analysis of 101 cases. Sex Abuse 2019;31:503–23.

15. Morton CH, Henley MM, Seacrist M, Roth LM. Bearing witness: United States and Canadian maternity support workers' observations of disrespectful care in childbirth. Birth 2018;45:263–74.

16. Reed R, Sharman R, Inglis C. Women's descriptions of childbirth trauma relating to care provider actions and interactions. BMC Pregnancy Childbirth 2017;17:21.

17. Elmir R, Schmied V, Wilkes L, Jackson D. Women's perceptions and experiences of a traumatic birth: a meta-ethnography. J Adv Nurs 2010;66:2142–53.

18. Grekin R, O'Hara MW. Prevalence and risk factors of postpartum posttraumatic stress disorder: a meta-analysis. Clin Psychol Rev 2014;34:389–401.

19. Thurston RC, Chang Y, Matthews KA, von Kanel R, Koenen K. Association of sexual harassment and sexual assault with midlife women's mental and physical health. JAMA Intern Med 2019;179:48–53.

20. Larsen ML, Hilden M, Skovlund CW, Lidegaard O. Somatic health of 2500 women examined at a sexual assault center over 10 years. Acta Obstet Gynecol Scand 2016;95:872–8.

21. American Medical Association. Romantic or sexual relationships with patients. In: Code of medical ethics of the American Medical Association. Chicago (IL): AMA; 2017:139, 372–5.

22. Gutheil TG. Borderline personality disorder, boundary violations, and patient-therapist sex: medicolegal pitfalls. Am J Psychiatry 1989;146:597–602.

23. Ladson D, Welton R. Recognizing and managing erotic and eroticized transferences. Psychiatry (Edgmont) 2007;4:47–50.

24. American Medical Association. Treating self or family. In: Code of medical ethics of the American Medical Association. Chicago (IL): AMA; 2017:16, 261–2.

25. American Medical Association. Reporting incompetent or unethical behaviors by colleagues. In: Code of medical ethics of the American Medical Association. Chicago (IL): AMA; 2017:150, 380–1.

26. Federation of State Medical Boards. Position statement on duty to report. Adopted as policy by the Federation of State Medical Boards. April 2016. Euless (TX): FSMB; 2016. Available at: http://www.fsmb.org/siteassets/advocacy/policies/position-statement-on-duty-to-report.pdf. Retrieved April 9, 2019.

27. Federation of State Medical Boards. Essentials of a state medical and osteopathic practice act. Adopted as policy by the Federation of State Medical Boards in April 2015. Euless (TX): FSMB; 2015. Available at: https://www.fsmb.org/siteassets/advocacy/policies/essentials-of-a-state-medical-and-osteopathic-practice-act.pdf. Retrieved April 9, 2019.

28. Professional use of digital and social media. ACOG Committee Opinion No. 791. American College of Obstetricians and Gynecologists. Obstet Gynecol 2019;134:e117–21.

29. Informed consent. ACOG Committee Opinion No. 439. American College of Obstetricians and Gynecologists. Obstet Gynecol 2009;114:401–8.

30. Coles J, Jones K. "Universal precautions": perinatal touch and examination after childhood sexual abuse. Birth 2009;36:230–6.

31. Seng JS, Sparbel KJ, Low LK, Killion C. Abuse-related posttraumatic stress and desired maternity care practices: women's perspectives. J Midwifery Womens Health 2002;47:360–70.

32. White A. Responding to prenatal disclosure of past sexual abuse. Obstet Gynecol 2014;123:1344–7.

33. Sobel L, O'Rourke-Suchoff D, Holland E, Remis K, Resnick K, Perkins R, et al. Pregnancy and childbirth after sexual trauma: patient perspectives and care preferences. Obstet Gynecol 2018;132:1461–8.

34. Raja S, Hasnain M, Hoersch M, Gove-Yin S, Rajagopalan C. Trauma informed care in medicine: current knowledge and future research directions. Fam Community Health 2015;38:216–26.

35. Adult manifestations of childhood sexual abuse. Committee Opinion No. 498. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011;118:392–5.

36. Intimate partner violence. Committee Opinion No. 518. American College of Obstetricians and Gynecologists. Obstet Gynecol 2012;119:412–7.

37. Reproductive and sexual coercion. Committee Opinion No. 554. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;121:41–5.

38. Veterans Health Administration. Health care services for women veterans. VHA directive 1330.01(2). Washington (DC): VHA; 2018. Available at: https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=5332. Retrieved April 9, 2019.

39. Royal College of Obstetricians and Gynaecologists. Obtaining valid consent. Clinical governance advice no. 6. January 2015. London (UK): RCOG; 2015. Available at: https://www.rcog.org.uk/globalassets/documents/guidelines/clinical-governance-advice/cga6.pdf. Retrieved April 9, 2019.

40. American Medical Association. Use of chaperones. Code of Medical Ethics Opinion 1.2.4. In: Code of medical ethics of the American Medical Association. Chicago, IL: AMA; 2017: 17–8. Available at: https://www.ama-assn.org/delivering-care/ethics/use-chaperones. Retrieved September 17, 2019.

41. DuBois JM, Anderson EE, Chibnall JT, Diakov L, Doukas DJ, Holmboe ES, et al. Preventing egregious ethical violations in medical practice: evidence-informed recommendations from a multidisciplinary working group. J Med Regul 2018;104:23–31.

42. American College of Obstetricians and Gynecologists. Your first gynecologic visit. ACOG Patient Education Pamphlet AP150. Washington, DC: American College of Obstetricians and Gynecologists; 2017.

43. Professional responsibilities in obstetric–gynecologic medical education and training. Committee Opinion No. 500. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011;118:400–4.

44. Goldie J, Schwartz L, Morrison J. Sex and the surgery: students' attitudes and potential behaviour as they pass through a modern medical curriculum. J Med Ethics 2004;30:480–6.

45. White GE. Setting and maintaining professional role boundaries: an educational strategy. Med Educ 2004;38: 903–10.

46. White GE. Medical students' learning needs about setting and maintaining social and sexual boundaries: a report. Med Educ 2003;37:1017–9.

47. Spickard WA Jr, Swiggart WH, Manley GT, Samenow CP, Dodd DT. A continuing medical education approach to improve sexual boundaries of physicians. Bull Menninger Clin 2008;72:38–53.

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Sexual misconduct. ACOG Committee Opinion No. 796. American College of Obstetricians and Gynecologists. Obstet Gynecol 2020;135:e43–50.

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AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Venography Services – Tab 14

In May 2020, the CPT Editorial Panel replaced a family of four cardiac catheterization codes with five new codes to describe cardiac catheterization for congenital cardiac defect(s). In addition, the Panel replaced two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects. In October 2020, the RUC reviewed and valued these six new 000-day global codes (93593-93598), which CMS implemented in the Medicare Physician Payment Schedule (MFS) effective January 1, 2022.

In February 2022, the CPT Editorial Panel approved the creation of six new add-on codes (93584-93588) for venography services. The services described by 93584 and 9X001 were previously reported using more general CPT codes 75827 *Venography, caval, superior, with serialography, radiological supervision and interpretation* and 75825 *Venography, caval, inferior, with serialography, radiological supervision and interpretation*, respectively; these previous codes were not solely for patients with congenital defects. The services described by codes 93585-93588 were previously reported with an unlisted code for cardiovascular services or procedures. These newly created codes represent add-on services that are performed during cardiac catheterization for congenital heart defects in the superior vena cava (SVC), the inferior vena cava (IVC), and in other congenital veins. The intention of the new codes was that they be reported with the corresponding 000 global cardiac catheterization codes.

At the April 2022 RUC meeting, the RUC recommended that existing CPT codes 93593-93598 and new add-on codes 93584-93588 be referred to the CPT Editorial Panel for further clarification within the CPT 2024 cycle. The distinctions between current coding and the newly created services were unclear and required revision by CPT to accurately explain whether the catheter placement performed for venography is part of a congenital cardiac catheterization. In September 2022, the CPT Editorial Panel approved the revision of the five new add-on codes (93584, 93585-93588) and rescinded 9X001 *Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; inferior vena cava (List separately in addition to code for primary procedure).* The codes were revised at the September 2022 CPT Editorial Panel meeting and surveyed for the January 2023 RUC Meeting.

Intensity

Selective catheter placement in anomalous congenital venous structures is not included in the base congenital cardiac catheterization codes. Therefore, add-on codes in the venography services family include selective catheter placement in the specific venous structure(s) being imaged as well as venography and radiologic supervision and interpretation. The RUC noted that there is a dearth of ZZZ comparator codes with similar time and intensity as CPT codes 93584 and 93585 – 93588. Recognizing that intensity is especially sensitive to time for ZZZ services, which generally have shorter procedure times and only include intra-service time (no pre/post-service time or visits), the RUC acknowledged that the recommended values would be the highest for ZZZ codes with commensurate intra-service time. However, the RUC concurs that the values are justified given the intensity of the physician work for these procedures, which involve the use of different catheters and wire combinations to

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navigate to the target location in surgically-altered or congenital-altered anatomy. These codes are for all patient ages, recognizing that the physician work becomes especially intense and complex when the patients are infants.

Moreover, the add-on services for the venography services family comprise more complex, detailed physician work than the underlying cardiac congenital catheterization codes and have appropriately higher intensity than these base codes. While the RUC notes that it is uncommon for an add-on code to be more intense than the underlying service, it does occur. A relevant example is trans-septal puncture CPT code 93462 *Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (List separately in addition to code for primary procedure)* (work RVU = 3.73, 40 minutes intra-service and total time) that may be performed with SVT ablation CPT code 93654 *Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording and catheter ablation of arrhythmogenic focus, including intracardiac electrophysiologic 3-dimensional mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and His bundle recording, when performed; with treatment of ventricular tachycardia or focus of ventricular ectopy including left ventricular pacing and recording, when performed* (work RVU = 18.10, 200 minutes intra-service and 291 minutes total time). The puncture procedure is more intense than the ablation. Similarly, for example, the base code 93593 *Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; normal native connections* (work RVU = 3.99, 45 minutes intra-service and 148 minutes total time) is less intense than the additional code 93584 where, if present, a second superior vena cava that requires incorporation into a surgical cavopulmonary anastomosis is entered.

93584 ***Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; anomalous or persistent superior vena cava when it exists as a second contralateral superior vena cava, with native drainage to heart (List separately in addition to code for primary procedure)***

The RUC reviewed the survey results from 42 congenital interventional cardiologists and determined that the survey 25th percentile work RVU of 1.20 appropriately accounts for the physician work involved in this add-on service. The RUC recommends 10 minutes intra-service and total time as supported by the survey. The work of 93584 is considerably complex, requiring extensive catheter manipulation in the second superior vena cava. Moreover, the less intense work of the base code has already been completed. As such, 93584 is highly intense from the first minute.

It was noted that CPT code 75827 *Venography, caval, superior, with serialography, radiological supervision and interpretation* (work RVU= 1.14), which is a CMS/Other valued code, is to be reported when a normal SVC is performed. For coding purposes, the term "anomalous/persistent left or right SVC" refers to a second SVC on the opposite side of the chest from the first SVC. For example, in typical cardiac anatomy, the SVC is on the right side and a persistent left SVC would be on the left side. In situs inversus, the SVC would typically be located on the left side of the chest, and a persistent right SVC would be on the right side. In heterotaxy, bilateral SVCs are common. In these scenarios, venography of the first SVC would be reported with 75827, and catheter placement and venography of the persistent/anomalous SVC would be reported with 93584. Formerly, the additional work of performing the persistent/anomalous SVC was reported using unlisted code 93799. The RUC concurred with the specialties that performing catheter placement and venography of the persistent/anomalous SVC on a pediatric patient with this congenital defect is more intense/complex than performing venography of the SVC in typical cardiac anatomy of an adult patient.

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It was also noted that catheter placement in a normal SVC is considered part of the base congenital cardiac catheterization codes. Whereas selective catheter placement in anomalous congenital venous structures is not included in the base congenital cardiac catheterization service and is separately included in the new add-on congenital venography CPT codes.

The RUC compared the surveyed code to the top key reference service and MPC code 36227 *Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 2.09, 15 minutes intra-service and total time) and noted that the surveyed code requires less time and intensity than the reference code and is therefore appropriately valued lower. The RUC also compared the surveyed code to the second highest key reference service code 75774 *Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 1.01, 30 minutes intra-service and total time) and noted that the surveyed code requires much less time and much greater intensity than the reference code and is therefore appropriately valued higher. A key difference between these two key reference services is the first includes catheter placement and the latter does not, thus the significant variability in their values.

For additional support, the RUC referenced MPC code 37253 *Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)* (work RVU = 1.44, 20 minutes intra-service and 21 minutes total time) and noted that the intra-service time is higher and the intensity is lower than the surveyed code. The RUC concluded that CPT code 93584 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 1.20 for CPT code 93584.**

93585 ***Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; azygos/hemi-azygos venous system (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 42 congenital interventional cardiologists and determined that the survey 25th percentile work RVU of 1.13 appropriately accounts for the physician work involved in this add-on service. The RUC recommends 10 minutes intra-service and total time as supported by the survey. The work of 93585 is considerably complex as it requires significant and extensive catheter manipulation It was noted that, if catheter entry is superior to the heart, it is more complicated than inferior access.

The RUC compared the surveyed code to the top key reference service code 75774 *Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 1.01 and 30 minutes intra-service time) and noted that the surveyed code requires much less time and much greater intensity than the reference code and is therefore appropriately valued higher. The RUC also compared the surveyed code to the second highest key reference service MPC code 36227 *Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 2.09 and 15 minutes intra-service time) and noted that the surveyed code requires less time and intensity than the reference code and is therefore appropriately valued lower. The RUC concluded that CPT code 93585 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 1.13 for CPT code 93585.**

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93586 ***Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; coronary sinus (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 42 congenital interventional cardiologists and determined that the survey 25th percentile work RVU of 1.43 appropriately accounts for the physician work involved in this add-on service. The RUC recommends 12 minutes intra-service and total time as supported by the survey. The work of 93586 is considerably complex as it requires significant and extensive catheter manipulation. Within the code family, the coronary sinus is typically normal, without congenital defects, however, the drainage patterns, size, and stenosis can vary which can increase the complexity of the venography.

The RUC compared the surveyed code to the top key reference service MPC code 36227 *Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 2.09, 15 minutes intra-service and total time) and noted that the surveyed code requires less time and intensity than the reference code and is therefore appropriately valued lower. The RUC also compared the surveyed code to the second highest key reference service code 75774 *Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 1.01, 30 minutes intra-service and total time) and noted that the surveyed code requires much less time and much greater intensity than the reference code and is therefore appropriately valued higher.

For additional support, the RUC referenced MPC code 37253 *Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)* (work RVU = 1.44, 20 minutes intra-service and 21 minutes total time) and noted the close comparison in the amount of physician work involved in the procedures. The RUC concluded that CPT code 93586 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 1.43 for CPT code 93586.**

93587 ***Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; venovenous collaterals originating at or above the heart (eg, from innominate vein) (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 42 congenital interventional cardiologists and determined that the survey median work RVU of 2.11 appropriately accounts for the physician work involved in this add-on service. The RUC recommends 16 minutes intra-service time as supported by the survey. The work of 93587 is more complex as it requires significantly different and more extensive catheter manipulation and injecting various venovenous (VV) collaterals. These VV collaterals are not present at birth, instead, they develop as complications of chronically high systemic venous pressures. The physician work for this procedure is typically performed on two vessels that are difficult to reach. Moreover, there is no pre-procedure imaging to determine the vessels so the physician must search for them, adding to the complexity.

The RUC compared the surveyed code to the top key reference service MPC code 36227 *Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 2.09, 15 minutes intra-service and total time) and noted that the surveyed code has similar time and intensity as the reference code and should therefore be valued similarly. The RUC also compared the surveyed code to the second highest key reference service code 75774 *Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 1.01, 30 minutes intra-service and total

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time) and noted that the surveyed code has much less time but much greater intensity than the reference code and is therefore appropriately valued higher.

For additional support, the RUC referenced CPT code 34713 *Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 French or larger), including ultrasound guidance, when performed, unilateral (List separately in addition to code for primary procedure)* (work RVU = 2.50 and 20 minutes intra-service time) and noted the greater amount of time and physician work involved with the comparison procedure. The RUC concluded that CPT code 93587 should be valued at the median work RVU as supported by the survey. **The RUC recommends a work RVU of 2.11 for CPT code 93587.**

93588 ***Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; venovenous collaterals originating below the heart (eg, from the inferior vena cava) (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 42 congenital interventional cardiologists and determined that the survey median work RVU of 2.13 appropriately accounts for the physician work involved in this add-on service. The RUC recommends 17 minutes intra-service and total time as supported by the survey. The work of 93588 is significantly more complex as it requires significantly different and more extensive catheter manipulation as the congenital anomaly can be in a different place in every patient. The existence of anomalous systemic venous return often requires an additional venous cannula during cardiopulmonary bypass, heightening the importance of identification for pre-operative planning. Systemic venous anomalies may create an increase in technical and procedural complexity by making it more challenging to obtain essential information during cardiac catheterization or by necessitating alternative vascular access sites to perform catheterization procedures. The venovenous (VV) collaterals are not present at birth, instead, they develop as complications of chronically high systemic venous pressures. The physician work for this procedure is typically performed on two vessels that are difficult to reach. Moreover, there is no pre-procedure imaging to determine the vessels so the physician must search for them, adding to the complexity.

The RUC compared the surveyed code to the top key reference service MPC code 36227 *Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 2.09, 15 minutes intra-service and total time) and noted that the surveyed code has similar time and intensity as the reference code and should therefore be valued similarly. The RUC also compared the surveyed code to the second highest key reference service code 75774 *Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 1.01, 30 minutes intra-service and total time) and noted that the surveyed code has much less time but much greater intensity than the reference code and is therefore appropriately valued higher.

For additional support, the RUC referenced CPT code 34713 *Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 French or larger), including ultrasound guidance, when performed, unilateral (List separately in addition to code for primary procedure)* (work RVU = 2.50, 20 minutes intra-service and total time) and noted that the surveyed code has less time and similar intensity. The RUC concluded that CPT code 93588 should be valued at the median work RVU as supported by the survey. **The RUC recommends a work RVU of 2.13 for CPT code 93588.**

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Affirmations
The RUC affirms the October 2020 RUC recommendations for CPT codes 93593-93598 and notes that CMS reduced the value of codes 93595-93598. Thus, the RUC continues to recommend the following work RVUs: 3.99 for CPT code 93593, 6.10 for CPT code 93594, 6.00 for CPT code 93595, 7.91 for CPT code 93596, 9.99 for CPT code 93597 and 1.75 for CPT code 93598.

Practice Expense
No direct practice expense inputs are recommended for CPT codes 93584 and 93585 – 93588 as they are facility-based add-on services.

New Technology
CPT codes 93584 and 93585 – 93588 will be placed on the New Technology list and will be re-reviewed on the same timeline as the family of codes 93593-93598 from October 2020 to ensure correct valuation and utilization assumptions.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation

Medicine
Cardiovascular
Cardiac Catheterization
Cardiac Catheterization for Congenital Heart Defects

Cardiac catheterization for the evaluation of congenital heart defect(s) is reported with 93593, 93594, 93595, 93596, 93597, 93598. Cardiac catheterization services for anomalous coronary arteries arising from the aorta or off of other coronary arteries, patent foramen ovale, mitral valve prolapse, and bicuspid aortic valve, in the absence of other congenital heart defects, are reported with 93451-93464, 93566, 93567, 93568. However, when these conditions exist in conjunction with other congenital heart defects, 93593, 93594, 93595, 93596, 93597 may be reported. Evaluation of anomalous coronary arteries arising from the pulmonary arterial system is reported with the cardiac catheterization for congenital heart defects codes.

For additional guidance on reporting cardiac catheterization services for congenital heart defects versus non-congenital indications, see Cardiac Catheterization guidelines.

Right heart catheterization*…*

Catheter placement and*…*

For cardiac catheterization…

…

Normal native connections exist when the pathway of blood flow follows the expected course through the right and left heart chambers and great vessels (ie, superior vena cava [SVC]*/inferior vena cava* [IVC] *to right atrium, then right ventricle, then pulmonary arteries for the right*

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heart; left atrium to left ventricle, then aorta for the left heart). Examples of congenital heart defects with normal connections would include acyanotic defects such as isolated atrial septal defect, ventricular septal defect, or patent ductus arteriosus. Services including right heart catheterization for congenital cardiac anomalies with normal connections are reported with 93593, 93596.

…

Left heart catheterization*…*

Catheter placement and*…*

For cardiac catheterization…

When contrast injection(s) is performed in conjunction with cardiac catheterization for congenital heart defects, see injection procedure codes 93563, 93564, 93565, 93566, 93567, 93568, 93569, 93573, 93574, 93575, 93584, 93585, 93586, 93587, 93588, or use appropriate codes from the Radiology section and the Vascular Injection Procedures subsection in the Surgery/Cardiovascular System section. For venography of the IVC, report 75825. For venography of the SVC, report 75827. Venography of an anomalous or persistent SVC (93584), the azygous/hemiazygous venous system (93585), the coronary sinus (93586), or veno-venous collaterals (93587, 93588) requires catheter placement(s) distinct from that required for congenital right and left heart catheterization. Therefore, 93584, 93585, 93586, 93587, 93588 include catheter placement in addition to venography. Codes 93563, 93564, 93565, 93566, 93567, 93568, 93569, 93573, 93574, 93575, 93584, 93585, 93586, 93587, 93588 include imaging supervision, interpretation, and report.

Injection procedures 93563, 93564, 93565, 93566, 93567, 93568, 93569, 93573, 93574, 93575, 93584, 93585, 93586, 93587, 93588 represent separate, identifiable services and may be reported in conjunction with one another, when appropriate. For angiography of other noncoronary and nonpulmonary arteries and veins, performed as a distinct service, use appropriate codes from the Radiology section and the Vascular Injection Procedures subsection in the Surgery/Cardiovascular System section.

Venography: Catheter placement in a normal SVC and a normal IVC is considered part of standard congenital cardiac catheterization. When venography of the normal IVC is performed, report 75825. When venography of the normal SVC is performed, report 75827. For coding purposes, the term "anomalous/persistent left or right SVC" refers to a second SVC on the opposite side of the chest from the first SVC. For example, in typical cardiac anatomy, the SVC is on the right side and a persistent left SVC would be on the left side. In situs inversus, the SVC would typically be located on the left side of the chest, and a persistent right SVC would be on the right side. In heterotaxy, bilateral SVCs are common. In these scenarios, venography of the first SVC would be reported with 75827, and catheter placement and venography of the persistent/anomalous SVC would be reported with 93584.

Selective catheter placement in anomalous congenital venous structures is not included in standard congenital cardiac catheterization. Therefore, add-on codes 93584, 93585, 93586, 93587, 93588 include selective catheter placement in the specific venous structure(s) being imaged as well as venography and radiologic supervision and interpretation.

Angiography of the…

Selective pulmonary angiography codes for cardiac catheterization [93569, 93573, 93574, 93575] include selective catheter positioning of the angiographic catheter, injection, and radiologic supervision and interpretation).

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(f)93593	D1	Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; normal native connections	000	3.99 AFFIRM October 2020 RUC Recommendation
(f)93594	D2	abnormal native connections	000	6.10 AFFIRM October 2020 RUC Recommendation
(f)93595	D3	Left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone, normal or abnormal native connections	000	6.00 AFFIRM October 2020 RUC Recommendation
(f)93596	D4	Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); normal native connections	000	7.91 AFFIRM October 2020 RUC Recommendation
(f)93597	D5	abnormal native connections	000	9.99 AFFIRM October 2020 RUC Recommendation
✚●93584	D6	Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; anomalous or persistent superior vena cava when it exists as a second contralateral superior vena cava, with native drainage to heart (List separately in addition to code for primary procedure) (Use 93584 in conjunction with 93593, 93594, 93596, 93597) (Report 93584 once per session)	ZZZ	1.20
✚●93585	D7	azygos/hemi-azygos venous system (List separately in addition to code for primary procedure) (Use 93585 in conjunction with 93593, 93594, 93596, 93597) (Report 93585 once per session)	ZZZ	1.13

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✚●93586	D8	coronary sinus (List separately in addition to code for primary procedure) (Use 93586 in conjunction with 93593, 93594, 93596, 93597) (Report 93586 once per session)	ZZZ	1.43
✚●93587	D9	venovenous collaterals originating at or above the heart (eg, from innominate vein) (List separately in addition to code for primary procedure) (Use 93587 in conjunction with 93593, 93594, 93596, 93597) (Report 93587 once per session)	ZZZ	2.11
✚●93588	D10	venovenous collaterals originating below the heart (eg, from the inferior vena cava) (List separately in addition to code for primary procedure) (Use 93588 in conjunction with 93593, 93594, 93596, 93597) (Report 93588 once per session)	ZZZ	2.13
(f)93598	D11	Cardiac output measurement(s), thermodilution or other indicator dilution method, performed during cardiac catheterization for the evaluation of congenital heart defects (List separately in addition to code for primary procedure) (Use 93598 in conjunction with 93593, 93594, 93595, 93596, 93597) (Do not report 93598 in conjunction with 93451-93461) (For pharmacologic agent administration during cardiac catheterization for congenital heart defect[s], use 93463) (For physiological exercise study with cardiac catheterization for congenital heart defect[s], use 93464) (For indicator dilution studies such as thermodilution for cardiac output measurement during cardiac catheterization for congenital heart defect[s], use 93598)	ZZZ	1.75 AFFIRM October 2020 RUC Recommendation

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		(For contrast injections during cardiac catheterization for congenital heart defect[s], see 75825, 75827, 93563, 93564, 93565, 93566, 93567, 93568, 93569, 93573, 93574, 93575, 93584, 93585, 93586, 93587, 93588) (For angiography or venography not described in the 90000 series code section, see appropriate codes from the Radiology section and the Vascular Injection Procedures subsection in the Surgery/Cardiovascular System section) (For transseptal or transapical access of the left atrium during cardiac catheterization for congenital heart defect[s], use 93462 in conjunction with 93595, 93596, 93597, as appropriate)		

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December 13, 2022

Ezequiel Silva, MD
AMA/RVS Update PE Subcommittee
American Medical Association
330 N. Wabash Avenue
Chicago, IL 60611

Re: Tab 14 Venography Services

Dear Dr. Silva:

Tab 14 on the January 2023 RUC agenda addresses 11 codes. Five of these are new codes from CPT, which describe venography services (93584, 93585--93588) sometimes performed during cardiac catheterization for congenital heart defects. These five new add-on codes will be reported with six recently created 000 global codes (93593-93598) that describe congenital catheterization services. The societies will present survey data and recommendations for the 93584, 93585-93588 at this meeting. In this letter, we recommend the RUC affirm its prior recommendations for codes 93593-93598.

At the May 2020 meeting, CPT created the new family of congenital catheterization codes to replace outdated codes that no longer adequately described the work of congenital catheterization. These changes were made to address gaps in the prior codes and changes in the services as a result of technology evolution over the prior two decades.

Codes 93593-93598 were valued by the RUC in October 2020 and CMS implemented them in the fee schedule—with some work RVU reductions opposed by AMA and the societies—January 1, 2022. The newly created venography add-on codes are additive to the underlying congenital catheterization codes. 93584, 93585-93588 represent work that has previously been undescribed by CPT. They do not change the work of 93593-93598 and were created to be separate and additive ZZZ services. Therefore, the societies recommend affirmation of the 2020 RUC valuation for codes 93593-93598. The entire group of 11 codes is displayed below in a table for convenience.

(f)*93593*	D1	*Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; normal native connections*	000	3.99
(f)*93594*	D2	*abnormal native connections*	000	6.10
(f)*93595*	D3	*Left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone, normal or abnormal native connections*	000	6.00 *(CMS 5.50)*
(f)*93596*	D4	*Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); normal native connections*	000	7.91 *(CMS 6.84)*

(f)*93597*	D5	*abnormal native connections*	000	9.99 *(CMS 8.88)*
✚●93584	D6	Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; anomalous or persistent superior vena cava when it exists as a second contralateral superior vena cava, with native drainage to heart (List separately in addition to code for primary procedure) (Use 93584 in conjunction with 93593, 93594, 93595, 93596, 93597) (Report 93584 once per session)	ZZZ	
✚●93585	D8	azygos/hemi-azygos venous system (List separately in addition to code for primary procedure) (Use 93585 in conjunction with 93593, 93594, 93595, 93596, 93597) (Report 93585 once per session)	ZZZ	
✚●93586	D9	coronary sinus (List separately in addition to code for primary procedure) (Use 93586 in conjunction with 93593, 93594, 93595, 93596, 93597) (Report 93586 once per session)	ZZZ	
✚●93587	D10	venovenous collaterals originating at or above the heart (eg, from innominate vein) (List separately in addition to code for primary procedure) (Use 93587 in conjunction with 93593, 93594, 93595, 93596, 93597) (Report 93587 once per session)	ZZZ	
✚●93588	D11	venovenous collaterals originating below the heart (eg, from the inferior vena cava) (List separately in addition to code for primary procedure) (Use 93588 in conjunction with 93593, 93594, 93595, 93596, 93597) (Report 93588 once per session)	ZZZ	
(f)✚*93598*	D12	*Cardiac output measurement(s), thermodilution or other indicator dilution method, performed during cardiac catheterization for the*	ZZZ	1.75

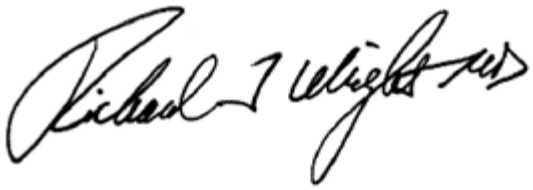
		evaluation of congenital heart defects (List separately in addition to code for primary procedure) *(Use 93598 in conjunction with 93593, 93594, 93595, 93596, 93597)* *(Do not report 93598 in conjunction with 93451- 93461)* *(For pharmacologic agent administration during cardiac catheterization for congenital heart defect[s], use 93463)* *(For physiological exercise study with cardiac catheterization for congenital heart defect[s], use 93464)* *(For indicator dilution studies such as thermodilution for cardiac output measurement during cardiac catheterization for congenital heart defect[s], use 93598)* *(For contrast injections during cardiac catheterization for congenital heart defect[s], see 93563, 93564, 93565, 93566, 93567, 93568, 93569, 93573, 93574, 93575,* 93584, 9X001, 93585, 93586, 93587, 93588*)* *(For angiography or venography not described in the 90000 series code section, see appropriate codes from the Radiology section and the Vascular Injection Procedures subsection in the Surgery/Cardiovascular System section)* *(For transseptal or transapical access of the left atrium during cardiac catheterization for congenital heart defect[s], use 93462 in conjunction with 93595, 93596, 93597, as appropriate)*		*(CMS 1.44)*

Thank you for your consideration of this information as you prepare for the upcoming meeting. Please contact Matt Minnella at mminnella@acc.org if you have any questions.

Sincerely,



Afnan Tariq, MD
SCAI RUC Advisor



Richard Wright, MD
ACC RUC Advisor

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93584 Tracking Number D6 Original Specialty Recommended RVU: **1.60**
Presented Recommended RVU: **1.60**
Global Period: ZZZ Current Work RVU: **N/A** RUC Recommended RVU: **1.20**

CPT Descriptor: Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; anomalous or persistent superior vena cava when it exists as a second contralateral superior vena cava, with native drainage to heart (List separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: During a diagnostic right and left cardiac catheterization in preparation for next stage cavopulmonary anastomosis in a 5-month-old female with hypoplastic left heart syndrome status post Norwood operation, an anomalous superior vena cava is identified, and venography is performed to aid surgical planning. [Note: This is an add-on service. Only consider the additional work related to achieving catheter placement and performance of anomalous superior vena cava venography.]

Percentage of Survey Respondents who found Vignette to be Typical: 97%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: An end hole guide catheter is inserted through a venous sheath and, with guidewire assistance, into a superior vena cava. Venography is performed with contrast injection. If present, a second superior vena cava that requires incorporation into a surgical cavopulmonary anastomosis is entered. (Catheter placement is reported separately with the diagnostic cardiac catheterization codes for congenital heart disease.) Venography with contrast injection is repeated to delineate the vessel course.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Mark Hoyer MD, Afnan Tariq, MD, Richard Wright, MD, Edward Tuohy, MD					
Specialty Society(ies):	SCAI, ACC					
CPT Code:	93584					
Sample Size:	370	**Resp N:**	42			
Description of Sample:	random sampling of congenital cardiologists					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		1.00	6.00	**15.00**	30.00	400.00
Survey RVW:		0.86	1.20	**1.60**	2.07	5.00
Pre-Service Evaluation Time:				**0.00**		
Pre-Service Positioning Time:				**0.00**		
Pre-Service Scrub, Dress, Wait Time:				**0.00**		
Intra-Service Time:		1.00	6.00	**10.00**	15.00	45.00
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	93584	**Recommended Physician Work RVU: 1.20**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? Yes

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
36227	ZZZ	2.09	**RUC Time**

CPT Descriptor Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
75774	ZZZ	1.01	**RUC Time**

CPT Descriptor Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37253	ZZZ	1.44	**RUC Time**	105,426

CPT Descriptor 1 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36227	ZZZ	2.09	**RUC Time**	13,420

CPT Descriptor 2 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
36483	ZZZ	1.75	**RUC Time**

CPT Descriptor Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous;

subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 19 **% of respondents:** 45.2 **%**

Number of respondents who choose 2nd Key Reference Code: 17 **% of respondents:** 40.4 **%**

TIME ESTIMATES (Median)

	CPT Code: 93584	Top Key Reference CPT Code: 36227	2nd Key Reference CPT Code: 75774
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	10.00	15.00	30.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**10.00**	**15.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	5%	0%	68%	26%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	16%	58%	26%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	5%	63%	32%
Physical effort required	5%	68%	26%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	42%	47%	11%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	41%	53%	6%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	59%	41%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	59%	41%
Physical effort required	0%	53%	47%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	82%	18%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The CPT Panel approved a proposal at the February 2022 meeting to create six new codes to describe venography procedures performed during cardiac catheterizations for congenital heart defects. When attempting to survey for the April RUC meeting, the societies found that the codes were inherently flawed, two were redundant, and none could be correctly valued. The societies asked the RUC for a referral back to CPT to correct the code set. The CPT Panel approved an amended proposal at the September 2022 meeting to create five new codes that accurately describe venography procedures performed during cardiac catheterizations for congenital heart defects.

Congenital anomalies of the systemic venous return to the right atrium are rare in the general population (< 0.5%). However, there is a markedly increased incidence in congenital heart disease (CHD), as high as 4-10%, which increases to more than 50% when there are abnormalities in cardiac position (eg. situs inversus, heterotaxy syndromes). These abnormalities may be associated with significant cyanosis. Proper identification is of critical importance as the anatomy may have technical implications in the performance of percutaneous diagnostic and interventional procedures and/or open-heart surgery. The existence of anomalous systemic venous return often requires an additional venous cannula during cardiopulmonary bypass. Systemic venous anomalies may create an increase in technical and procedural complexity by making it more challenging to obtain essential information during cardiac catheterization or by necessitating alternative vascular access sites to perform catheterization procedures.

There are known and well-defined abnormalities of both the superior and inferior vena caval drainage, as well as abnormal vascular connections that develop from obstruction and excessively pressurized venous systems, as the blood decompresses through any alternative route.

Most of the variants are present at birth and represent a disruption of normal embryologic development. In normal anatomy, the venous blood from the upper half of the body travels through a right-sided superior vena cava (SVC) and drains to the right-sided systemic venous atrium. However, anomalies include a single left sided SVC draining to the right or left-sided systemic venous atrium via a persistent embryologic connection to the coronary sinus or bilateral SVC's draining through both routes. Abnormalities of the attachment points to the heart are also possible in some severe forms of CHD.

The systemic venous drainage from the lower body is typically carried by a right-sided inferior vena cava (IVC), which also drains to the right atrium. However, this may also be found on the opposite side, or the IVC may be completely interrupted with flow travelling through naturally occurring bypass routes via the azygos or hemi-azygos system to the superior venous system (which may also be anomalous, as described above) before finally reaching the heart.

The congenital interventionalist is often tasked with properly identifying and characterizing all abnormalities of the systemic venous drainage as part of a diagnostic procedure, since the specific anatomic details directly impacts procedural planning, surgical options, and approach, as well as overall prognosis.

Because there have not been CPT codes to reflect this distinct diagnostic work, the currently available angiographic codes are simply unable to accurately correctly capture these anatomic variants that are frequently encountered in congenital heart disease. As a result, they do not allow for proper CPT coding and tracking of patients with these conditions. Further, the current codes do not accurately reflect the marked difference in time and attention required to access and image each of these vessels when compared to normally located venous structures.

The newly created codes have never had a CPT code to describe their specific work. The ACC and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes.

Survey Data Observations

A joint RVS committee from the two societies reviewed the survey data to develop work RVU recommendations for the RUC. The ZZZ-global day survey was completed by physicians who have experience with the services.

For all five codes in this family, we see reasonable alignment in comparison to one of the KRS codes that we believe can be supported with other comparison codes. Based on the relationship to the KRS code which is also an MPC code, and other comparators, we are recommending the median work RVUs for the entire family.

93584 Survey Results:
The key reference code is 36227 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation. It was selected by 45% of respondents. 26% of respondents indicated that 93584 was more complex. The second reference code is 75774 angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation. It was selected by 40% of respondents. 53% of respondents indicated that 93584 was more complex. We would point out a key difference in these two KRS codes with the first including catheter placement and the latter not. Hence the significant variability in their values are for good reason.

93584 Recommendation:
The societies are recommending the median work RVU of 1.60 with the median survey time of 10 minutes. The work value falls between the MPC code 37253 and the first KRS 36227 and close to other comparators which have RVUs just below and above the recommendation as shown in the summary spreadsheet. The work of 93584 is significantly more complex as it requires significantly different and more extensive catheter manipulation as the congenital anomaly can be in a different place in every patient.

All codes in the family fit appropriately relative to the time and intensity of the KRS code 36227 (15 minutes and 2.09 wRVUs) at the medians. While we recognize IWPUT is sensitive for short services, we think recommendations at these times that produce IWPUTs slightly above/below 36227 bolster the recommendations. The family of codes also proceeds roughly as expected in a rationale rank order, with increasing time and RVUs as we work through the family.

Finally, these services for more fine/detailed work beyond the base codes have an appropriately higher IWPUT than the base codes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Cardiology How often? Sometimes

Specialty Cardiology How often? Rarely

Specialty Interventional Radiology How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 4500
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 50% of roughly 4500 births annually with single ventricule physiology or related defects undergo the service in first year. In addition, there are many other types of heart defects that also require this service for preoperative and other care planning through these patients lives. We are using the full 4500 births number to estimate roughly the universe of services.

Specialty Interventional Cardiology Frequency 4276 Percentage 95.02 %

Specialty Cardiology Frequency 136 Percentage 3.02 %

Specialty Interventional Radiology Frequency 88 Percentage 1.95 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 450
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 90% of these service will be provided to non-Medicare patients, but not knowable with high certainty because of lack of prior coding breakdown for congenital use.

Specialty Interventional Cardiology Frequency 427 Percentage 94.88 %

Specialty Cardiology Frequency 14 Percentage 3.11 %

Specialty Interventional Radiology Frequency 9 Percentage 2.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93572

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93585 Tracking Number D7 Original Specialty Recommended RVU: **1.63**
Presented Recommended RVU: **1.38**
Global Period: ZZZ Current Work RVU: **N/A** RUC Recommended RVU: **1.13**

CPT Descriptor: venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; azygos/hemi-azygos venous systemâ€¯(list separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: during diagnostic right and left cardiac catheterization in a 2-month-old male with heterotaxy syndrome, venography of the azygos or hemi-azygos vein is performed. [note: this is an add-on service. only consider the additional work related to achieving catheter placement and performance of azygos or hemi-azygos venography.]

Percentage of Survey Respondents who found Vignette to be Typical: 97%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: An end hole guide catheter is inserted through a venous sheath and, with guidewire assistance, into the inferior vena cava. If present, a second inferior vena cava is entered. (Catheter placement is reported separately with the diagnostic cardiac catheterization codes for congenital heart disease.) Venography of the inferior vena cava(e) is performed with contrast injection to delineate its drainage.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Mark Hoyer, MD, Afnan Tariq, MD, Richard Wright, MD, Edward Tuohy, MD					
Specialty Society(ies):	SCAI, ACC					
CPT Code:	93585					
Sample Size:	370	**Resp N:**	42			
Description of Sample:	random sample of congenital cardiologists					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		2.00	5.00	**8.00**	20.00	150.00
Survey RVW:		0.80	1.13	**1.63**	2.09	5.00
Pre-Service Evaluation Time:				**0.00**		
Pre-Service Positioning Time:				**0.00**		
Pre-Service Scrub, Dress, Wait Time:				**0.00**		
Intra-Service Time:		3.00	6.00	**10.00**	15.00	48.00
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	93585	**Recommended Physician Work RVU: 1.13**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? Yes

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
75774	ZZZ	1.01	**RUC Time**

CPT Descriptor Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
36227	ZZZ	2.09	**RUC Time**

CPT Descriptor Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37253	ZZZ	1.44	**RUC Time**	105,426

CPT Descriptor 1 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36227	ZZZ	2.09	**RUC Time**	13,420

CPT Descriptor 2 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
36483	ZZZ	1.75	**RUC Time**

CPT Descriptor Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous;

subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 20 **% of respondents:** 47.6 **%**

Number of respondents who choose 2nd Key Reference Code: 17 **% of respondents:** 40.4 **%**

TIME ESTIMATES (Median)

	CPT Code: 93585	Top Key Reference CPT Code: 75774	2nd Key Reference CPT Code: **36227**
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	10.00	30.00	15.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**10.00**	**30.00**	**15.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	10%	30%	55%	5%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	10%	35%	55%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	10%	40%	50%
Physical effort required	5%	45%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	5%	65%	30%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	6%	47%	41%	6%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	12%	53%	35%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	53%	47%
Physical effort required	0%	59%	41%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	41%	41%	18%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

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The CPT Panel approved a proposal at the February 2022 meeting to create six new codes to describe venography procedures performed during cardiac catheterizations for congenital heart defects. When attempting to survey for the April RUC meeting, the societies found that the codes were inherently flawed, two were redundant, and none could be correctly valued. The societies asked the RUC for a referral back to CPT to correct the code set. The CPT Panel approved an amended proposal at the September 2022 meeting to create five new codes that accurately describe venography procedures performed during cardiac catheterizations for congenital heart defects.

Congenital anomalies of the systemic venous return to the right atrium are rare in the general population (< 0.5%). However, there is a markedly increased incidence in congenital heart disease (CHD), as high as 4-10%, which increases to more than 50% when there are abnormalities in cardiac position (eg. situs inversus, heterotaxy syndromes). These abnormalities may be associated with significant cyanosis. Proper identification is of critical importance as the anatomy may have technical implications in the performance of percutaneous diagnostic and interventional procedures and/or open-heart surgery. The existence of anomalous systemic venous return often requires an additional venous cannula during cardiopulmonary bypass. Systemic venous anomalies may create an increase in technical and procedural complexity by making it more challenging to obtain essential information during cardiac catheterization or by necessitating alternative vascular access sites to perform catheterization procedures.

There are known and well-defined abnormalities of both the superior and inferior vena caval drainage, as well as abnormal vascular connections that develop from obstruction and excessively pressurized venous systems, as the blood decompresses through any alternative route.

Most of the variants are present at birth and represent a disruption of normal embryologic development. In normal anatomy, the venous blood from the upper half of the body travels through a right-sided superior vena cava (SVC) and drains to the right-sided systemic venous atrium. However, anomalies include a single left sided SVC draining to the right or left-sided systemic venous atrium via a persistent embryologic connection to the coronary sinus or bilateral SVC's draining through both routes. Abnormalities of the attachment points to the heart are also possible in some severe forms of CHD.

The systemic venous drainage from the lower body is typically carried by a right-sided inferior vena cava (IVC), which also drains to the right atrium. However, this may also be found on the opposite side, or the IVC may be completely interrupted with flow travelling through naturally occurring bypass routes via the azygos or hemi-azygos system to the superior venous system (which may also be anomalous, as described above) before finally reaching the heart.

The congenital interventionalist is often tasked with properly identifying and characterizing all abnormalities of the systemic venous drainage as part of a diagnostic procedure, since the specific anatomic details directly impacts procedural planning, surgical options, and approach, as well as overall prognosis.

Because there have not been CPT codes to reflect this distinct diagnostic work, the currently available angiographic codes are simply unable to accurately correctly capture these anatomic variants that are frequently encountered in congenital heart disease. As a result, they do not allow for proper CPT coding and tracking of patients with these conditions. Further, the current codes do not accurately reflect the marked difference in time and attention required to access and image each of these vessels when compared to normally located venous structures.

The newly created codes have never had a CPT code to describe their specific work. The ACC and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes.

Survey Data Observations

A joint RVS committee from the two societies reviewed the survey data to develop work RVU recommendations for the RUC. The ZZZ-global day survey was completed by physicians who have experience with the services.

For all five codes in this family, we see reasonable alignment in comparison to one of the KRS codes that we believe can be readily supported with other comparison codes. Based on the relationship to the KRS code which is also an MPC code, and other comparators, we are recommending the median work RVUs for the entire family.

93585 Survey Results:

The key reference code is 75774, angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation. It was selected by 47.6% of respondents. 60% of respondents indicated that 93585 was more complex. The second reference code is 36227, selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation. It was selected by 40.4% of respondents. 47% of respondents indicated that 93585 was more complex. We would point out a key difference in these two KRS codes with the first does not include catheter placement and the latter does. Hence the significant variability in their values are for good reason.

93585 Recommendation:

The societies are recommending the median work RVU of 1.63 with the median survey time of 10 minutes. The work value falls between the first 75774 and the second KRS 36227 and close to other comparators which have RVUs just below and above the recommendation as shown in the summary spreadsheet. The work of 93585 is significantly more complex as it requires significantly more extensive catheter manipulation.

All codes in the family fit appropriately relative to the time and intensity of the KRS code 36227 (15 minutes and 2.09 wRVUs) at the medians. While we recognize IWPUT is sensitive for short services, we think recommendations at these times that produce IWPUTs slightly above/below 36227 bolster the recommendations. The family of codes also proceeds roughly as expected in a rationale rank order, with increasing time and RVUs as we work through the family.

Finally, these services for more fine/detailed work beyond the base codes have an appropriately higher IWPUT than the base codes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Cardiology How often? Sometimes

Specialty Interventional Radiology How often? Rarely

Specialty Cardiology How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 1500
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming a sixth of roughly 4500 births annually with ventricular or related defects undergo the service in first year. In addition, there are many other types of heart defects that also require this service for preoperative and other care planning through these patients lives. We are doubling the first year estimate to account for the possible subsequent procedures performed on these patients at various times throughout their lives.

Specialty Interventional Cardiology Frequency 1425 Percentage 95.00 %

Specialty Cardiology Frequency 45 Percentage 3.00 %

Specialty Intervventional Radiology Frequency 30 Percentage 2.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 150
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 90% of these service will be provided to non-Medicare patients, but not knowable with high certainty because of lack of prior coding breakdown for congenital use.

Specialty Interventional Cardiology Frequency 142 Percentage 94.66 %

Specialty Cardiology Frequency 5 Percentage 3.33 %

Specialty Interventional Radiology Frequency 3 Percentage 2.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93572

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93586 Tracking Number D8 Original Specialty Recommended RVU: **2.05**
Presented Recommended RVU: **1.43**
Global Period: ZZZ Current Work RVU: **N/A** RUC Recommended RVU: **1.43**

CPT Descriptor: Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; coronary sinus (List separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: during diagnostic cardiac catheterization in an 18-year-old female with complex single ventricle physiology who has undergone classic fontan surgery, venography of the coronary sinus is performed. [note: this is an add-on service. only consider the additional work related to achieving catheter placement and performance of coronary sinus venography.]

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: An end hole guide catheter is inserted through a venous sheath and, with guidewire assistance, to the heart and directed into the coronary sinus. (Catheter placement is reported separately with the diagnostic cardiac catheterization codes for congenital heart disease.) Venography of the coronary sinus is performed with contrast injection in the vessel coronary sinus to delineate the course.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Mark Hoyer, MD, Afnan Tariq, MD, Richard Wright, MD, Edward Tuohy, MD					
Specialty Society(ies):	SCAI, ACC					
CPT Code:	93586					
Sample Size:	370	**Resp N:**	42			
Description of Sample:	Random sampling of congenital cardiologists					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	2.00	**5.00**	10.00	80.00
Survey RVW:		0.90	1.43	**2.05**	2.20	5.00
Pre-Service Evaluation Time:				**0.00**		
Pre-Service Positioning Time:				**0.00**		
Pre-Service Scrub, Dress, Wait Time:				**0.00**		
Intra-Service Time:		1.00	9.00	**12.00**	15.00	57.00
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	93586	**Recommended Physician Work RVU: 1.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**12.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? Yes

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
36227	ZZZ	2.09	**RUC Time**

CPT Descriptor Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
75774	ZZZ	1.01	**RUC Time**

CPT Descriptor Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37253	ZZZ	1.44	**RUC Time**	105,426

CPT Descriptor 1 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36227	ZZZ	2.09	**RUC Time**	13,420

CPT Descriptor 2 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
67334	ZZZ	2.06	**RUC Time**

CPT Descriptor Strabismus surgery by posterior fixation suture technique, with or without muscle recession (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 23 **% of respondents:** 54.7 **%**

Number of respondents who choose 2nd Key Reference Code: 12 **% of respondents:** 28.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93586	Top Key Reference CPT Code: 36227	2nd Key Reference CPT Code: 75774
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	12.00	15.00	30.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**12.00**	**15.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	4%	0%	22%	70%	4%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	4%	35%	61%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	4%	13%	83%

Physical effort required	4%	30%	65%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	26%	43%	30%

Survey Code Compared to 2nd Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	8%	67%	25%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	17%	83%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	0%	17%	83%
Physical effort required	0%	42%	58%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	33%	67%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The CPT Panel approved a proposal at the February 2022 meeting to create six new codes to describe venography procedures performed during cardiac catheterizations for congenital heart defects. When attempting to survey for the April RUC meeting, the societies found that the codes were inherently flawed, two were redundant, and none could be correctly valued. The societies asked the RUC for a referral back to CPT to correct the code set. The CPT Panel approved an amended proposal at the September 2022 meeting to create five new codes that accurately describe venography procedures performed during cardiac catheterizations for congenital heart defects.

Congenital anomalies of the systemic venous return to the right atrium are rare in the general population (< 0.5%). However, there is a markedly increased incidence in congenital heart disease (CHD), as high as 4-10%, which increases to more than 50% when there are abnormalities in cardiac position (eg. situs inversus, heterotaxy syndromes). These abnormalities may be associated with significant cyanosis. Proper identification is of critical importance as the anatomy may have technical implications in the performance of percutaneous diagnostic and interventional procedures and/or open-heart surgery. The existence of anomalous systemic venous return often requires an additional venous cannula during cardiopulmonary bypass. Systemic venous anomalies may create an increase in technical and procedural complexity by making it more challenging to obtain essential information during cardiac catheterization or by necessitating alternative vascular access sites to perform catheterization procedures.

There are known and well-defined abnormalities of both the superior and inferior vena caval drainage, as well as abnormal vascular connections that develop from obstruction and excessively pressurized venous systems, as the blood decompresses through any alternative route.

Most of the variants are present at birth and represent a disruption of normal embryologic development. In normal anatomy, the venous blood from the upper half of the body travels through a right-sided superior vena cava (SVC) and drains to the right-sided systemic venous atrium. However, anomalies include a single left sided SVC draining to the right or left-sided systemic venous atrium via a persistent embryologic connection to the coronary sinus or bilateral SVC's draining through both routes. Abnormalities of the attachment points to the heart are also possible in some severe forms of CHD.

The systemic venous drainage from the lower body is typically carried by a right-sided inferior vena cava (IVC), which also drains to the right atrium. However, this may also be found on the opposite side, or the IVC may be completely interrupted with flow travelling through naturally occurring bypass routes via the azygos or hemi-azygos system to the superior venous system (which may also be anomalous, as described above) before finally reaching the heart.

The congenital interventionalist is often tasked with properly identifying and characterizing all abnormalities of the systemic venous drainage as part of a diagnostic procedure, since the specific anatomic details directly impacts procedural planning, surgical options, and approach, as well as overall prognosis.

Because there have not been CPT codes to reflect this distinct diagnostic work, the currently available angiographic codes are simply unable to accurately correctly capture these anatomic variants that are frequently encountered in congenital heart disease. As a result, they do not allow for proper CPT coding and tracking of patients with these conditions. Further, the current codes do not accurately reflect the marked difference in time and attention required to access and image each of these vessels when compared to normally located venous structures.

The newly created codes have never had a CPT code to describe their specific work. The ACC and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes.

Survey Data Observations

A joint RVS committee from the two societies reviewed the survey data to develop work RVU recommendations for the RUC. The ZZZ-global day survey was completed by physicians who have experience with the services.

For all five codes in this family, we see reasonable alignment in comparison to one of the KRS codes that we believe can be readily supported with other comparison codes. Based on the relationship to the KRS code which is also an MPC code, and other comparators, we are recommending the median work RVUs for the entire family.

93586 Survey Results:

The key reference code is 36227, selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation. It was selected by 54.7% of respondents. 74% of respondents indicated that 93586 was more complex. The second reference code is 75774, angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation. It was selected by 28.5% of respondents. 92% of respondents indicated that 93586 was more complex. We would point out a key difference in these two KRS codes with the first including catheter placement and the latter not. Hence the significant variability in their values are for good reason.

93586 Recommendation:

The societies are recommending the median work RVU of 2.05 with the median survey time of 12 minutes. The work value falls just under the first KRS 36227 and close to other comparators which have RVUs just below and above the recommendation as shown in the summary spreadsheet. Particularly, 93586 aligns with 67334 Strabismus surgery by posterior fixation suture technique, with or without muscle recession, which has a work RVU of 2.06 and an intra time of 15 minutes. The work of 93586 is significantly more complex as it requires more extensive catheter manipulation.

All codes in the family fit appropriately relative to the time and intensity of the KRS code 36227 (15 minutes and 2.09 wRVUs) at the medians. While we recognize IWPUT is sensitive for short services, we think recommendations at these times that produce IWPUTs slightly above/below 36227 bolster the recommendations. The family of codes also proceeds roughly as expected in a rationale rank order, with increasing time and RVUs as we work through the family.

Finally, these services for more fine/detailed work beyond the base codes have an appropriately higher IWPUT than the base codes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)

If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Cardiology How often? Sometimes

Specialty Cardiology How often? Rarely

Specialty Interventional Radiology How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 900
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 10% of roughly 4500 births annually with ventricular or related defects undergo the service in first year. In addition, there are many other types of heart defects that also require this service for preoperative and other care planning through these patients lives. We are doubling the first year estimate to account for the possible subsequent procedures performed on these patients at various times throughout their lives.

Specialty Interventional Cardiology Frequency 855 Percentage 95.00 %

Specialty Cardiology Frequency 27 Percentage 3.00 %

Specialty Interventional Radiology Frequency 18 Percentage 2.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 90 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 90% of these service will be provided to non-Medicare patients, but not knowable with high certainty because of lack of prior coding breakdown for congenital use.

Specialty Interventional Cardiology Frequency 85 Percentage 94.44 %

Specialty Cardiology Frequency 3 Percentage 3.33 %

Specialty Interventional Radiology Frequency 2 Percentage 2.22 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93571

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93587 Tracking Number D9 Original Specialty Recommended RVU: **2.11**
Presented Recommended RVU: **2.11**
Global Period: ZZZ Current Work RVU: **N/A** RUC Recommended RVU: **2.11**

CPT Descriptor: Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; venovenous collaterals originating at or above the heart (eg, from innominate vein) (List separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: during diagnostic cardiac catheterization in a 15-year-old female with previous fontan surgery who has cyanosis, venovenous collaterals are discovered and venography is performed. [note: this is an add-on service. only consider the additional work related to achieving catheter placement and performance of venography of venovenous collaterals originating at or above the heart.]

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: An end hole guide catheter is inserted through a venous sheath and, with guidewire assistance, directed into all portions of the systemic venous pathway(s) draining to the heart from the level of the heart or above. (Catheter placement is reported separately with the diagnostic cardiac catheterization codes for congenital heart disease.) Venography with contrast injection is performed to delineate the course and drainage of the venovenous collaterals arising at the level of the heart or above. The process is repeated for any additional venovenous collaterals arising at the level of the heart or above and draining to the heart.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Mark Hoyer, MD, Afnan Tariq, MD, Richard Wright, MD, Edward Tuohy, MD					
Specialty Society(ies):	SCAI, ACC					
CPT Code:	93587					
Sample Size:	370	**Resp N:**	42			
Description of Sample:	random sampling of congenital cardiologists					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		3.00	10.00	**20.00**	30.00	100.00
Survey RVW:		1.01	1.71	**2.11**	2.40	5.00
Pre-Service Evaluation Time:				**0.00**		
Pre-Service Positioning Time:				**0.00**		
Pre-Service Scrub, Dress, Wait Time:				**0.00**		
Intra-Service Time:		5.00	10.00	**16.00**	22.00	49.00
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	93587	**Recommended Physician Work RVU: 2.11**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**16.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? Yes

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
36227	ZZZ	2.09	**RUC Time**

CPT Descriptor Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
75774	ZZZ	1.01	**RUC Time**

CPT Descriptor Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37253	ZZZ	1.44	**RUC Time**	105,426

CPT Descriptor 1 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36227	ZZZ	2.09	**RUC Time**	13,420

CPT Descriptor 2 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
34713	ZZZ	2.50	**RUC Time**

CPT Descriptor Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 French or larger), including ultrasound guidance, when performed, unilateral (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 25 **% of respondents:** 59.5 **%**

Number of respondents who choose 2nd Key Reference Code: 14 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 93587	Top Key Reference CPT Code: 36227	2nd Key Reference CPT Code: 75774
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	16.00	15.00	30.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**16.00**	**15.00**	**30.00**

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	4%	20%	40%	36%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	4%	28%	68%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	4%	12%	84%
Physical effort required	0%	40%	60%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	24%	36%	40%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	7%	57%	36%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	29%	71%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	14%	86%
Physical effort required	0%	21%	79%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	36%	64%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The CPT Panel approved a proposal at the February 2022 meeting to create six new codes to describe venography procedures performed during cardiac catheterizations for congenital heart defects. When attempting to survey for the April RUC meeting, the societies found that the codes were inherently flawed, two were redundant, and none could be correctly valued. The societies asked the RUC for a referral back to CPT to correct the code set. The CPT Panel approved an amended proposal at the September 2022 meeting to create five new codes that accurately describe venography procedures performed during cardiac catheterizations for congenital heart defects.

Congenital anomalies of the systemic venous return to the right atrium are rare in the general population (< 0.5%). However, there is a markedly increased incidence in congenital heart disease (CHD), as high as 4-10%, which increases to more than 50% when there are abnormalities in cardiac position (eg. situs inversus, heterotaxy syndromes). These abnormalities may be associated with significant cyanosis. Proper identification is of critical importance as the anatomy may have technical implications in the performance of percutaneous diagnostic and interventional procedures and/or open-heart surgery. The existence of anomalous systemic venous return often requires an additional venous cannula during cardiopulmonary bypass. Systemic venous anomalies may create an increase in technical and procedural complexity by making it more challenging to obtain essential information during cardiac catheterization or by necessitating alternative vascular access sites to perform catheterization procedures.

There are known and well-defined abnormalities of both the superior and inferior vena caval drainage, as well as abnormal vascular connections that develop from obstruction and excessively pressurized venous systems, as the blood decompresses through any alternative route.

Most of the variants are present at birth and represent a disruption of normal embryologic development. In normal anatomy, the venous blood from the upper half of the body travels through a right-sided superior vena cava (SVC) and drains to the right-sided systemic venous atrium. However, anomalies include a single left sided SVC draining to the right or left-sided systemic venous atrium via a persistent embryologic connection to the coronary sinus or bilateral SVC's draining through both routes. Abnormalities of the attachment points to the heart are also possible in some severe forms of CHD.

The systemic venous drainage from the lower body is typically carried by a right-sided inferior vena cava (IVC), which also drains to the right atrium. However, this may also be found on the opposite side, or the IVC may be completely interrupted with flow travelling through naturally occurring bypass routes via the azygos or hemi-azygos system to the superior venous system (which may also be anomalous, as described above) before finally reaching the heart.

The congenital interventionalist is often tasked with properly identifying and characterizing all abnormalities of the systemic venous drainage as part of a diagnostic procedure, since the specific anatomic details directly impacts procedural planning, surgical options, and approach, as well as overall prognosis.

Because there have not been CPT codes to reflect this distinct diagnostic work, the currently available angiographic codes are simply unable to accurately correctly capture these anatomic variants that are frequently encountered in congenital heart disease. As a result, they do not allow for proper CPT coding and tracking of patients with these conditions. Further, the current codes do not accurately reflect the marked difference in time and attention required to access and image each of these vessels when compared to normally located venous structures.

The newly created codes have never had a CPT code to describe their specific work. The ACC and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes.

Survey Data Observations

A joint RVS committee from the two societies reviewed the survey data to develop work RVU recommendations for the RUC. The ZZZ-global day survey was completed by physicians who have experience with the services.

For all five codes in this family, we see reasonable alignment in comparison to one of the KRS codes that we believe can be readily supported with other comparison codes. Based on the relationship to the KRS code which is also an MPC code, and other comparators, we are recommending the median work RVUs for the entire family.

93587 Survey Results:

The key reference code is 36227, selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation. It was selected by 59.5% of respondents. 76% of respondents indicated that 93587 was more complex. The second reference code is 75774, angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation. It was selected by 33.3% of respondents. 93% of respondents indicated that 93587 was more complex. We would point out a key difference in these two KRS codes with the first including catheter placement and the latter not. Hence the significant variability in their values are for good reason.

93587 Recommendation:

The societies are recommending the median work RVU of 2.11 with the median survey time of 16 minutes. The work value falls just over the first KRS 36227 and close to other comparators which have RVUs just below and above the recommendation as shown in the summary spreadsheet The work of 93587 is significantly more complex as it requires significantly different and more extensive catheter manipulation as the congenital anomaly can be in a different place in every patient. The work for this procedure is typically performed on two vessels.

All codes in the family fit appropriately relative to the time and intensity of the KRS code 36227 (15 minutes and 2.09 wRVUs) at the medians. While we recognize IWPUT is sensitive for short services, we think recommendations at these times that produce IWPUTs slightly above/below 36227 bolster the recommendations. The family of codes also proceeds roughly as expected in a rationale rank order, with increasing time and RVUs as we work through the family.

Finally, these services for more fine/detailed work beyond the base codes have an appropriately higher IWPUT than the base codes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Cardiology How often? Sometimes

Specialty Cardiology How often? Rarely

Specialty Interventional Radiology How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 1500
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming a sixth of roughly 4500 births annually with ventricular or related defects undergo the service in first year. In addition, there are many other types of heart defects that also require this service for preoperative and other care planning through these patients lives. We are doubling the first year estimate to account for the possible subsequent procedures performed on these patients at various times throughout their lives.

Specialty Interventional Cardiology Frequency 1425 Percentage 95.00 %

Specialty Cardiology Frequency 45 Percentage 3.00 %

Specialty Interventional Radiology Frequency 30 Percentage 2.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 150
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 90% of these service will be provided to non-Medicare patients, but not knowable with high certainty because of lack of prior coding breakdown for congenital use.

Specialty Interventional Cardiology Frequency 142 Percentage 94.66 %

Specialty Cardiology Frequency 5 Percentage 3.33 %

Specialty Interventional Radiology Frequency 3 Percentage 2.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93571

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93588 Tracking Number D10 Original Specialty Recommended RVU: **2.13**
Presented Recommended RVU: **2.13**
Global Period: ZZZ Current Work RVU: **N/A** RUC Recommended RVU: **2.13**

CPT Descriptor: Venography for congenital heart defect(s), including catheter placement, and radiological supervision and interpretation; venovenous collaterals originating below the heart (eg, from the inferior vena cava) (List separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: During diagnostic cardiac catheterization in a 17-year-old male with previous Fontan surgery who has cyanosis, venovenous collaterals are discovered and venography is performed. (Note: This is an add-on service. Only consider the additional work related to achieving catheter placement and performance of venography of venovenous collaterals originating below the heart)

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work:

Description of Intra-Service Work: An end hole guide catheter is inserted through a venous sheath and, with guidewire assistance, directed into all portions of the systemic venous pathway(s) arising from below the heart. (Catheter placement is reported separately with the diagnostic cardiac catheterization codes for congenital heart disease.) Venography with contrast injection is performed to delineate the course and drainage of the venovenous collaterals. The process is repeated for any additional venovenous collaterals arising from below the heart and draining to the heart.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	Mark Hoyer, MD, Afnan Tariq, MD, Richard Wright, MD, Edward Tuohy, MD					
Specialty Society(ies):	SCAI, ACC					
CPT Code:	93588					
Sample Size:	370	**Resp N:**	42			
Description of Sample:	random sampling of congenital cardiologists					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		3.00	8.00	**10.00**	30.00	100.00
Survey RVW:		1.01	1.71	**2.13**	2.48	5.00
Pre-Service Evaluation Time:				**0.00**		
Pre-Service Positioning Time:				**0.00**		
Pre-Service Scrub, Dress, Wait Time:				**0.00**		
Intra-Service Time:		5.00	10.00	**17.00**	25.00	50.00
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	93588	**Recommended Physician Work RVU: 2.13**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**17**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? Yes

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
36227	ZZZ	2.09	**RUC Time**

CPT Descriptor Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
75774	ZZZ	1.01	**RUC Time**

CPT Descriptor Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37253	ZZZ	1.44	**RUC Time**	105,426

CPT Descriptor 1 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36227	ZZZ	2.09	**RUC Time**	13,420

CPT Descriptor 2 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
34713	ZZZ	2.50	**RUC Time**

CPT Descriptor Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 French or larger), including ultrasound guidance, when performed, unilateral (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 25 **% of respondents:** 59.5 **%**

Number of respondents who choose 2nd Key Reference Code: 12 **% of respondents:** 28.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93588	Top Key Reference CPT Code: 36227	2nd Key Reference CPT Code: 75774
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	17.00	15.00	30.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**17.00**	**15.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	4%	20%	40%	36%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	4%	28%	68%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	4%	12%	84%
Physical effort required	0%	40%	60%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	20%	40%	40%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	8%	50%	42%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	33%	67%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	8%	92%
Physical effort required	0%	25%	75%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	25%	75%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

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Most of the variants are present at birth and represent a disruption of normal embryologic development. In normal anatomy, the venous blood from the upper half of the body travels through a right-sided superior vena cava (SVC) and drains to the right-sided systemic venous atrium. However, anomalies include a single left sided SVC draining to the right or left-sided systemic venous atrium via a persistent embryologic connection to the coronary sinus or bilateral SVC's draining through both routes. Abnormalities of the attachment points to the heart are also possible in some severe forms of CHD.

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93588 Survey Results:

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93588 Recommendation:

The societies are recommending the median work RVU of 2.13 with the median survey time of 17 minutes. The work value falls just over the first KRS 36227 and close to other comparators which have RVUs just below and above the recommendation as shown in the summary spreadsheet The work of 93588 is significantly more complex as it requires significantly different and more extensive catheter manipulation as the congenital anomaly can be in a different place in every patient. The work for this procedure is typically performed on two vessels.

All codes in the family fit appropriately relative to the time and intensity of the KRS code 36227 (15 minutes and 2.09 wRVUs) at the medians. While we recognize IWPUT is sensitive for short services, we think recommendations at these times that produce IWPUTs slightly above/below 36227 bolster the recommendations. The family of codes also proceeds roughly as expected in a rationale rank order, with increasing time and RVUs as we work through the family.

Finally, these services for more fine/detailed work beyond the base codes have an appropriately higher IWPUT than the base codes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Interventional Cardiology How often? Sometimes

Specialty Cardiology How often? Rarely

Specialty Interventional Radiology How often? Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 900
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. xpert panel estimate assuming 10% of roughly 4500 births annually with ventricular or related defects undergo the service in first year. In addition, there are many other types of heart defects that also require this service for preoperative and other care planning through these patients lives. We are doubling the first year estimate to account for the possible subsequent procedures performed on these patients at various times throughout their lives.

Specialty Interventional Cardiology Frequency 855 Percentage 95.00 %

Specialty Cardiology Frequency 27 Percentage 3.00 %

Specialty Interventional Radiology Frequency 18 Percentage 2.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 90 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Expert panel estimate assuming 90% of these service will be provided to non-Medicare patients, but not knowable with high certainty because of lack of prior coding breakdown for congenital use.

Specialty Interventional Cardiology Frequency 85 Percentage 94.44 %

Specialty Cardiology Frequency 3 Percentage 3.00 %

Specialty Interventional Radiology Frequency 2 Percentage 2.22 %

Do many physicians perform this service across the United States? No

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93571

SS Rec Summary

ISSUE: Venography Services

TAB: 14

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	36227	ZZZ	Selective catheter placement, external carotid artery,	2012	19	0.139	0.139			2.09			15						15								
2nd REF	75774	ZZZ	Angiography, selective, each additional vessel studied after	2018	17	0.034	0.034			1.01			30						30								
CURRENT	93799	XXX	Unlisted cardiovascular service or procedure			-	-						0														
SVY	9X000	ZZZ	Venography for congenital heart defect(s), including		42	0.160	0.160	0.86	1.20	1.60	2.07	5.00	10				1	6	10	15	45		1	6	15	30	400
REC	9X000	ZZZ	Venography for congenital heart defect(s), including			0.120	0.120			1.20			10						10								
MPC	37253	ZZZ	Intravascular ultrasound (noncoronary vessel) during	2018		0.072	0.072			1.44			20						20								
MPC	36227	ZZZ	Selective catheter placement, external carotid artery,	2012		0.139	0.139			2.09			15						15								

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	75774	ZZZ	Angiography, selective, each additional vessel studied after	2018	20	0.034	0.034			1.01			30						30								
2nd REF	36227	ZZZ	Selective catheter placement, external carotid artery,	2012	17	0.139	0.139			2.09			15						15								
CURRENT	93799	XXX	Unlisted cardiovascular service or procedure			-	-						0														
SVY	9X002	ZZZ	Venography for congenital heart defect(s), including		42	0.163	0.163	0.80	1.13	1.63	2.09	5.00	10				3	6	10	15	48		2	5	8	20	150
REC	9X002	ZZZ	Venography for congenital heart defect(s), including			0.113	0.113			1.13			10						10								
MPC	36227	ZZZ	Selective catheter placement, external carotid artery,	2012		0.139	0.139			2.09			15						15								

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	36227	ZZZ	Selective catheter placement, external carotid artery,	2012	23	0.139	0.139			2.09			15						15								
2nd REF	75774	ZZZ	Angiography, selective, each additional vessel studied after	2018	12	0.034	0.034			1.01			30						30								
CURRENT	93799	XXX	Unlisted cardiovascular service or procedure			-	-						0														
SVY	9X003	ZZZ	Venography for congenital heart defect(s), including		42	0.171	0.171	0.90	1.43	2.05	2.20	5.00	12				1	9	12	15	57		0	2	5	10	80
REC	9X003	ZZZ	Venography for congenital heart defect(s), including			0.119	0.119			1.43			12						12								
MPC	36227	ZZZ	Selective catheter placement, external carotid artery,	2012		0.139	0.139			2.09			15						15								
MPC	37253	ZZZ	Intravascular ultrasound (noncoronary vessel) during	2018		0.072	0.072			1.44			20						20								

SS Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	AR	AS	AT	AU	AV
4									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
5	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
33									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
34	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
35	1st REF	36227	ZZZ	Selective catheter placement, external carotid artery,	2012	25	0.139	0.139			2.09			15						15								
36	2nd REF	75774	ZZZ	Angiography, selective, each additional vessel studied after	2018	14	0.034	0.034			1.01			30						30								
37	CURRENT	93799	XXX	Unlisted cardiovascular service or procedure			-	-						0														
38	SVY	9X004	ZZZ	Venography for congenital heart defect(s), including		42	0.132	0.132	1.01	1.71	2.11	2.40	5.00	16				5	10	16	22	49		3	10	20	30	100
39	REC	9X004	ZZZ	Venography for congenital heart defect(s), including			0.132	0.132			2.11			16						16								
40	MPC	36227	ZZZ	Selective catheter placement, external carotid artery,	2012		0.139	0.139			2.09			15						15								
41	Other Comp	34713	ZZZ	Percutaneous access and closure of femoral artery for	2016		0.125	0.125			2.50			20						20								
42																												
43									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
44	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
45	1st REF	36227	ZZZ	Selective catheter placement, external carotid artery,	2012	25	0.139	0.139			2.09			15						15								
46	2nd REF	75774	ZZZ	Angiography, selective, each additional vessel studied after	2018	12	0.034	0.034			1.01			30						30								
47	CURRENT	93799	XXX	Unlisted cardiovascular service or procedure			-	-						0														
48	SVY	93588	ZZZ	Venography for congenital heart defect(s), including		42	0.125	0.125	1.01	1.71	2.13	2.48	5.00	17				5	10	17	25	50		3	8	10	30	100
49	REC	93588	ZZZ	Venography for congenital heart defect(s), including			0.125	0.125			2.13			17						17								
50	MPC	36227	ZZZ	Selective catheter placement, external carotid artery,	2012		0.139	0.139			2.09			15						15								
51	Other Comp	34713	ZZZ	Percutaneous access and closure of femoral artery for	2016		0.125	0.125			2.50			20						20								
52																												
53									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
54	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
55	CURRENT	93593	000	Right heart catheterization for congenital heart defect(s)			0.042	0.027			3.99			148	40	3	15			45			45					
56	Oct 2020 RUC Recommendaiton	93593	000	Right heart catheterization for congenital heart defect(s)	Oct-20		0.042	0.027			3.99			148	40	3	15			45			45					
57	AFFIRM	93593	000	Right heart catheterization for congenital heart defect(s)			0.042	0.027			3.99			148	40	3	15			45			45					
58																												
59									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
60	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
61	CURRENT	93594	000	Right heart catheterization for congenital heart defect(s)			0.063	0.035			6.10			172	46	3	15			60			48					
62	Oct 2020 RUC Recommendaiton	93594	000	Right heart catheterization for congenital heart defect(s)			0.063	0.035			6.10			172	46	3	15			60			48					

SS Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	AR	AS	AT	AU	AV
4									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
5	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
63	AFFIRM	93594	000	Right heart catheterization for congenital heart defect(s)	Oct-20		0.063	0.035			6.10			172	46	3	15			60			48					
64																												
65									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
66	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
67	CURRENT	93595	000	Left heart catheterization for congenital heart defect(s)			0.068	0.035			5.50			158	46	3	15			48			46					
68	Oct 2020 RUC Recommendaiton	93595	000	Left heart catheterization for congenital heart defect(s)	Oct-20		0.078	0.038			6.00			158	46	3	15			48			46					
69	AFFIRM	93595	000	Left heart catheterization for congenital heart defect(s)			0.078	0.038			6.00			158	46	3	15			48			46					
70																												
71									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
72	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
73	CURRENT	93596	000	Right and left heart catheterization for congenital			0.072	0.038			6.84			181	50	3	15			60			53					
74	Oct 2020 RUC Recommendaiton	93596	000	Right and left heart catheterization for congenital	Oct-20		0.090	0.044			7.91			181	50	3	15			60			53					
75	AFFIRM	93596	000	Right and left heart catheterization for congenital			0.090	0.044			7.91			181	50	3	15			60			53					
76																												
77									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
78	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
79	CURRENT	93597	000	Right and left heart catheterization for congenital			0.074	0.041			8.89			216	55	3	15			83			60					
80	Oct 2020 RUC Recommendaiton	93597	000	Right and left heart catheterization for congenital	Oct-20		0.087	0.046			9.99			216	55	3	15			83			60					
81	AFFIRM	93597	000	Right and left heart catheterization for congenital			0.087	0.046			9.99			216	55	3	15			83			60					
82																												
83									RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
84	Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
85	CURRENT	93598	ZZZ	Cardiac output measurement(s), thermodilution or other			0.072	0.072			1.44			20						20								
86	Oct 2020 RUC Recommendaiton	93598	ZZZ	Cardiac output measurement(s), thermodilution or other	Oct-20		0.088	0.088			1.75			20						20								
87	AFFIRM	93598	ZZZ	Cardiac output measurement(s), thermodilution or other			0.088	0.088			1.75			20						20								

December 13, 2022

Scott Manaker, MD
AMA/RVS Update PE Subcommittee
American Medical Association
330 N. Wabash Avenue
Chicago, IL 60611

Re: Tab 14 Venography Services

Dear Dr. Manaker:

Tab 14 on the January 2023 RUC agenda addresses 11 codes. Five of these are new codes, which describe venography services performed during cardiac catheterization for congenital heart defects. All five of these services will be provided exclusively in the facility setting with a ZZZ global period. As such, the Society for Cardiovascular Angiography and Interventions and the American College of Cardiology recommend no direct practice expense inputs for these codes in Tab 14.

The RUC also identified 6 established codes as part of this family. These include 93593, 93594, 93595, 93596, 93597 and 93598. As these codes were surveyed and approved by the RUC in October 2020 and have just gone into effect for CMS as of January 2022, we are proposing reaffirmation of these code values. Further, each of these codes are exclusively performed in the facility setting with a zero day global period. As such, the Society for Cardiovascular Angiography and Interventions and the American College of Cardiology recommend no direct practice expense inputs for these codes in Tab 14.

Thank you for your consideration of this information as you prepare for the upcoming meeting. Please contact Matt Minnella at mminnella@acc.org if you have any questions.

Sincerely,



Afnan Tariq, MD
SCAI RUC Advisor



Richard Wright, MD
ACC RUC Advisor

AMA/Specialty Society RVS Update Committee Summary of Recommendations

October 2020

Cardiac Catheterization for Congenital Defects – Tab 10

In May 2020, the CPT Editorial Panel replaced a family of four cardiac catheterization codes with five new codes to describe cardiac catheterization for congenital cardiac defect(s). In addition, the Panel replaced two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects.

Compelling Evidence
The RUC reviewed and agreed that there is compelling evidence based on a change in the patient population and a change in technology. The specialty societies noted and the RUC agreed that the vast majority of diagnostic catheter studies were performed in children who were healthier with simpler cardiac defects when the previous code structure was last valued in 1997; children with more significant cardiac defects had no treatment options, so catheterization was not warranted. Over the past 23 years, as result of improvements in both technique and technology, the specialty has evolved and now performs a substantially larger number of more complex diagnostic evaluations to guide more complex interventional procedures, and the typical patient is now a more complex patient requiring more pathology. The specialties noted that one of the whitepapers that they provided by Nicholson et al. confirms that these procedures were unable to be previously accomplished on the current typical patient with earlier technology/techniques. The specialties provided additional literature to further demonstrate the changes in congenital catheterization over the past two decades.

The specialties noted that, relative to adult patients with normal cardiac anatomy, the pre-service evaluation time for pediatric patients with congenital defects includes additional time to discuss a patient's procedure with the parent. Similarly, the post-procedure work includes additional time to explain the pathology of the child to the parent. Furthermore, as a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details into national registries such as Improving Pediatric and Adult Congenital Treatments (IMPACT), which can also add significant post procedure work time. In addition, the post-service period time typically includes time to diagram the congenital heart defect in the EHR and complete data submission to the registry.

93593 ***Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; normal native connections***
The RUC reviewed the survey results from 46 interventional and pediatric interventional cardiologists and recommends the survey median work RVU of 3.99 for CPT code 93593. The RUC recommends 40 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 45 minutes of intra-service time and 45 minutes of immediate post-service time. The specialties noted that, relative to adult patients with normal cardiac anatomy, the pre-service evaluation time for pediatric patients with congenital defects includes additional time to discuss a patient's procedure with the parent and the post-procedure work includes additional time to explain the pathology of the child to the parent.

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Furthermore, as a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details into national registries such as IMPACT, which also adds post procedure work time. In addition, the post-service period time typically includes time to diagram the congenital heart defect in the EHR and complete data submission to the registry.

The specialty noted and the RUC agreed that the existing codes for cardiac catheterization for congenital heart disease have inappropriately low IWPUTs that are not in line with the other cardiac catheterization codes that are for patients without congenital heart disease (codes 93452-93461).

The RUC and the specialty societies discussed how deleted code 93530 was previously the only "right heart only" catheterization code designed to capture all possible pathologies for patients with congenital heart disease. This work is now being segmented into 93593 for patients with simple defects, defined in CPT as having normal native connections, and 93594 for the more complex patients with abnormal native connections. The RUC concurred that this change in code structure is one of several reasons why comparing the 1997 physician times for 93530 to both 93593 and 93594 is precarious at best. The RUC also noted that when deleted code 93530 was last evaluated by the RUC and CMS in 1997, both the RUC and CMS evaluated physician time with much less rigor and the valuation process has greatly evolved and become more refined. Correspondingly, deleted code 93530 has an inappropriately low IWPUT of 0.0206, which implies that the 1997 times are overstated relative to the current work RVU. Separately, the RUC also noted that 0.25 work RVUs and 10 minutes of pre-service time were systematically removed from the deleted code in 2017 when moderate sedation was unbundled from all services following the deletion of CPT Appendix G. As 93530 is typically performed on an infant under *general anesthesia*, the specialty noted and the RUC agreed that including 93530 in the moderate sedation unbundling initiative was inappropriate, and had an unwarranted downward effect on the work RVUs currently credited to the code. Furthermore, the times captured in surveys in 1997 only reflected a small number of specialists who had adequate experience to provide reliable information on the procedure, a reflection of the nascent nature of the specialty 23 years ago.

To justify a value of 3.99, the RUC compared the survey code to CPT code 49422 *Removal of tunneled intraperitoneal catheter* (work RVU= 4.00, intra-service time of 45 minutes, total time of 111 minutes) and noted that both services involve an identical amount of intra-service time and a similar overall amount of physician work. The RUC also compared the survey code to MPC code 11044 *Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less* (work RVU= 4.10, intra-service time of 45 minutes, total time of 116 minutes) and noted that both services involve identical intra-service time and the survey code at 3.99 would be appropriately valued to this reference service. **The RUC recommends a work RVU of 3.99 for CPT code 93593.**

93594 ***Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; abnormal native connections***

The RUC reviewed the survey results from 45 interventional and pediatric interventional cardiologists and recommends the survey median work RVU of 6.10 for CPT code 93594. The RUC recommends 46 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 60 minutes of intra-service time and 48 minutes of immediate post-service time. The specialties noted that, relative to adult patients with normal cardiac anatomy, the pre-service evaluation time for pediatric patients with congenital defects includes additional time to discuss a patient's procedure with the parent and the post-procedure work includes additional time to explain the pathology of the child to the parent. Furthermore, as a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details into

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national registries such as IMPACT, which can also add significant post procedure work time. In addition, the post-service period time typically includes time to diagram the congenital heart defect in the EHR and complete data submission to the registry.

The RUC and the specialty societies discussed how deleted code 93530 was previously the only right heart only catheterization code designed to capture all possible pathologies for patients with congenital heart disease. This work is now being segmented into 93593 for patients with simple defects, defined in CPT as having normal native connections, and 93594 for the more complex patients with abnormal native connections. The RUC concurred that this change in code structure is one of several reasons why comparing the 1997 physician times for 93530 to both 93593 and 93594 is precarious at best. The RUC also noted that when deleted code 93530 was last evaluated by the RUC and CMS in 1997, both the RUC and CMS evaluated physician time with much less rigor and the valuation process has greatly evolved and become more refined. Correspondingly, deleted code 93530 has an inappropriately low IWPUT of 0.0206, which implies that the 1997 times are overstated relative to the current work RVU. Separately, the RUC also noted that 0.25 work RVUs and 10 minutes of pre-service time were systematically removed from the deleted code in 2017 when moderate sedation was unbundled from all services following the deletion of CPT Appendix G. As 93530 is typically performed on an infant under *general anesthesia*, the specialty noted and the RUC agreed that including 93530 in the moderate sedation unbundling initiative was inappropriate, and had an unwarranted downward effect on the work RVUs currently credited to the code. Furthermore, the times captured in surveys in 1997 only reflected a small number of specialists who had adequate experience to provide reliable information on the procedure, a reflection of the nascent nature of the specialty 23 years ago.

To justify a value of 6.10, the RUC compared the survey code to CPT code 36217 *Selective catheter placement, arterial system; initial third order or more selective thoracic or brachiocephalic branch, within a vascular family* (work RVU= 6.29, intra-service time of 60 minutes, total time of 111 minutes) and noted that both services involve identical intra-service time and a similar overall amount of physician work. The RUC also compared the survey code to CPT code 20245 *Biopsy, bone, open; deep (eg, humeral shaft, ischium, femoral shaft)* (work RVU=6.00, intra-service time of 60 minutes, total time of 160 minutes) and noted that although both services have identical intra-service time, the survey code involves 10 more minutes of total time, supporting the somewhat higher work value. **The RUC recommends a work RVU of 6.10 for CPT code 93594.**

93595 ***Left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone, normal or abnormal native connections***

The RUC reviewed the survey results from 46 interventional and pediatric interventional cardiologists and recommends the survey median work RVU of 6.00 for CPT code 93595. The RUC recommends 46 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 48 minutes of intra-service time and 46 minutes of immediate post-service time. The specialty societies noted that, relative to adult patients with normal cardiac anatomy, the pre-service evaluation time for pediatric patients with congenital defects includes additional time to discuss a patient's procedure with the parent. Similarly, the post-procedure work includes additional time to explain the pathology of the child to the parent. Furthermore, as a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details into national registries such as IMPACT, which can also add significant post procedure work time. In addition, the post-service period time typically includes time to diagram the congenital heart defect in the EHR and complete data submission to the registry.

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CPT code 93595 describes a left heart catheterization procedure in patients with congenital heart and vascular defects. In addition to left heart obstructive lesions such as aortic valve stenosis and coarctation of the aorta, a left heart catheterization is often needed for evaluation of patients with pulmonary blood flow originating from the aorta; those with major aorto-pulmonary collateral arteries or, major aortopulmonary collateral arteries (MAPCAs), for example. Such patients typically have numerous vascular connections from the aorta to supply the pulmonary blood flow in a secondary vascular tree, either in addition to, or as replacement for the native pulmonary arterial tree. These procedures require a significantly greater level of diagnostic evaluation, catheter and wire manipulation, and angiography to identify each vessel for surgical planning than previously afforded with the non-congenital diagnostic codes.

The RUC noted that 93595 is typically somewhat more intense to perform than 93594, justifying a somewhat higher assigned physician work intensity. For 93595, the physician typically accesses the femoral artery after which all of them connect to the aorta; there is no variability with this for the most part. For a normal connection patient, it will be straightforward. Risk of arterial catheterization is always high due to risks of stroke, bleeding into the brain for infants on heparin, femoral artery injury for infants. For an abnormal connection patient, things get more complicated because doctors are now also talking about crossing arterial shunts or the PDA to evaluate the pulmonary arteries, or evaluating other vascular structures like MAPCAs, which can be multiple. Although the overall structures evaluated are still fewer than from a right heart catheterization (93594), when assessing the pulmonary arteries across shunts or a PDA, this is not typically well tolerated. These shunts are 3 or 3.5mm in diameter with a catheter being ~1.5mm, the procedure involves blocking roughly 50 percent or more of the entire blood flow to the lungs. Due to this, the physician work intensity is very high.

To justify a value of 6.00, the RUC compared the survey code to CPT code 93453 *Combined right and left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed* (work RVU=5.99, intra-service time of 45 minutes, total time of 113 minutes) and noted that the survey code involves similar intra-service time and more total time, and similar amount of physician work. The RUC also compared the survey code to CPT code 37248 *Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; initial vein* (work RVU= 6.00, intra-service time of 50 minutes, total time of 109 minutes) and noted that the survey code involves similar intra-service time and more total time, and a similar total amount of physician work. **The RUC recommends a work RVU of 6.00 for CPT code 93595.**

93596 ***Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); normal native connections***

The RUC reviewed the survey results from 46 interventional and pediatric interventional cardiologists and recommends the survey median work RVU of 7.91 for CPT code 93596. The RUC recommends 50 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 60 minutes of intra-service time and 53 minutes of immediate post-service time. The specialties noted that, relative to adult patients with normal cardiac anatomy, the pre-service evaluation time for pediatric patients with congenital defects includes additional time to discuss a patient's procedure with the parent. Similarly, the post-procedure work includes additional time to explain the pathology of the child to the parent. Furthermore, as a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details

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into national registries such as IMPACT, which can also add significant post procedure work time. In addition, the post-service period time typically includes time to diagram the congenital heart defect in the EHR and complete data submission to the registry.

To justify a value of 7.91 the RUC compared the survey code to CPT code 93461 *Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization…* (work RVU=7.85, intra-service time of 60 minutes, total time of 143 minutes) and noted both services involve identical intra-service times whereas the survey code involves more total time. The RUC also compared the survey code to CPT code 52356 *Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy including insertion of indwelling ureteral stent (eg, Gibbons or double-J type)* (work RVU= 8.00, intra-service time of 60 minutes, total time of 133 minutes) and noted both services involve identical intra-service times and a similar overall amount of physician work. **The RUC recommends a work RVU of 7.91 for CPT code 93596.**

93597 ***Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); abnormal native connections***
The RUC reviewed the survey results from 46 interventional and pediatric interventional cardiologists and recommends the current work RVU of 9.99 for CPT code 93597. The RUC recommends 55 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 83 minutes of intra-service time and 60 minutes of immediate post-service time. The specialties noted that, relative to adult patients with normal cardiac anatomy, the pre-service evaluation time for pediatric patients with congenital defects includes additional time to discuss a patient's procedure with the parent. Similarly, the post-procedure work includes additional time to explain the pathology of the child to the parent. Furthermore, as a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details into national registries such as IMPACT, which can also add significant post procedure work time. In addition, the post-service period time typically includes time to diagram the congenital heart defect in the EHR and complete data submission to the registry.

To justify a value of 9.99, the RUC compared the survey code to CPT code 92920 *Percutaneous transluminal coronary angioplasty; single major coronary artery or branch* (work RVU= 9.85, intra-service time of 68 minutes, total time of 127 minutes) and noted that, although the survey code involves more intra-service and total time, that is offset by it being somewhat less intense to perform. The RUC agreed both services should be valued similarly. **The RUC recommends a work RVU of 9.99 for CPT code 93597.**

+93598 ***Cardiac output measurement(s), thermodilution or other indicator dilution method, performed during cardiac catheterization for the evaluation of congenital heart defects (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 46 interventional and pediatric interventional cardiologists and recommends 20 minutes of intra-service time. The RUC reviewed the survey 25th percentile work RVU of 2.00 and agreed that this value overstates the amount of physician work involved. The RUC agreed that a direct work value crosswalk to CPT code 36483 *Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)* (work RVU= 1.75, intra-service time= 20 min) is appropriate, as both services involve an identical amount of physician work and time and therefore, should be valued the same. The RUC also compared the survey code to CPT code 20931 *Allograft, structural, for spine surgery only*

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(List separately in addition to code for primary procedure) (work RVU= 1.81, intra-service time of 20 minutes) and noted that both services involve identical intra-service times, though the survey code is slightly less intense to perform. **The RUC recommends a work RVU of 1.75 for CPT code 93598.**

Practice Expense
These services are facility-only and have no direct practice inputs. **The RUC recommends no direct practice inputs for CPT codes 93593-93598.**

New Technology/New Service
The RUC recommends that 93593-93598 be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Evaluation and Management **Critical Care Services** *Critical care is…* *Providing medical care…* *Inpatient critical care…* *Services for a…* *Critical care and…* For reporting by professionals, the following services are included in critical care when performed during the critical period by the physician(s) providing critical care: the interpretation of cardiac output measurements (~~93561, 9356~~93598), chest X rays (71045, 71046), pulse oximetry (94760, 94761, 94762), blood gases, and collection and interpretation of physiologic data (eg, ECGs, blood pressures, hematologic data); gastric intubation (43752, 43753); temporary transcutaneous pacing (92953); ventilatory management (94002-94004, 94660, 94662); and vascular access procedures (36000, 36410, 36415, 36591, 36600). Any services performed that are not included in this listing should be reported separately. Facilities may report the above services separately. **…**				
99291		***Critical care, evaluation and management*** *of the critically ill or critically injured patient; first 30-74 minutes*		
99292		*each additional 30 minutes (List separately in addition to code for primary service)*		

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(Use 99292 in conjunction with 99291)

---------- ***Coding Tip*** ----------

Services Included in Critical Care Services

For reporting by professionals, the following services are included in critical care when performed during the critical period by the physician(s) providing critical care: the interpretation of cardiac output measurements (~~93561, 9356~~93598), chest X rays (71045, 71046), pulse oximetry (94760, 94761, 94762), blood gases, and collection and interpretation of physiologic data (eg, ECGs, blood pressures, hematologic data); gastric intubation (43752, 43753); temporary transcutaneous pacing (92953); ventilatory management (94002-94004, 94660, 94662); and vascular access procedures (36000, 36410, 36415, 36591, 36600). Any services performed that are not listed above should be reported separately. Facilities may report the above services separately

CPT Coding Guideline, Critical Care

Inpatient Neonatal Intensive Care Services and Pediatric and Neonatal Critical Care Services

Pediatric Critical Care Patient Transport

Codes 99466, 99467…

Codes 99485, 99486…

For the definition…

The non-face-to-face direction…

Emergency department services…

The following services are included when performed during the pediatric patient transport by the physician providing critical care and may not be reported separately: routine monitoring evaluations (eg, heart rate, respiratory rate, blood pressure, and pulse oximetry), the interpretation of cardiac output measurements (~~9356~~93598), chest X rays (71045, 71046), pulse oximetry (94760, 94761, 94762), blood gases and information data stored in computers (eg, ECGs, blood pressures, hematologic data), gastric intubation (43752, 43753), temporary transcutaneous pacing (92953), ventilatory management 94002, 94003, 94660, 94662), and vascular access procedures (36000, 36400, 36405, 36406, 36415, 36591, 36600). Any services performed which are not listed above should be reported separately. **…**

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Surgery
Cardiovascular System
Heart and Pericardium
Pacemaker or Implantable Defibrillator

A pacemaker system…

A single chamber…

A leadless cardiac…

Right heart catheterization (93451, 93453, 93456, 93457, 93460, 93461~~, 93530, 93531, 93532, 93533~~) may not be reported in conjunction with leadless pacemaker insertion and removal codes 33274, 33275 unless complete right heart catheterization is performed for an indication distinct from the leadless pacemaker procedure.

#33275 *Transcatheter removal of permanent leadless pacemaker, right ventricular, including imaging guidance (eg, fluoroscopy, venous ultrasound, ventriculography, femoral venography), when performed*

(Do not report 33274, 33275 in conjunction with 93451, 93453, 93456, 93457, 93460, 93461, 93593, 93594, 93596, 93597, 9359893530, 93531, 93532, 93533, unless complete right heart catheterization is performed for indications distinct from the leadless pacemaker procedure)

Implantable Hemodynamic Monitors

33289 *Transcatheter implantation of wireless pulmonary artery pressure sensor for long-term hemodynamic monitoring, including deployment and calibration of the sensor, right heart catheterization, selective pulmonary catheterization, radiological supervision and interpretation, and pulmonary artery angiography, when performed*

(Do not report 33289 in conjunction with 36013, 36014, 36015, 75741, 75743, 75746, 76000, 93451, 93453, 93456, 93457, 93460, 93461, 93593, 93594, 93596, 93597, 9359893530, 93531, 93532, 93533, 93568)

Heart (Including Valves) and Great Vessels

33340 *Percutaneous transcatheter closure of the left atrial appendage with endocardial implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, when performed, and radiological supervision and interpretation*

(Do not report 33340 in conjunction with 93452, 93453, 93458, 93459, 93460, 93461, 93595, 93596, 93597, 93598~~93531, 93532, 93533,~~ unless catheterization of the left ventricle is performed by a non-transseptal approach for indications distinct from the left atrial appendage closure procedure)

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(Do not report 33340 in conjunction with 93451, 93453, 93456, 93460, 93461, 93593, 93594, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~, unless complete right heart catheterization is performed for indications distinct from the left atrial appendage closure procedure)

Cardiac Valves
Mitral Valve

Codes 33418 and…

Codes 33418 and…

Angiography, radiological supervision…

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~) should **not** be used with 33418, 33419 to report:

1. Contrast injections, angiography, road-mapping, and/ or fluoroscopic guidance for the transcatheter mitral valve repair (TMVR),

2. Left ventricular angiography to assess mitral regurgitation for guidance of TMVR, or

3. Right and left heart catheterization for hemodynamic measurements before, during, and after TMVR for guidance of TMVR.

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598~~93530, 93531, 93532, 93533~~) and diagnostic coronary angiography codes (93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563, 93564) may be reported with 33418, 33419, representing separate and distinct services from TMVR, if:

1. No prior study is available, and a full diagnostic study is performed, or

2. A prior study is available, but as documented in the medical record:

   a. There is inadequate visualization of the anatomy and/or pathology, or

   b. The patient's condition with respect to the clinical indication has changed since the prior study, or

   c. There is a clinical change during the procedure that requires new evaluation.

Other cardiac catheterization…

For same session…

Diagnostic coronary angiography…

Percutaneous coronary interventional…

When transcatheter ventricular…

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When cardiopulmonary bypass…

33418 Transcatheter mitral valve repair, percutaneous approach, including transseptal puncture when performed; initial prosthesis

Pulmonary Valve

Code 33477 is…

Code 33477 includes…

Code 33477 includes all cardiac catheterization(s), intraprocedural contrast injection(s), fluoroscopic radiological supervision and interpretation, and imaging guidance performed to complete the pulmonary valve procedure. Do not report 33477 in conjunction with 76000, 93451, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~, 93563, 93566, 93567, 93568 for angiography intrinsic to the procedure.

Code 33477 includes,,,

Codes 92997, 92998…

Diagnostic right heart catheterization and diagnostic coronary angiography codes (93451, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~, 93563, 93566, 93567, 93568) should **not** be used with 33477 to report:

1. Contrast injections, angiography, roadmapping, and/or fluoroscopic guidance for the TPVI,

2. Pulmonary conduit angiography for guidance of TPVI, or

3. Right heart catheterization for hemodynamic measurements before, during, and after TPVI for guidance of TPVI.

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~), diagnostic coronary angiography codes (93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563, 93564), and diagnostic pulmonary angiography code (93568) may be reported with 33477, representing separate and distinct services from TPVI, if:

1. No prior study is available, and a full diagnostic study is performed, or

2. A prior study is available, but as documented in the medical record:

   a. There is inadequate visualization of the anatomy and/or pathology, or

   b. The patient's condition with respect to the clinical indication has changed since the prior study, or

   c. There is a clinical change during the procedure that requires new evaluation.

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Other cardiac catheterization…

For same session…

Diagnostic coronary angiography…

Percutaneous coronary interventional…

Percutaneous pulmonary artery…

When transcatheter ventricular…

When cardiopulmonary bypass…

33470 *Valvotomy, pulmonary valve, closed heart; transventricular*

Arteries and Veins
Vascular Injection Procedures
Intra-Arterial-Intra-Aortic

36215 *Selective catheter placement, arterial system; each first order thoracic or brachiocephalic branch, within a vascular family*

…

✚*36218* *additional second order, third order, and beyond, thoracic or brachiocephalic branch, within a vascular family (List in addition to code for initial second or third order vessel as appropriate)*

(Use 36218 in conjunction with 36216, 36217, 36225, 36226)

(For angiography, see 36222-36228, 75600-75774)

(For transluminal balloon angioplasty [except lower extremity artery[ies] for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit], see 37246, 37247)

(For transcatheter therapies, see 37200, 37211, 37213, 37214, 37236, 37237, 37238, 37239, 37241, 37242, 37243, 37244, 61624, 61626)

(When ~~coronary artery,~~ arterial ~~conduit~~ [eg, internal mammary, inferior epigastric or free ~~radical~~ radial artery] or venous bypass graft angiography is performed in conjunction with cardiac catheterization, see the appropriate cardiac catheterization, injection procedure, and imaging supervision code[s] [93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, ~~93530-93533,~~ 93593, 93594, 93595, 93596, 93597, 93564] in the **Medicine** section. When internal mammary artery angiography only is performed without a concomitant cardiac catheterization, use 36216 or 36217 as appropriate)

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Radiology
Diagnostic Radiology (Diagnostic Imaging)
Vascular Procedures
Aorta and Arteries

✚*75774* *Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)*

(For cardiac catheterization procedures, see 93452-93462, 93593, 93594, 93595, 93596, 93597~~93531-93533~~, 93563-93568)

Medicine
Cardiovascular
Cardiac Catheterization

Cardiac catheterization is a diagnostic medical procedure which includes introduction, positioning and repositioning, when necessary, of catheter(s), within the vascular system, recording of intracardiac and/or intravascular pressure(s), and final evaluation and report of procedure. There are two code families for cardiac catheterization: one for congenital heart disease and one for all other conditions. For cardiac catherization for congenital heart defects (93593, 93594, 93595, 93596, 93597, 93598), see the **Medicine/Cardiovascular/Cardiac Catheterization for Congenital Heart Defects** subsection. The following guidelines apply to cardiac catheterization performed for indications other than the evaluation of congenital heart defects. ~~Anomalous coronary arteries, patent foramen ovale, mitral valve prolapse, and bicuspid aortic valve are to be reported with 93451-93464, 93566-93568.~~

Right ~~h~~Heart ~~c~~Catheterization: for indications other than the evaluation of congenital heart defects (93453, 93456, 93457, 93460, 93461) includes catheter placement in one or more right-sided cardiac chamber(s) or structures (ie, the right atrium, right ventricle, pulmonary artery, pulmonary wedge), obtaining blood samples for measurement of blood gases, and cardiac output measurements (Fick or other method), when performed. For placement of a flow directed catheter (eg, Swan-Ganz) performed for hemodynamic monitoring purposes not in conjunction with other catheterization services, use 93503. Do not report 93503 in conjunction with other diagnostic cardiac catheterization codes. Right heart catheterization does not include right ventricular or right atrial angiography (93566). ~~Left heart catheterization involves catheter placement in a left-sided (systemic) cardiac chamber(s) (left ventricle or left atrium) and included left ventricular injection(s) when performed. Do not report 93503 in conjunction with other diagnostic cardiac catheterization codes. When right heart catheterization is performed in conjunction with other cardiac catheterization services, report 93453, 93456, 93457, 93460, or 93461.~~

For right heart catheterization as part of catheterization to evaluate congenital heart defects, see 93593, 93594, 93596, 93597, 93598. For reporting purposes, when the morphologic left ventricle is in a subpulmonic position (eg, certain cases of transposition of the great arteries) due to congenital heart disease, catheter placement with hemodynamic assessment in this structure~~s~~ during right heart catheterization is considered part of that procedure, and does not constitute left heart catheterization. When the subpulmonic ventricle also connects to the aorta (eg, double outlet right ventricle), catheter placement with hemodynamic assessment of this ventricle during right heart catheterization is considered part of that procedure, while catheter placement with hemodynamic assessment of that same ventricle from the arterial approach is considered left heart catheterization. Report the appropriate code for right and left heart catheterization if catheter placement with hemodynamic assessment of the

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double outlet ventricle is performed both during the right heart catheterization and separately from the arterial approach. Right heart catheterization for congenital heart defects does not typically involve thermodilution cardiac output assessments. When thermodilution cardiac output is performed in this setting it may be separately reported using 93598). ~~When left heart catheterization is performed using either transapical puncture of the left ventricle or transseptal puncture of an intact septum, report 93462 in conjunction with 93452, 93453, 93458-93461, 93653, 93654. Catheter placement(s) in coronary artery(ies) involves selective engagement of the origins of the native coronary artery(ies) for the purpose of coronary angiography. Catheter placement(s) in bypass graft(s) (venous, internal mammary, free arterial graft[s]) involve selective engagement of the origins of the graft(s) for the purpose of bypass angiography. It is typically performed only in conjunction with coronary angiography of native vessels.~~

Left Heart Catheterization: for indications other than congenital heart defects (93452, 93453, 93458, 93459, 93460, 93461) involves catheter placement in a left-sided (systemic) cardiac chamber(s) (left ventricle or left atrium) and includes left ventricular/left atrial angiography, imaging supervision, and interpretation, when performed. For reporting purposes, when the morphologic right ventricle is in a systemic (subaortic) position due to congenital heart disease (eg, certain cases of transposition of the great arteries), catheter placement with hemodynamic assessment of the subaortic ventricle performed during left heart catheterization is considered part of the procedure and does not constitute right heart catheterization. If additional catheterization of right heart structures (eg, atrium, pulmonary artery) is performed at the same setting, report the appropriate code for right and left heart catheterization. When left heart catheterization is performed using either transapical puncture of the left ventricle or transseptal puncture of an intact septum, report 93462 in conjunction with 93452, 93453, 93458-93461, 93596, 93597. For left heart catheterization services for the evaluation of congenital heart defects, see 93595, 93596, 93597, 93565.

***Catheter Placement and Injection Procedures*:** For a listing of the injection procedures included in specific cardiac catheterization procedures, please refer to the tables on pages (X-X).

Cardiac catheterization (93451-93461), other than for the evaluation of congenital heart defects, includes: a) all roadmapping angiography in order to place the catheters; b) any injections for angiography of the left ventricle, left atrium, native coronary arteries or bypass grafts listed as inherent to the procedure in the cardiac catheterization table located on pages X-X; and c) imaging supervision, interpretation, and report. Do not report 93563, 93464, 93565 in conjunction with 93452, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461. The cardiac catheterization codes do not include contrast injection(s) and imaging supervision, interpretation, and report for imaging that is separately identified by other specific procedure code(s).

Catheter placement(s) in coronary artery(ies) involves selective engagement of the origins of the native coronary artery(ies) for the purpose of coronary angiography. Catheter placement(s) in bypass graft(s) (venous, internal mammary, free arterial graft[s]) involves selective engagement of the origins of the graft(s) for the purpose of bypass angiography. Bypass graft angiography is typically performed only in conjunction with coronary angiography of native vessels.

~~The cardiac catheterization codes (93452-93461), other than those for congenital heart disease, include contrast injection(s), imaging supervision, interpretation, and report for imaging typically performed. Codes for left heart catheterization (93452, 93453, 93458-93461), other than those for congenital heart disease, include intraprocedural injection(s) for left ventricular/left atrial angiography, imaging supervision, and interpretation, when performed.~~ Codes for ~~coronary~~ catheter placement(s) in native coronary arteries (93454-93461) and bypass graft(s) (93455,

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93457, 93459, 93461) ~~, other than those for congenital heart disease,~~ include intraprocedural injection(s) for coronary/bypass graft angiography, imaging supervision, and interpretation, except when these catheter placements are performed during cardiac catheterization for the evaluation of congenital heart defects. ~~Codes for catheter placement(s) in bypass graft(s) (93455, 93457, 93459, 93461), other than those for congenital heart disease, include intraprocedural injection(s) for bypass graft angiography, imaging supervision, and interpretation.~~ Do not report 93563-93565 in conjunction with 93452-93461.

For right ventricular or right atrial angiography performed in conjunction with right heart catheterization for noncongenital heart disease (93451, 93453, 93456, 93457, 93460, 93461) or for the evaluation of congenital heart defects (93593, 93594, 93596, 93597), use 93566. For reporting purposes, angiography of the morphologic right ventricle or morphologic right atrium is reported with 93566, whether these structures are in the standard prepulmonic position or in a systemic (subaortic) position. Left heart catheterization performed for noncongenital heart disease (93452, 93453, 93458, 93459, 93460, 93461) includes left ventriculography, when performed. For reporting purposes, angiography of the morphologic left ventricle or morphologic left atrium is reported with 93565, whether these structures are in the standard systemic (subaortic) position or in a prepulmonic position. Do not report 93565 with 93452, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461. For cardiac catheterization performed for the evaluation of congenital heart defects, left ventriculography is separately reported with 93565. For both congenital and noncongenital cardiac catheterization, supravalvular aortography is reported with 93567. For both congenital and noncongenital cardiac catheterization, pulmonary angiography is reported with 93568 plus the appropriate right heart catheterization code.

When contrast injection(s) are performed in conjunction with cardiac catheterization for congenital heart disease (93593, 93594, 93595, 93596, 93597), see 93563, 93564, 93565, 93566, 93567, 93568. Injection procedures 93563, 93564, 93565, 93566, 93567, 93568 represent separate identifiable services and may be reported in conjunction with one another when appropriate. Codes 93563, 93564, 93565, 93566, 93567, 93568 include imaging supervision, interpretation, and report.

For angiography of noncoronary arteries and veins, performed as a distinct service, use appropriate codes from the Radiology section and the Vascular Injection Procedures section.

~~For cardiac catheterization for congenital cardiac anomalies, see 93530-93533. When contrast injection(s) are performed in conjunction with cardiac catheterization for congenital anomalies, see 93563-93568~~

~~Cardiac catheterization (93451-93461) includes all roadmapping angiography in order to place the catheters, including any injections and imaging supervision, interpretation, and report. It does not include contrast injection(s) and imaging supervision, interpretation, and report for imaging that is separately identified by other specific procedure code(s). For right ventricular or right atrial angiography performed in conjunction with cardiac catheterization for congenital or noncongenital heart disease (93451-93461, 93530-93533), use 93566. For aortography, use 93567. For pulmonary angiography, use 93568. For angiography of noncoronary arteries and veins, performed as a distinct service, use appropriate codes from the Radiology section and the Vascular Injection Procedures section~~.

Adjunctive Hemodynamic Assessments: ~~W~~when cardiac catheterization is combined with pharmacologic agent administration with the specific purpose of repeating hemodynamic measurements to evaluate hemodynamic response, use 93463 in conjunction with 93451-93453, 93456-93461, 93593, 93594, 93595, 93596, 93597. Do not report 93463 for intracoronary administration of pharmacologic agents during percutaneous

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coronary interventional procedures, during intracoronary assessment of coronary pressure, flow or resistance, or during intracoronary imaging procedures. Do not report 93463 in conjunction with 92920-92944, 92975, 92977.

When cardiac catheterization is combined with exercise (eg, walking or arm or leg ergometry protocol) with the specific purpose of repeating hemodynamic measurements to evaluate hemodynamic response, report 93464 in conjunction with 93451-93453, 93456-93461, ~~and~~93593, 93594, 93595, 93596, 9359793530-93533.

~~Please see the cardiac catheterization table located on page 684.~~

93451 *Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed*

(Do not report 93451 in conjunction with 33289, 93453, 93456, 93457, 93460, 93461, *0X06T)*

(Do not report 93451 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for diagnostic right heart catheterization procedures intrinsic to the valve repair or annulus reconstruction procedure)

Illustration caption:

~~**Right Heart Catheterization—Infant**~~
~~Catheter is advanced retrograde through the arterial system to the ascending aorta; pressures are measured in the aortic root; the catheter is manipulated using fluoroscopic guidance into the ostium of a coronary artery, arterial bypass conduit, or venous coronary bypass graft.~~

Illustration deleted

93453 *Combined right and left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed*

(Do not report 93453 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for diagnostic left and right heart catheterization procedures intrinsic to the valve repair or annulus reconstruction procedure)

93454 *Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation*

(Do not report 93454 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for coronary angiography intrinsic to the valve repair or annulus reconstruction procedure)

93455 *with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography*

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	(Do not report 93455 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for coronary angiography intrinsic to the valve repair or annulus reconstruction procedure)
93456	*with right heart catheterization*
	(Do not report 93456 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for diagnostic coronary angiography or right heart catheterization procedures intrinsic to the valve repair or annulus reconstruction procedure)
93460	*with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed*
	(Do not report 93460 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for diagnostic coronary angiography or left and right heart catheterization procedures intrinsic to the valve repair or annulus reconstruction procedure)
93461	*with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography*
	(Do not report 93461 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for diagnostic coronary angiography or left and right heart catheterization procedures intrinsic to the valve repair or annulus reconstruction procedure)
✚*93462*	*Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (List separately in addition to code for primary procedure)*
	(Use 93462 in conjunction with 33477, 93452, 93453, 93458, 93459, 93460, 93461, 93595, 93596, 93597, 93582, 93653, 93654)
	(Use 93462 in conjunction with 93590, 93591 for transapical puncture performed for left heart catheterization and percutaneous transcatheter closure of paravalvular leak)
	(Use 93462 in conjunction with 93581 for transseptal or transapical puncture performed for percutaneous transcatheter closure of ventricular septal defect)
	(Do not report 93462 in conjunction with 93590 for transeptal puncture through intact septum performed for left heart catheterization and percutaneous transcatheter closure of paravalvular leak)
	(Do not report 93462 in conjunction with 93656)
	(Do not report 93462 in conjunction with 33418, 0345T, 0544T unless transapical puncture is performed)
✚*93463*	*Pharmacologic agent administration (eg, inhaled nitric oxide, intravenous infusion of nitroprusside, dobutamine, milrinone, or other agent) including assessing hemodynamic measurements before, during, after and repeat pharmacologic agent administration, when performed (List separately in addition to code for primary procedure)*

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		(Use 93463 in conjunction with 33477, 93451-93453, 93456-93461, 93593, 93594, 93595, 93596, 9359793530, 93531, 93532, 93533, 93580, 93581, 93582) *(Report 93463 only once per catheterization procedure)* *(Do not report 93463 for pharmacologic agent administration in conjunction with coronary interventional procedure 92920-92944, 92975, 92977)*		
✚	*93464*	*Physiologic exercise study (eg, bicycle or arm ergometry) including assessing hemodynamic measurements before and after (List separately in addition to code for primary procedure)* (Use 93464 in conjunction with 33477, 93451-93453, 93456-93461, 93593, 93594, 93595, 93596, 9359793530-93533) *(Report 93464 only once per catheterization procedure)* *(For pharmacologic agent administration, use 93463) (For bundle of His recording, use 93600)* (For bundle of His recording, use 93600)		
D	93530	-	Right heart catheterization, for congenital cardiac anomalies (93530 has been deleted. To report, see 93593, 93594)	000	N/A (2020 work RVU = 3.97)
D	93531	-	Combined right heart catheterization and retrograde left heart catheterization, for congenital cardiac anomalies	000	N/A (2020 work RVU = 8.34)
D	93532	-	Combined right heart catheterization and transseptal left heart catheterization through intact septum with or without retrograde left heart catheterization, for congenital cardiac anomalies	000	N/A (2020 work RVU = 9.99)
D	93533	-	Combined right heart catheterization and transseptal left heart catheterization through existing septal opening, with or without retrograde left heart catheterization, for congenital cardiac anomalies (93531, 93532, 93533 have been deleted. To report, see 93462, 93596, 93597)	000	N/A (2020 work RVU = 6.69)
Injection Procedures					

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~~All injection codes include radiological supervision, interpretation, and report. Cardiac catheterization codes (93452-93461), other than those for congenital heart disease, include contrast injection(s) for imaging typically performed during these (see Cardiac Catheterization above). Do not report 93563-93565 in conjunction with 93452-93461. When injection procedures for right ventricular, right atrial, aortic, or pulmonary angiography are performed in conjunction with cardiac catheterization, these services are reported separately (93566-93568). When right ventricular or right atrial angiography is performed at the time of heart catheterization, use 93566 with the appropriate catheterization code (93451, 93453, 93456, 93457, 93460, or 93461. Use 93567 when supravalvular ascending aortography is performed at the time of heart catheterization. Use 93568 with the appropriate right heart catheterization code when pulmonary angiography is performed. Separately reported injection procedures do not include introduction of catheters but do include repositioning of catheters when necessary and use of automatic power injectors, when performed.~~

~~When contrast injection(s) are performed in conjunction with cardiac catheterization for congenital cardiac anomalies (93530-93533), see 93563-93568. Injection procedure codes 93563-93568 include imaging supervision, interpretation, and report.~~

~~Injection procedures 93563-93568 represent separate identifiable services and may be coded in conjunction with one another when appropriate. The technical details of angiography, supervision of imaging and processing, interpretation, and report are included.~~

~~**D**93561~~	-	~~Indicator dilution studies such as dye or thermodilution, including arterial and/or venous catheterization; with cardiac output measurement (separate procedure)~~	ZZZ	N/A (2020 work RVU = 0.95)
~~**D**93562~~	-	~~subsequent measurement of cardiac output~~ ~~(Do not report 93561, 93562 in conjunction with 93451-93462, 93582)~~ (Codes 93561, 93562 have been deleted) (For cardiac output measurement[s], thermodilution or other indicator dilution method, performed during cardiac catheterization for the evaluation of congenital heart defects, use 93598) *(For radioisotope method of cardiac output, see 78472, 78473, or 78481)*	ZZZ	N/A (2020 work RVU = 0.77)

~~**+**~~*93563*	*Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for selective coronary angiography during congenital heart catheterization, including catheter placement(s) when performed (List separately in addition to code for primary procedure)*
~~**+**~~*93564*	*for selective opacification of aortocoronary venous or arterial bypass graft(s) (eg, aortocoronary saphenous vein, free radial artery, or free mammary artery graft) to one or more coronary arteries and in situ arterial conduits (eg, internal mammary), whether native or used for bypass to one or more coronary arteries during congenital heart*

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	catheterization, , including catheter placement(s) when performed (List separately in addition to code for primary procedure)
	(Do not report 93563, 93564 in conjunction with 33418, 0345T, 0483T, 0484T, 0544T, 0545T for coronary angiography intrinsic to the valve repair or annulus reconstruction procedure)
✚*93565*	*for selective left ventricular or left atrial angiography (List separately in addition to code for primary procedure)*
	(Do not report 93563-93565 in conjunction with 93452-93461)
	(Use 93563-93565 in conjunction with 93593, 93594, 93595, 93596, 93597~~93530-93533~~)
✚*93566*	*for selective right ventricular or right atrial angiography (List separately in addition to code for primary procedure)*
	(Use 93566 in conjunction with 93451, 93453, 93456, 93457, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93582~~93530-93533~~)
	(Do not report 93566 in conjunction with 33274 for right ventriculography performed during leadless pacemaker insertion)
	(Do not report 93566 in conjunction with 0545T for right ventricular or right atrial angiography procedures intrinsic to the annulus reconstruction procedure)
✚*93567*	*for supravalvular aortography (List separately in addition to code for primary procedure)*
	(Use 93567 in conjunction with 93451-93461, 93593, 93594, 93595, 93596, 93597~~93530-93533~~)
	(For non-supravalvular thoracic aortography or abdominal aortography performed at the time of cardiac catheterization, use the appropriate radiological supervision and interpretation codes [36221, 75600-75630])
✚*93568*	*for pulmonary angiography (List separately in addition to code for primary procedure)*
	(Use 93568 in conjunction with 93451, 93453, 93456, 93457, 93460, 93461, 93593, 93594, 93595, 93596, 93597~~93530-93533~~, 93580, 93581, 93582, 93583)
✚*93571*	*Intravascular Doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (List separately in addition to code for primary procedure)*
	(Use 93571 in conjunction with 92920, 92924, 92928, 92933, 92937, 92941, 92943, 92975, 93454-93461, 93563, 93564, 93593, 93594, 93595, 93596, 93597)
	(Do not report 93571 in conjunction with 0523T)
✚*93572*	*each additional vessel (List separately in addition to code for primary procedure)*

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(For unlisted cardiac catheterization procedure, use 93799)

(Use 93572 in conjunction with 93571)

(Intravascular distal coronary blood flow velocity measurements include all Doppler transducer manipulations and repositioning within the specific vessel being examined, during coronary angiography or therapeutic intervention [eg, angioplasty])

(For unlisted cardiac catheterization procedure, use 93799) (Do not report 93572 in conjunction with 0523T)

Repair of Structural Heart Defect

93580 *Percutaneous transcatheter closure of congenital interatrial communication (ie, Fontan* fenestration, atrial septal defect) with implant

(Percutaneous transcatheter closure of atrial septal defect includes a right heart catheterization procedure. Code 93580 includes injection of contrast for atrial and ventricular angiograms. Codes 93451-93453, 9345~~6~~5, 93457, 93458, 93459, 93460, ~~-~~93461, 93593, 93594, 93595, 93596, 93597, 9359893530-93533, 9356~~4-~~, 93566 should not be reported separately in addition to code 93580)

(For other cardiac angiographic procedures performed at the time of transcatheter atrial septal defect closure, see 93563, 93564, 93567, 93568, as appropriate)

93581 *Percutaneous transcatheter closure of a congenital ventricular septal defect with implant*

(Percutaneous transcatheter closure of ventricular septal defect includes a right heart catheterization procedure. Code 93581 includes injection of contrast for atrial and ventricular angiograms. Codes 93451-93453, 9345~~6~~5, 93457, 93458, 93459, 93460, ~~-~~93461, 93593, 93594, 93595, 93596, 93597, 9359893530-93533, 9356~~4-~~, 93566 should not be reported separately in addition to code 93581)

(For other cardiac angiographic procedures performed at the time of transcatheter closure of ventricular septal defect, see 93563, 93564, 93567, 93568, as appropriate)

(For echocardiographic services performed in addition to 93580, 93581, see 93303-93317, 93662 as appropriate)

93582 *Percutaneous transcatheter closure of patent ductus arteriosus*

(93582 includes congenital right and left heart catheterization, catheter placement in the aorta, and aortic arch angiography, when performed)

(Do not report 93582 in conjunction with 36013, 36014, 36200, 75600, 75605, 93451-93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 9359893530, 93531, 93532, 93533, 93567)

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	(For other cardiac angiographic procedures performed at the time of transcatheter PDA closure, see 93563, 93564, 93565, 93566, 93568 as appropriate)
	~~(For left heart catheterization by transseptal puncture through intact septum or by transapical puncture performed at the time of transcatheter PDA closure, use 93462)~~
	(For repair of patent ductus arteriosus by ligation, see 33820, 33822, 33824)
	(For intracardiac echocardiographic services performed at the time of transcatheter PDA closure, use 93662. Other echocardiographic services provided by a separate individual are reported using the appropriate echocardiography service codes, 93315, 93316, 93317)
93583	*Percutaneous transcatheter septal reduction therapy (eg, alcohol septal ablation) including temporary pacemaker insertion when performed*
	(93583 includes insertion of temporary pacemaker, when performed, and left heart catheterization)
	(Do not report 93583 in conjunction with 33210, 93452, 93453, 93458, 93459, 93460, 93461, 93595, 93596, 9359793531, ~~93532, 93533~~, 93565)
	(93583 includes left anterior descending coronary angiography for the purpose of roadmapping to guide the intervention. Do not report 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563 for coronary angiography performed during alcohol septal ablation for the purpose of roadmapping, guidance of the intervention, vessel measurement, and completion angiography)
	(Diagnostic cardiac catheterization procedures may be separately reportable when no prior catheter-based diagnostic study of the treatment zone is available, the prior diagnostic study is inadequate, or the patient's condition with respect to the clinical indication has changed since the prior study or during the intervention. Use the appropriate codes from 93451, 93454, 93455, 93456, 93457, 93593, 93594, 9359893530, 93563, 93564, 93566, 93567, 93568)
	(Do not report 93583 in conjunction with 33210, 33211)
	(Do not report 93463 for the injection of alcohol for this procedure)
	(For intracardiac echocardiographic services performed at the time of alcohol septal ablation, use 93662)
	(Other echocardiographic services provided by a separate physician are reported using the appropriate echocardiography services codes, 93312, 93313, 93314, 93315, 93316, 93317)
	(For surgical ventriculomyotomy [-myectomy] for idiopathic hypertrophic subaortic stenosis, use 33416)
Transcatheter Closure of Paravalvular Leak	

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Codes 93590, 93591…

Codes 93590 and 93591…

Code 93590 includes transseptal puncture, and left heart catheterization/left ventriculography (93452, 93453, 93458, 93459, 93460, 93461, 93595, 93596, 93597~~93531, 93532, 93533~~, 93565), when performed. Transapical left heart catheterization (93462) may be reported separately, when performed.

Code 93591 includes, when performed, supravalvular aortography (93567), left heart catheterization/left ventriculography (93452, 93453, 93458, 93459, 93460, 93461, 93595, 93596, 93597~~93531, 93532, 93533~~, 93565). Transapical left heart catheterization (93462) may be reported separately, when performed.

Diagnostic right heart catheterization codes (93451, 93456, 93457, 93593, 93594, 93598~~93530~~) and diagnostic coronary angiography codes (93454, 93455, 93456, 93457, 93563, 93564) may be reported with 93590, 93591, representing separate and distinct services from PVL closure, if:

1. No prior study is available and a full diagnostic study is performed, or

2. A prior study is available, but as documented in the medical record:

   a. there is inadequate visualization of the anatomy and/or pathology, or

   b. the patient's condition with respect to the clinical indication has changed since the prior study, or

   c. there is a clinical change during the procedure that requires new evaluation.

Other cardiac catheterization…

For same session…

93590 Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, mitral valve

Cardiac Catheterization for Congenital Heart Defects

Cardiac catheterization for the evaluation of congenital heart defect(s) is reported with 93593, 93594, 93595, 93596, 93597, 93598. Cardiac catheterization services for anomalous coronary arteries arising from the aorta or off of other coronary arteries, patent foramen ovale, mitral valve prolapse, and bicuspid aortic valve, in the absence of other congenital heart defects, are reported with 93451-93464, 93566, 93567, 93568. However, when these conditions exist in conjunction with other congenital heart defects, 93593, 93594, 93595, 93596, 93597 may be reported. Evaluation of anomalous coronary arteries arising from the pulmonary arterial system is reported with the congenital catheterization codes.

Right Heart Catheterization: for congenital heart defects (93593, 93594, 93596, 93597) includes catheter placement in one or more right-sided cardiac chamber(s) or structures (ie, the right atrium, right ventricle, pulmonary artery, pulmonary wedge), obtaining blood samples for measurement of blood gases, and Fick cardiac output measurements, when performed. While the morphologic right atrium and morphologic

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right ventricle are typically the right heart structures supplying blood flow to the pulmonary artery, in congenital heart disease the subpulmonic ventricle may be a morphologic left ventricle and the subpulmonic atrium may be a morphologic left atrium. For reporting purposes, when the morphologic left ventricle or left atrium is in a subpulmonic position due to congenital heart disease, catheter placement in either of these structures is considered part of right heart catheterization and does not constitute left heart catheterization. Right heart catheterization for congenital cardiac anomalies does not typically involve thermodilution cardiac output assessments. When thermodilution cardiac output is performed in this setting, it may be separately reported using add-on code 93598. Right heart catheterization does not include right ventricular or right atrial angiography. When right ventricular or right atrial angiography is performed, use 93566. For reporting purposes, angiography of the morphologic right ventricle or morphologic right atrium is reported with 93566, whether these structures are in the standard pre-pulmonic position or in a systemic (subaortic) position. For placement of a flow directed catheter (eg, Swan-Ganz) performed for hemodynamic monitoring purposes not in conjunction with other catheterization services, use 93503. Do not report 93503 in conjunction with 93453, 93456, 93457, 93460, 93461, 93593, 93594, 93595, 93596, 93597.

Right heart catheterization for congenital heart defects may be performed in patients with normal or abnormal connections. The terms *normal* and *abnormal* native connections are used to define the variations in the anatomic connections from the great veins to the atria, atria to the ventricles, and ventricles to the great arteries. This designation as normal or abnormal is used to determine the appropriate code to report right heart catheterization services in congenital heart disease.

Normal native connections exist when the pathway of blood flow follows the expected course through the right and left heart chambers and great vessels (ie, superior vena cava/inferior vena cava to right atrium, then right ventricle, then pulmonary arteries for the right heart; left atrium to left ventricle, then aorta for the left heart). Examples of congenital heart defects with normal connections would include acyanotic defects such as isolated atrial septal defect, ventricular septal defect, or patent ductus arteriosus. Services including right heart catheterization for congenital cardiac anomalies with normal connections are reported with 93593, 93596.

Abnormal native connections exist when there are alternative connections for the pathway of blood flow through the heart and great vessels. Abnormal connections are typically present in patients with cyanotic congenital heart defects, any variation of single ventricle anatomy (eg, hypoplastic right or left heart, double outlet right ventricle), unbalanced atrioventricular canal (endocardial cushion) defect, transposition of the great arteries, valvular atresia, tetralogy of Fallot with or without major aortopulmonary collateral arteries (MAPCAs), total anomalous pulmonary veins, truncus arteriosus, and any lesions with heterotaxia and/or dextrocardia. Examples of right heart catheterization through abnormal connections include accessing the pulmonary arteries via surgical shunts, accessing the pulmonary circulation from the aorta via MAPCAs, or accessing isolated pulmonary arteries through a patent ductus arteriosus. Other examples would include right heart catheterization through cavopulmonary anastomoses, Fontan conduits, atrial switch conduits [Mustard/Senning], or any variations of single ventricle anatomy/physiology. Services including right heart catheterization for congenital heart defects with abnormal connections are reported with 93594, 93597.

Left Heart Catheterization: for congenital heart defects (93595, 93596, 93597) involves catheter placement in a left-sided (systemic) cardiac chamber(s) (ventricle or atrium). The systemic chambers channel oxygenated blood to the aorta. In normal physiology the systemic chambers include the morphologic left atrium and left ventricle. In congenital heart disease, the systemic chambers may include a morphologic right atrium or morphologic right ventricle which is connected to the aorta due to transposition or other congenital anomaly. These may be termed

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subaortic chambers. For the purposes of reporting, the term left ventricle or left atrium is meant to describe the systemic (subaortic) ventricle or atrium. When left heart catheterization is performed using either transapical puncture of the left ventricle or transseptal puncture of an intact septum, report 93462 in conjunction with 93595, 93596, 93597. Left heart catheterization for congenital heart defects does not include left ventricular/left atrial angiography when performed. Left ventriculography or left atrial angiography performed during cardiac catheterization for congenital heart defects is separately reported with 93565. For reporting purposes, angiography of the morphologic left ventricle or morphologic left atrium is reported with 93565, whether these structures are in the standard systemic (subaortic) position or in a pre-pulmonic position. For left heart catheterization only, in patients with congenital heart defects, with either normal or abnormal connections, use 93595. When combined left and right heart catheterization is performed to evaluate congenital heart defects, use 93596 for normal native connections, or 93597 for abnormal native connections.

Catheter Placement and Injection Procedures: The work of imaging guidance, including fluoroscopy and ultrasound guidance for vascular access and to guide catheter placement for hemodynamic evaluation, is included in the cardiac catheterization for congenital heart defects codes, when performed by the same operator.

For cardiac catheterization for congenital heart defects, injection procedures are separately reportable due to the marked variability in the cardiovascular anatomy encountered.

When contrast injection(s) are performed in conjunction with cardiac catheterization for congenital heart defects, see injection procedure codes 93563, 93564, 93565, 93566, 93567, 93568, or use appropriate codes from the Radiology section and the Vascular Injection Procedures section. Codes 93563, 93564, 93565, 93566, 93567, 93568 include imaging supervision, interpretation, and report.

Injection procedures 93563, 93564, 93565, 93566, 93567, 93568 represent separate, identifiable services and may be reported in conjunction with one another when appropriate. For angiography of noncoronary arteries and veins, performed as a distinct service, use appropriate codes from the Radiology section and the Vascular Injection Procedures section.

Angiography of the native coronary arteries or bypass grafts during cardiac catheterization for congenital heart defects is reported with 93563, 93564. Catheter placement(s) in coronary artery(ies) or bypass grafts involves selective engagement of the origins of the native coronary artery(ies) or bypass grafts for the purpose of coronary angiography.

●93593	F1	Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; normal native connections	000	3.99
●93594	F2	abnormal native connections	000	6.10
●93595	F3	Left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone, normal or abnormal native connections	000	6.00

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●93596	F4	Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); normal native connections	000	7.91
●93597	F5	abnormal native connections	000	9.99
✚●93598	F6	Cardiac output measurement(s), thermodilution or other indicator dilution method, performed during cardiac catheterization for the evaluation of congenital heart defects (List separately in addition to code for primary procedure) (Use 93598 in conjunction with 93593, 93594, 93595, 93596, 93597) (Do not report 93598 in conjunction with 93451-93461) (For pharmacologic agent administration during cardiac catheterization for congenital heart defect[s], use 93463) (For physiological exercise study with cardiac catheterization for congenital heart defect[s], use 93464) (For indicator dilution studies such as thermodilution for cardiac output measurement during cardiac catheterization for congenital heart defect[s], use 93598) (For contrast injections during cardiac catheterization for congenital heart defect[s], see 93563, 93564, 93565, 93566, 93567, 93568) (For angiography or venography not described in the 90000 series code section, see appropriate codes from the Radiology and the Medicine/Vascular Injection Procedure subsection) (For transseptal or transapical access of the left atrium during cardiac catheterization for congenital heart defect[s], use 93462 in conjunction with 93595, 93596, 93597, as appropriate)	ZZZ	1.75

Category III Codes

0342T *Therapeutic apheresis with selective HDL delipidation and plasma reinfusion*

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Fluoroscopy (76000) and radiologic supervision and interpretation are inherent to the transcatheter mitral valve repair (TMVR) procedure and are not separately reportable. Diagnostic cardiac catheterization (93451, 93452, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598~~93530, 93531, 93532, 93533~~) should not be reported with transcatheter mitral valve repair (0345T) for:

- Contrast injections, angiography, roadmapping, and/or fluoroscopic guidance for the transcatheter mitral valve repair (TMVR),
- Left ventricular angiography to assess mitral regurgitation, for guidance of TMVR, or
- Right and left heart catheterization for hemodynamic measurements before, during, and after TMVR for guidance of TMVR.

Diagnostic right and left heart catheterization (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~), and diagnostic coronary angiography (93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563, 93564) not inherent to the TMVR, may be reported with 0345T, appended with modifier 59 if:

1. No prior study is available and a full diagnostic study is performed, or

2. A prior study is available, but as documented in the medical record:

   a. There is inadequate visualization of the anatomy and/or pathology, or

   b. The patient's condition with respect to the clinical indication has changed since the prior study, or

   c. There is a clinical change during the procedure that requires new evaluation.

Percutaneous coronary interventional…

Other cardiac catheterization...

When transcatheter ventricular…

0345T *Transcatheter mitral valve repair percutaneous approach via the coronary sinus*

…

0463T *Interrogation device evaluation (in person) with analysis, review and report, includes connection, recording and disconnection per patient encounter, implantable aortic counterpulsation ventricular assist system, per day*

(Do not report 0463T in conjunction with 0451T-0462T)

(Do not report 0451T-0463T in conjunction with 36000, 36002, 36005, 36010, 36200-36228, 75600-75774, 76000, 76936, 76937, 77001, 77002, 77011, 77012, 77021, 93451-93533, 93598, ~~93561~~93563, 93564, 93565, 93566, 93567, 93568, 93571, 93572)

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0481T *Injection(s), autologous white blood cell concentrate (autologous protein solution), any site, including image guidance, harvesting and preparation, when performed*

…

Codes 0483T, 0484T…

Angiography, radiological supervision…

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~) should not be used with 0483T, 0484T to report:

1. contrast injections, angiography, roadmapping, and/or fluoroscopic guidance for the transcatheter mitral valve implantation (TMVI),

2. left ventricular angiography to assess or confirm valve positioning and function,

3. right and left heart catheterization for hemodynamic measurements before, during, and after TMVI for guidance of TMVI.

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~) and diagnostic coronary angiography codes (93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563, 93564) performed at the time of TMVI may be separately reportable, if:

1. no prior study is available, and a full diagnostic study is performed, or

2. a prior study is available, but as documented in the medical record:

a. there is inadequate visualization of the anatomy and/or pathology, or

b. the patient's condition with respect to the clinical indication has changed since the prior study, or

c. there is a clinical change during the procedure that requires new evaluation.

For same session…

When cardiopulmonary bypass…

For percutaneous transcatheter…

0483T *Transcatheter mitral valve implantation/replacement (TMVI) with prosthetic valve; percutaneous approach, including transseptal puncture, when performed*

Wireless Cardiac Stimulation System for Left Ventricular Pacing

A wireless cardiac…

The complete system…

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Patients with a…

Code 0515T describes…

For removal of…

All catheterization and…

Do not report left heart catheterization codes (93452, 93453, 93458, 93459, 93460, 93461, 93595, 93596, 93597~~93531, 93532, 93533~~) for delivery of a wireless cardiac stimulator electrode into the left ventricle.

0515T *Insertion of wireless cardiac stimulator for left ventricular pacing, including device interrogation and programming, and imaging supervision and interpretation, when performed; complete system (includes electrode and generator [transmitter and battery])*

…

0543T *Transapical mitral valve repair, including transthoracic echocardiography, when performed, with placement of artificial chordae tendineae*

(For transesophageal echocardiography image guidance, use 93355)

Codes 0544T and…

Angiography, radiological supervision…

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598~~93530, 93531, 93532, 93533~~, 93565, 93566) may not be used in conjunction with 0544T, 0545T to report:

1. contrast injections, angiography, road-mapping, and/or fluoroscopic guidance for the implantation and adjustment of the transcatheter mitral or tricuspid valve annulus reconstruction device, or
2. right or left ventricular angiography to assess or confirm transcatheter mitral or tricuspid valve annulus reconstruction device positioning and function, or
3. right and left heart catheterization for hemodynamic measurements before, during, and after transcatheter mitral or tricuspid valve annulus reconstruction for guidance.

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598~~93530, 93531, 93532, 93533~~) and diagnostic coronary angiography codes (93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563, 93564) performed at the time of transcatheter mitral or tricuspid valve annulus reconstruction may be separately reportable if:

1. no prior study is available, and a full diagnostic study is performed, or

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2. a prior study is available, but as documented in the medical record:

a. there is inadequate visualization of the anatomy and/or pathology, or

b. the patient's condition with respect to the clinical indication has changed since the prior study, or

c. there is a clinical change during the procedure that requires new evaluation.

Other cardiac catheterization…

For same session…

Percutaneous coronary interventional…

When cardiopulmonary bypass…

When transcatheter ventricular…

For percutaneous transcatheter…

0544T *Transcatheter mitral valve annulus reconstruction, with implantation of adjustable annulus reconstruction device, percutaneous approach including transseptal puncture*

(For transcatheter mitral valve repair percutaneous approach including transseptal puncture when performed, see 33418, 33419)

(For transcatheter mitral valve repair percutaneous approach via the coronary sinus, use 0345T)

(For transcatheter mitral valve implantation/ replacement [TMVI] with prosthetic valve percutaneous approach, use 0483T)

0545T *Transcatheter tricuspid valve annulus reconstruction with implantation of adjustable annulus reconstruction device, percutaneous approach*

(Do not report 0544T, 0545T in conjunction with 93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598~~93530, 93531, 93532, 93533~~, 93565, 93566 for diagnostic left and right heart catheterization procedures intrinsic to the annular repair procedure)

Tricuspid Valve Repair

Codes 0569T, 0570T…

For open tricuspid…

Angiography, radiological supervision…

Intracardiac echocardiography (93662)…

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Fluoroscopy (76000) and diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~, 93566) may **not** be used with 0569T, 0570T to report the following techniques for guidance of TTVr:

1. Contrast injections, angiography, roadmapping, and/or fluoroscopic guidance for the TTVr,

2. Right ventricular angiography to assess tricuspid regurgitation for guidance of TTVr, or

3. Right and left heart catheterization for hemodynamic measurements before, during, and after TTVr for guidance of TTVr.

Diagnostic right and left heart catheterization codes (93451, 93452, 93453, 93456, 93457, 93458, 93459, 93460, 93461, 93593, 93594, 93595, 93596, 93597, 93598 ~~93530, 93531, 93532, 93533~~, 93566) and diagnostic coronary angiography codes (93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93563, 93564) may be reported with 0569T, 0570T, representing separate and distinct services from TTVr, if:

1. No prior study is available, and a full diagnostic study is performed, or

2. A prior study is available, but as documented in the medical record:

   a. There is inadequate evaluation of the anatomy and/ or pathology, or

   b. The patient's condition with respect to the clinical indication has changed since the prior study, or

   c. There is a clinical change during the procedure that requires new diagnostic evaluation.

Other cardiac catheterization…

For same session…

Diagnostic coronary angiography…

Percutaneous coronary interventional…

When transcatheter ventricular…

When cardiopulmonary bypass…

0569T Transcatheter tricuspid valve repair, percutaneous approach; initial prosthesis

Modifiers
CPT Level I Modifiers

63 *Procedure Performed on Infants less than 4 kg*

Procedures performed on neonates and infants up to a present body weight of 4 kg may involve significantly increased complexity and physician or other qualified health care professional work commonly associated with these patients. This circumstance may be reported by adding modifier 63 to the procedure number. **Note:** Unless otherwise designated, this modifier may only be appended to procedures/services

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listed in the 20100-69990 code series and 92920, 92928, 92953, 92960, 92986, 92987, 92990, 92997, 92998, 93312, 93313, 93314, 93315, 93316, 93317, 93318, 93452, 93505, 93593, 93594, 93595, 93596, 93597, 9359893530, 93531, 93532, 93533, 93561, 93562, 93563, 93564, 93568, 93580, 93582, 93590, 93591, 93592, 93615, 93616 from the Medicine/Cardiovascular section. Modifier 63 should not be appended to any CPT codes listed in the **Evaluation and Management Services, Anesthesia, Radiology, Pathology/Laboratory,** or **Medicine** sections (other than those identified above from the Medicine/Cardiovascular section).

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93593 Tracking Number F1 Original Specialty Recommended RVU: **3.99**
Presented Recommended RVU: **3.99**
Global Period: 000 Current Work RVU: RUC Recommended RVU: **3.99**

CPT Descriptor: Right heart catheterization or congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone for hemodynamic evaluation; normal or abnormal native connections.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 9-month-old, 7 kg male with known pulmonary valve stenosis and failure to thrive is brought to the cardiac catheterization lab for evaluation. This cardiac catheterization is being requested to measure the right heart hemodynamics and severity of valvular stenosis, to determine if intervention is indicated.

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC , In the office

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day , Overnight stay-less than 24 hours , Overnight stay-more than 24 hours

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day

Description of Pre-Service Work: Review of noninvasive work-up including echocardiogram, CXR. and EKG. Determine all potential components required for the procedure are present. Perform and document a complete and/or interval history and physical exam. Provide a description of the procedure and expected results to the parents of the patient, a description of potential hazards, and signature of informed consent for the procedure. Acquaint the patient or parents with the catheterization laboratory. Supervise the administration of anxiolysis, when necessary. Conduct final procedural coordination with technicians, nurses, and the anesthesiology team. Set up a sterile table with all necessary sheaths and catheters, syringes, bowl with sterile heparinized flush, contrast, and any other necessary sterile equipment. Position patient. Prep, scrub, drape, and wait. Connect sterile tubing to flush system and pressure transducers and ensure the hemodynamic recording system is properly zeroed.

Description of Intra-Service Work: The vast majority of all procedures are conducted under general anesthesia. Palpate and identify the access site landmarks and administer local anesthesia. Access is obtained percutaneously, using Seldinger technique into the internal jugular, subclavian, axillary, or femoral venous systems. Ultrasound guidance for vascular access may be used depending on the vessel to be accessed and the age of the patient. Once the vessel is punctured, a guidewire is passed into the vessel. The vascular sheath is introduced into the vein, the guidewire and dilator removed, and the sheath flushed with sterile heparinized saline. A diagnostic catheter is passed through this sheath under fluoroscopic guidance. The catheter is directed from the venous system into any of the typical right heart structures including, the inferior and superior vena cavae, right atrium, right ventricle, right and left pulmonary arteries, and pulmonary capillary wedge position(s). Baseline measurements and blood sampling may be conducted in each of these chambers. Cardiac output is typically calculated using the Fick method. In patients without intra-cardiac shunting, cardiac output may be measured by thermodilution (separately reported). Positioning for angiography may occur in any of the right heart chambers or blood vessels, which includes exchanging the diagnostic catheter used for physiologic data for an angiographic catheter, and each are separately reportable. Following measurement of baseline values, pharmacological intervention may be performed (separately reported), and the measurements repeated. Following the conduct of the catherterization proper, the catheter and sheath is extracted and compression hemostasis achieved in the catheterization lab, and prior to being taken to the recovery area.

CPT Code: 93593

Description of Post-Service Work: Following catheterization, a brief procedure note is documented in the medical record. The patient is transported to the recovery area and a verbal report given to the accepting team. Medication reconciliation is performed in the EHR and post procedure orders are placed for nursing care. A detailed catheterization report is documented, which includes a diagram of the congenital heart defect, description of the procedure performed, calculations and interpretations of all hemodynamic data obtained, review and interpretation of the angiograms, and listing of the findings and recommendations. All necessary data is then also entered into the appropriate national data registry, as indicated/appropriate. There is at least one physician bedside visit to assess the patient, including catheterization sites, discuss the findings with the patient and/or family, and review discharge instructions and follow up information prior to discharge.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2020					
Presenter(s):	Richard Wright, MD; Thad Waites, MD; Edward Toggart, MD; Sergio Bartakian, MD; Steven Krug, MD					
Specialty Society(ies):	ACC & AAP & SCAI					
CPT Code:	93593					
Sample Size:	676	**Resp N:**	46			
Description of Sample:	Random interventional cardiologists from ACC, all pediatric cardiologists from AAP & SCAI identifiable from membership rolls					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	10.00	**35.00**	60.00	250.00
Survey RVW:	2.47	2.83	**3.99**	5.00	10.55
Pre-Service Evaluation Time:			**40.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	12.00	30.00	**45.00**	60.00	120.00

Immediate Post Service-Time:	**45.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	93593	**Recommended Physician Work RVU: 3.99**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**40.00**	**40.00**	**0.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**45.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**45.00**	**33.00**	**12.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93451	000	2.47	**RUC Time**

CPT Descriptor Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93454	000	4.54	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation;

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36475	000	5.30	**RUC Time**	109,583

CPT Descriptor 1 Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; first vein treated

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
31628	000	3.55	**RUC Time**	32,291

CPT Descriptor 2 Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with transbronchial lung biopsy(s), single lobe

Other Reference CPT Code	Global	Work RVU	Time Source
49422	000	4.00	**RUC Time**

CPT Descriptor Removal of tunneled intraperitoneal catheter

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 26 **% of respondents:** 56.5 **%**

Number of respondents who choose 2nd Key Reference Code: 5 **% of respondents:** 10.8 **%**

TIME ESTIMATES (Median)

	CPT Code: 93593	**Top Key Reference CPT Code:** 93451	**2nd Key Reference CPT Code:** **93454**
Median Pre-Service Time	58.00	30.00	30.00
Median Intra-Service Time	45.00	30.00	30.00
Median Immediate Post-service Time	45.00	30.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**148.00**	**90.00**	**90.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	4%	46%	46%	4%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	4%	46%	50%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	0%	65%	35%
Physical effort required	0%	77%	23%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	65%	35%

2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	20%	80%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	20%	20%	60%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	20%	0%	80%
Physical effort required	0%	60%	40%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	60%	40%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

History and Background

In May 2020, the ACC and SCAI presented a code change application to the CPT Editorial Panel to replace four congenital cardiac catheterization codes with five new codes to report cardiac catheterization for congenital cardiac defect(s); the proposal also included replacement of two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects; revision

of guidelines and parenthetical notes to reflect the proposed new and deleted codes; and revision of the Modifier 63 Procedure Performed on Infants Less than 4 kg guidelines to reflect these changes.

These changes were recommended to address gaps in the prior codes and significant changes in the service as a result of technology evolution over the past two decades. Whereas a predominance of diagnostic catheterizations were previously performed in a healthier population of children, with simpler cardiac defects, the specialty has evolved towards performing a substantially larger number of more complex diagnostic evaluations to guide more complex interventional procedures. Members felt the existing codes, created in the 1990s no longer captured the wider range of patient and procedural complexity. We explain this further in the compelling evidence discussion below and support with several pieces of literature.

The ACC, AAP, and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes. The 000-global day survey was completed by physicians who have experience with the service. This is the first of five new codes to report cardiac catheterization for congenital heart disease.

The key reference code is 93451 for right heart catheterization. It was selected by 56% of respondents. Half of the respondents indicated that 93593 was more complex. The second reference code was 93454 for catheter placement in coronary artery. It was selected by approximately 10% of respondents. 80% of the respondents indicated that 93593 was more intense/complex overall.

Rationale - Compelling Evidence for the Family

The recommended RVUs for this family of codes would result in increased spending. As noted above and below, increasingly ill patients are treated with increasingly complex technology, which we believe supports an argument for compelling evidence. Literature from the CPT code change application explain the medical advances that have occurred in the last decade (Bergerson, et al.).

Since 1997, when to-be-deleted code 93530 was surveyed, there has been a shift in patient population and change in how these codes are billed. The typical patient is now a more complex patient with more pathology. Due to the shift in patient population, the IWPUT correctly increases with our recommendations, bringing it in line with other codes in the cardiac catherization family. We believe this also shows there are differences in RUC survey methodology from 1997 to now, and that the current codes' times and RVUs are no longer be accurate because of that evolution. Nicholson et al. explains that these procedures were unable to be previously accomplished with earlier technology/techniques. Additional literature from the code change application is attached to show the changes in congenital catheterization over the past two decades.

There are numerous reasons why the original CPT code, 93530, does not work to properly capture the work performed in 2020 and beyond. For instance, the original code was the only right heart only catheterization code designed to capture all possible pathologies for patients with congenital heart disease. Although this was somewhat appropriate in the era where right heart only catheterizations were performed mostly for simple lesions, a far broader use of right heart catheterization had since developed. This brought about a need to divide the code into two; one for those with simple defects, defined in CPT as having normal connections, and a second code for the more complex patients with abnormal connections.

Furthermore, as the specialty has evolved into a much more complex patient population, several elements of the pre- and post- service packages, simply do not suit the work performed in a children's hospital. For instance, many procedures involve off-label use of products/devices, which preclude a children's hospital from carrying sufficient inventory. Physicians must keep these products/devices at affiliated adult hospitals, and on case-by-case need, go to the parent facility and obtain the required materials, which can take a substantial amount of time. Time to discuss a patient's procedure with the parent also takes considerably more time as compared to discussing with an adult patient consenting for themselves. This same problem is further involved in the post procedure segment of work in having to explain the pathology of the child to the parent. As a national standard, congenital heart programs are now also required to enter hemodynamic data and other procedural details into national registries such as IMPACT, which can also add significant post procedure work time.

Recommendation

Therefore, for code 93593 the societies recommend an RVW of 3.99 with 58 minutes preservice time, 45 minutes intraservice time from the survey median, and 45 minutes postservice time. This compares favorably with several MPC and

other codes that have identical or similar intraservice times, though each of those also have shorter total times, as shown in the summary spreadsheet.

The societies recommending the complete post-service time from the survey as we believe it correctly captures additional time that is typically spent to diagram the congenital heart defect in the EHR (not unlike the images included in attached Cardiac Catheterization Report), speak with the family who are typically parents concerned about their infant child, and complete data submission to the registry. Package 9B with the placement of these additional minutes is presented below.

	9B General Anesthesia or Complex Regional Block/Complex Procedure	
Total Post-Service Time	**33**	
Details:		
Application of Dressing[1]	2	
Transfer of supine patient off table	1	
Operative Note	5	+5
Monitor patient recovery/stabilization	10	
Communication with patient and/or family	5	+7
Written post-operative note	5	
Post-Operative Orders and Order Entry	5	

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93530

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatric Cardiology How often? Commonly

Specialty Interventional Cardiology How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 6440
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate based on IMPACT Registry data collected on congenital cardiac catheterizations and Medicaid claims data.

Specialty Pediatric Cardiology Frequency 6118 Percentage 95.00 %

Specialty Interventional Cardiology Frequency 322 Percentage 5.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 287
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on the Medicare data estimation reported in 2019

Specialty Interventional Cardiology Frequency 228 Percentage 79.44 %

Specialty Pediatric Interventional Cardiology Frequency 59 Percentage 20.55 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93530

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93594 Tracking Number F2 Original Specialty Recommended RVU: **6.10**
Presented Recommended RVU: **6.10**
Global Period: 000 Current Work RVU: RUC Recommended RVU: **6.10**

CPT Descriptor: Right heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone; abnormal native connections.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 6-month-old, 8 kg female with pulmonary atresia status post prior surgical shunt placement, now demonstrates progressive cyanosis, failure to thrive, and worsening cardiac function. She is brought to the cardiac catheterization lab for suspected branch pulmonary artery stenosis to determine if further intervention is warranted.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC , In the office

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day , Overnight stay-less than 24 hours , Overnight stay-more than 24 hours

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day

Description of Pre-Service Work: Review of noninvasive work-up including echocardiogram, CXR, EKG, cardiac CT, MRI, 3D printed model, or any other pertinent studies. Determine all potential components required for the procedure are present, including discussion with industry representatives to provide any atypical supplies not kept in stock. Perform and document a complete and/or interval history and physical exam, noting any and all prior cardiovascular sugeries and interventions. Provide a description of the underlying congenital anomaly and indication for intervention, description of the procedure, and expected results to the parents of the patient, a description of potential hazards, and signature of informed consent for the procedure. Acquaint the patient or parents with the catheterization laboratory. Supervise the administration of anxiolysis, when necessary. Conduct final procedural coordination with technicians, nurses, and the anesthesiology team. Set up a sterile table with all necessary sheaths and catheters, syringes, bowl with sterile heparinized flush, contrast, and any other necessary sterile equipment. Don surgical scrubs and lead. Supervise positioning the patient to allow for multiple access sites to be prepped. Prep, scrub, drape, and wait. Connect sterile tubing to flush system and pressure transducers and ensure the hemodynamic recording system is properly zeroed.

Description of Intra-Service Work: The vast majority of all procedures are conducted under general anesthesia. Palpate and identify the access site landmarks and administer local anesthesia. Access is obtained percutaneously, using Seldinger technique into the internal jugular, subclavian, axillary, or femoral venous systems. Frequently, multiple attempts must be made because of very small vessels and/or venous thrombosis from previous studies or presence of central venous access catheters. Additional ultrasound guidance may be necessary/used due to these problems, and not additionally reportable. In rare cases, the need for hepatic venous access may be necessary due to lack of any other possible venous access, and is separately reportable. Once the vessel is punctured, a guidewire is passed into the vessel. The vascular sheath is introduced into the vein, the guidewire and dilator removed, and the sheath flushed with sterile heparinized saline. A diagnostic catheter is passed through this sheath under fluoroscopic guidance. The catheter is then directed from the venous system into any of the typical right heart structures including, the inferior and/or superior vena cavae, atria, pulmonary ventricle, right and/or left pulmonary arteries, and pulmonary capillary wedge position(s). Frequently, there are additional venous structures such as a left sided vena cava, which may have to be catheterized and evaluated selectively. These must be accessed either from an interrupted inferior vena cava, directly from the left internal jugular vein, or through the heart via the coronary sinus. Baseline measurements and blood sampling may be conducted in each of these chambers. Cardiac output is typically calculated using the Fick method. In patients without intra-cardiac shunting (eg, post complete repair),

cardiac output may be measured by thermodilution (separately reported). Positioning for angiography may occur in any of the right heart chambers or blood vessels, which includes exchanging the diagnostic catheter used for physiologic data for an angiographic catheter, and each is separately reportable. Following measurement of baseline values, pharmacological intervention (separately reported) may be performed and the measurements repeated. Following the conduct of the catherterization proper, the catheter is extracted and compression hemostasis achieved in the catheterization lab, and prior to being taken to the recovery area.

Description of Post-Service Work: Following catheterization, a brief procedure note is documented in the medical record. The patient is transported to the recovery area and a verbal report given to the accepting team. Medication reconciliation is performed in the EMR and post procedure orders are placed for nursing care. A detailed catheterization report is documented, which includes a sllightly more complex diagram of the congenital heart defect, description of the procedure performed, calculations and interpretations of all hemodynamic data obtained, review and interpretation of the angiograms, and listing of the findings and recommendations. All necessary data is then also entered into the appropriate national data registry, as indicated/appropriate. There is at least one physician bedside visit to assess the patient, including catheterization sites, discuss the findings with the patient and/or family, and review discharge instructions and follow up information prior to discharge.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2020					
Presenter(s):	Richard Wright, MD; Thad Waites, MD; Edward Toggart, MD; Sergio Bartakian, MD; Steven Krug, MD					
Specialty Society(ies):	ACC, AAP & SCAI					
CPT Code:	93594					
Sample Size:	676	**Resp N:**	45			
Description of Sample:	Random interventional cardiologists from ACC, all pediatric cardiologists from AAP & SCAI identifiable from membership rolls					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	20.00	**30.00**	50.00	250.00
Survey RVW:	3.00	5.00	**6.10**	7.25	14.21
Pre-Service Evaluation Time:			**46.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	20.00	45.00	**60.00**	70.00	180.00

Immediate Post Service-Time:	**48.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	93594	**Recommended Physician Work RVU: 6.10**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**46.00**	**40.00**	**6.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**60.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**48.00**	**33.00**	**15.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93459	000	6.35	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93451	000	2.47	**RUC Time**

CPT Descriptor Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52351	000	5.75	**RUC Time**	22,929

CPT Descriptor 1 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37212	000	6.81	**RUC Time**	3,012

CPT Descriptor 2 Transcatheter therapy, venous infusion for thrombolysis, any method, including radiological supervision and interpretation, initial treatment day

Other Reference CPT Code	Global	Work RVU	Time Source
36217	000	6.29	**RUC Time**

CPT Descriptor Selective catheter placement, arterial system; initial third order or more selective thoracic or brachiocephalic branch, within a vascular family

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 8 **% of respondents:** 17.7 **%**

Number of respondents who choose 2nd Key Reference Code: 8 **% of respondents:** 17.7 **%**

TIME ESTIMATES (Median)

	CPT Code: 93594	**Top Key Reference CPT Code:** 93459	**2nd Key Reference CPT Code:** **93451**
Median Pre-Service Time	64.00	35.00	30.00
Median Intra-Service Time	60.00	50.00	30.00
Median Immediate Post-service Time	48.00	30.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**172.00**	**115.00**	**90.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	0%	37%	63%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	12%	12%	76%
Physical effort required	0%	50%	50%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	12%	88%

2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	12%	63%	25%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	12%	88%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	25%	75%
Physical effort required	0%	37%	63%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	37%	63%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

History and Background

In May 2020, the ACC and SCAI presented a code change application to the CPT Editorial Panel to replace four congenital cardiac catheterization codes with five new codes to report cardiac catheterization for congenital cardiac defect(s); the proposal also included replacement of two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects; revision

of guidelines and parenthetical notes to reflect the proposed new and deleted codes; and revision of the Modifier 63 Procedure Performed on Infants Less than 4 kg guidelines to reflect these changes.

These changes were recommended to address gaps in the prior codes and significant changes in the service as a result of technology evolution over the past two decades. Whereas a predominance of diagnostic catheterizations were previously performed in a healthier population of children, with simpler cardiac defects, the specialty has evolved towards performing a substantially larger number of more complex diagnostic evaluations to guide more complex interventional procedures. Members felt the existing codes, created in the 1990s no longer captured the wider range of patient and procedural complexity. As a result, the ACC, AAP, and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes. The 000-global day survey was completed by physicians who have experience with the service. This is the second of five new codes to report cardiac catheterization for congenital heart disease.

The key reference code is 93459 for catheter placement in the coronary artery. It was selected by 17% of respondents. All of the respondents indicated that 93594 was somewhat more or much more complex. The second reference code was 93451 for right heart catheterization. It was selected by approximately 18% of respondents, as well. 88% of the respondents indicated that 93594 was somewhat or much more complex.

Rationale

Since 1997, when to-be-deleted code was surveyed, there has been a shift in patient population and change in how these codes are billed. The typical patient is now a more complex patient with significantly more pathology. Due to the shift in patient population, the IWPUT increases dramatically and more correctly, in line with other codes in the cardiac catherization family. We believe this also shows there are differences in RUC survey methodology from 1997 to now, and that the current codes' times and RVUs may no longer be accurate because of that evolution.

There are numerous reasons why the original CPT code, 93530, does not work to properly capture the work performed in 2020 and beyond. For instance, the original code was the only right heart only catheterization code designed to capture all possible pathologies for patients with congenital heart disease. Although this was somewhat appropriate in the era where right heart only catheterizations were performed mostly for simple lesions, a far broader use of right heart catheterization had since developed. This brought about a need to divide the code into two; one for those with simple defects, defined in CPT as having normal connections, and a second code for the more complex patients with abnormal connections. This, second of five new codes, is for the latter and designed to capture a right heart catheterization procedure in some of the most complex congenital heart defects. Those with abnormal connections are described in CPT as having complex lesions such as heterotaxy with dextrocardia, complex single ventricle anatomy such as tricuspid valve atresia and double outlet right ventricle. Such patients often have several other congenital abnormalities which require a significant greater level of diagnostic evaluation, catheter and wire manipulation, and angiography. Additionally, as the specialty has evolved into a much more complex patient population, several elements of the pre and post service packages, simply do not suit the work performed in a children's hospital.

Furthermore, as the specialty has evolved into a much more complex patient population, several elements of the pre and post service packages, simply do not suit the work performed in a children's hospital. As previously described, there are additional reporting requirements and significant communication barriers not captured by these packages.

Recommendation

Therefore, for code 93594 the societies recommend an RVW of 6.10 with 64 minutes preservice time, 60 minutes intraservice time from the survey median, and 48 minutes postservice time. This compares favorably with multiple MPC codes and others that have identical or similar intraservice times, though each of those also have shorter total times, as shown in the summary spreadsheet.

We are recommending the complete preservice evaluation time from the survey as we believe it correctly captures additional time that is typically spent to prepare for the procedure, ensure all supplies are available, and discuss informed consent with the parents. We are recommending the complete post-service time from the survey as we believe it correctly captures additional time that is typically spent to diagram the congenital heart defect in the EHR, speak with the family who are typically parents concerned about their infant child, and complete data submission to the registry. Package 9B with the placement of these additional minutes is presented below.

History and Exam (Performance and review of appropriate Pre-Tests)	15	
Prepare for Procedure (Check labs, plan, assess risks, review procedure)	4	+4
Communicate with patient and/or family (Discuss procedure/ obtain consent)	5	+2
Communicate with other professionals	5	
Check/set-up room, supplies and equipment	5	
Check/ prepare patient readiness (Gown, drape, prep, mark)	5	
Prepare/ review/ confirm procedure	1	
Perform/ supervise patient positioning	3	
Administer local/topical anesthesia	0	
Observe (wait anesthesia care)	15	
Dress and scrub for procedure	5	

	9B General Anesthesia or Complex Regional Block/Complex Procedure	
Total Post-Service Time	**33**	
Details:		
Application of Dressing[1]	2	
Transfer of supine patient off table	1	
Operative Note	5	+6
Monitor patient recovery/stabilization	10	
Communication with patient and/or family	5	+9
Written post-operative note	5	
Post-Operative Orders and Order Entry	5	

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93530

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatric Cardiology How often? Commonly

Specialty Interventional Cardiology How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 6440
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate based on IMPACT Registry data collected on congenital cardiac catheterizations and Medicaid claims data.

Specialty Pediatric Cardiology Frequency 6118 Percentage 95.00 %

Specialty Interventional Cardiology Frequency 322 Percentage 5.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Procedure is expected to be pediatric patients.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93530

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93595 Tracking Number F3 Original Specialty Recommended RVU: **6.00**
Presented Recommended RVU: **6.00**
Global Period: 000 Current Work RVU: RUC Recommended RVU: **6.00**

CPT Descriptor: Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 2-year-old male with previously repaired coarctation of the aorta undergoes a 2D echocardiogram and Doppler study as well as CT angiogram demonstrating re-stenosis of the proximal descending thoracic aorta. This cardiac catheterization is being performed to measure the left heart hemodynamics to determine if surgical versus transcatheter intervention is indicated.

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC , In the office

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day , Overnight stay-less than 24 hours , Overnight stay-more than 24 hours

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day

Description of Pre-Service Work: Review of noninvasive work-up including echocardiogram, CXR, EKG, cardiac CT, MRI, 3D printed model, or any other pertinent studies. Determine all potential components required for the procedure are present, including discussion with industry representatives to provide any atypical supplies not kept in stock. Perform and document a complete and/or interval history and physical exam, noting any and all prior cardiovascular sugeries and interventions. Provide a description of the underlying congenital anomaly and indication for intervention, description of the procedure, and expected results to the parents of the patient, a description of potential hazards, and signature of informed consent for the procedure. Acquaint the patient or parents with the catheterization laboratory. Supervise the administration of anxiolysis, when necessary. Conduct final procedural coordination with technicians, nurses, and the anesthesiology team. Set up a sterile table with all necessary sheaths and catheters, syringes, bowl with sterile heparinized flush, contrast, and any other necessary sterile equipment. Don surgical scrubs and lead. Supervise positioning the patient to allow for multiple access sites to be prepped. Prep, scrub, drape, and wait. Connect sterile tubing to flush system and pressure transducers and ensure the hemodynamic recording system is properly zeroed.

Description of Intra-Service Work: The far majority of procedures are conducted under general anesthesia. Palpate and identify the access site landmarks and administer local anesthesia. Access is obtained percutaneously, using Seldinger technique. Ultrasound guidance may be necessary for vascular access, and not additionally reportable. Typically the femoral artery is punctured, and a guidewire passed into the vessel. The vascular sheath is introduced into the artery, the guidewire and dilator removed, and the sheath flushed with sterile heparinized saline. Additional arterial access may be obtained in one of the radial, or axillary arteries, and occasionally, carotid arterial access is used. Frequently, multiple attempts much be made because of very small vessels and/or arterial thrombosis from previous procedures or postoperative arterial monitoring. A diagnostic end hole catheter is passed with a guidewire, through this sheath under fluoroscopic guidance and directed from the arterial system into the descending aorta, across the stenosis, around the aortic arch and to the ascending aorta, and further across the aortic valve into the left ventricle. Baseline measurements and blood sampling may be conducted in each of these chambers. The end hole guide catheter is used to precisely assess the location of pressure gradients to rule out any additional areas of stenosis. The end hole catheter is then used to again cross the coarctation and secure wire position either in the left ventricle, aortic root, or subclavian artery. The diagnostic catheter is

then exchanged over the wire for an angiographic catheter (separately reported). Angiography is then obtained, typically in the aortic arch, but can vary due to presence of multiple or long segment lesions (each separately reported). Additional angiography of the coronary arteries, carotid and subclavian arteries, or descending abdominal aorta may also be necessary (separately reported). In other conditions, angiography of the pulmonary arteries may be performed from the left heart, (eg, across a systemic-pulmonary surgical shunt) and is separately reported. Following measurement of baseline values, pharmacological intervention may be performed (separately reported) and the hemodynamic measurements repeated. Following the conduct of the catheterization proper, the catheter is removed and compression hemostasis achieved in the catheterization lab, and prior to being taken to the recovery area.

Description of Post-Service Work: Following catheterization, a brief procedure note is documented in the medical record. The patient is transported to the recovery area and a verbal report given to the accepting team. Medication reconciliation is performed in the EMR and post procedure orders are placed for nursing care. A detailed catheterization report is documented, which includes a more complex diagram of the congenital heart defect, description of the procedure performed, calculations and interpretations of all hemodynamic data obtained, review and interpretation of the angiograms, and listing of the findings and recommendations. All necessary data is then also entered into the appropriate national data registry, as indicated/appropriate. There is at least one physician bedside visit to assess the patient, including catheterization sites, discuss the findings with the patient and/or family, and review discharge instructions and follow up information prior to discharge.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2020					
Presenter(s):	Richard Wright, MD; Thad Waites, MD; Edward Toggart, MD; Sergio Bartakian, MD; Steven Krug, MD					
Specialty Society(ies):	ACC, AAP & SCAI					
CPT Code:	93595					
Sample Size:	646	**Resp N:**	46			
Description of Sample:	Random interventional cardiologists from ACC, all pediatric cardiologists from AAP & SCAI identifiable from membership rolls					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	10.00	**24.00**	50.00	250.00
Survey RVW:		2.50	5.25	**6.00**	7.00	11.05
Pre-Service Evaluation Time:				**46.00**		
Pre-Service Positioning Time:				**15.00**		
Pre-Service Scrub, Dress, Wait Time:				**15.00**		
Intra-Service Time:		15.00	32.00	**48.00**	60.00	180.00
Immediate Post Service-Time:	**46.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	93595	**Recommended Physician Work RVU: 6.00**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**46.00**	**40.00**	**6.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**48.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**46.00**	**33.00**	**13.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x 0.00 99292x 0.00
Other Hospital time/visit(s):	0.00	99231x 0.00 99232x 0.00 99233x 0.00
Discharge Day Mgmt:	0.00	99238x 0.0 99239x 0.0 99217x 0.00
Office time/visit(s):	0.00	99211x 0.00 12x 0.00 13x 0.00 14x 0.00 15x 0.00
Prolonged Services:	0.00	99354x 0.00 55x 0.00 56x 0.00 57x 0.00
Sub Obs Care:	0.00	99224x 0.00 99225x 0.00 99226x 0.00

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93458	000	5.60	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93454	000	4.54	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation;

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52351	000	5.75	**RUC Time**	22,929

CPT Descriptor 1 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37212	000	6.81	**RUC Time**	3,012

CPT Descriptor 2 Transcatheter therapy, venous infusion for thrombolysis, any method, including radiological supervision and interpretation, initial treatment day

Other Reference CPT Code	Global	Work RVU	Time Source
93453	000	5.99	**RUC Time**

CPT Descriptor Combined right and left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 11 **% of respondents:** 23.9 **%**

Number of respondents who choose 2nd Key Reference Code: 9 **% of respondents:** 19.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93595	Top Key Reference CPT Code: 93458	2nd Key Reference CPT Code: **93454**
Median Pre-Service Time	64.00	30.00	30.00
Median Intra-Service Time	48.00	45.00	30.00
Median Immediate Post-service Time	46.00	30.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**158.00**	**105.00**	**90.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	18%	27%	55%	0%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	18%	27%	55%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	18%	46%	36%
Physical effort required	18%	55%	27%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	9%	27%	64%

2nd Key Reference Code

	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	33%	56%	11%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	56%	44%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	44%	56%
Physical effort required	0%	67%	33%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	44%	56%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

History and Background

In May 2020, the ACC and SCAI presented a code change application to the CPT Editorial Panel to replace four congenital cardiac catheterization codes with five new codes to report cardiac catheterization for congenital cardiac defect(s); the proposal also included replacement of two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects; revision

of guidelines and parenthetical notes to reflect the proposed new and deleted codes; and revision of the Modifier 63 Procedure Performed on Infants Less than 4 kg guidelines to reflect these changes.

These changes were recommended to address gaps in the prior codes and significant changes in the service as a result of technology evolution over the past two decades. Whereas a predominance of diagnostic catheterizations were previously performed in a healthier population of children, with simpler cardiac defects, the specialty has evolved towards performing a substantially larger number of more complex diagnostic evaluations to guide more complex interventional procedures. Members felt the existing codes, created in the 1990s no longer captured the wider range of patient and procedural complexity. As a result, the ACC, AAP, and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes. The 000-global day survey was completed by physicians who have experience with the service. This is the third of five new codes to report cardiac catheterization for congenital heart disease.

The key reference code is 93458 for catheter placement in the coronary artery. It was selected by 24% of respondents. 55% of the respondents indicated that 93595 was more complex. The second reference code was 93454 for catheter placement in coronary artery. It was selected by approximately 20% of respondents. 67% of the respondents indicated that 93595 was more intense/complex overall.

Rationale

Since 1997, when the to-be-deleted congenital catheterization codes were created, a specific left heart catheterization only code was never created. Pediatric cardiologists were therefore relegated to using the adult (non-congenital) left heart catheterization with / without coronary arteries to capture their work. Unfortunately, due to obvious differences in the work performed, this has caused significant confusion amongst billers and payers, often resulting to inappropriate denials. Furthermore, although the reference code does capture left heart catheterization, the work performed in diagnostic evaluation of non-congenital patients with normal hearts and normal vascular connections is not sufficient to capture the performed with congenital patients, where these assumptions cannot be made, and a more thorough evaluation is needed.

This, third of five new codes, is designed to capture a left heart catheterization procedure in patients with congenital heart and vascular defects. In addition to left heart obstructive lesions such as aortic valve stenosis and coarctation of the aorta, a left heart catheterization is often needed for evaluation of patients with pulmonary blood flow originating from the aorta; those with major aorto-pulmonary collateral arteries or, MAPCAs, for example. Such patients typically have numerous vascular connections from the aorta to supply the pulmonary blood flow in a secondary vascular tree, either in addition to, or as replacement for the native pulmonary arterial tree. These procedures require a significantly greater level of diagnostic evaluation, catheter and wire manipulation, and angiography to identify each and every vessel for surgical planning than previously afforded with the non-congenital diagnostic codes.

Furthermore, as the specialty has evolved into a much more complex patient population, several elements of the pre and post service packages, simply do not suit the work performed in a children's hospital. As previously described, there are additional reporting requirements and significant communication barriers not captured by these packages.

Recommendation

Therefore, for code 93595 the societies recommend an RVW of 6.00 with 64 minutes preservice time, 48 minutes intraservice time from the survey median, and 46 minutes postservice time. This compares favorably with multiple MPC codes and others that have identical or similar intraservice times, though each of those also have shorter total times, as shown in the summary spreadsheet.

We are recommending the complete preservice evaluation time from the survey as we believe it correctly captures additional time that is typically spent to prepare for the procedure, ensure all supplies are available, and discuss informed consent with the parents. We are recommending the complete post-service time from the survey as we believe it correctly captures additional time that is typically spent to diagram the congenital heart defect in the EHR, speak with the family who are typically parents concerned about their infant child, and complete data submission to the registry. Package 9B with the placement of these additional minutes is presented below.

History and Exam (Performance and review of appropriate Pre-Tests)	15	

Prepare for Procedure (Check labs, plan, assess risks, review procedure)	4	+4
Communicate with patient and/or family (Discuss procedure/ obtain consent)	5	+2
Communicate with other professionals	5	
Check/set-up room, supplies and equipment	5	
Check/ prepare patient readiness (Gown, drape, prep, mark)	5	
Prepare/ review/ confirm procedure	1	
Perform/ supervise patient positioning	3	
Administer local/topical anesthesia	0	
Observe (wait anesthesia care)	15	
Dress and scrub for procedure	5	

	9B General Anesthesia or Complex Regional Block/Complex Procedure	
Total Post-Service Time	**33**	
Details:		
Application of Dressing[1]	2	
Transfer of supine patient off table	1	
Operative Note	5	+5
Monitor patient recovery/stabilization	10	
Communication with patient and/or family	5	+8
Written post-operative note	5	
Post-Operative Orders and Order Entry	5	

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93799

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatric Cardiology How often? Commonly

Specialty Interventional Cardiology How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 4140
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate based on IMPACT Registry data collected on congenital cardiac catheterizations and Medicaid claims data.

Specialty Pediatric Cardiology Frequency 3933 Percentage 95.00 %

Specialty Interventional Cardiology Frequency 207 Percentage 5.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Procedure is expected to be primarly for pediatric patients.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93458

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93596 Tracking Number F4 Original Specialty Recommended RVU: **7.91**
Presented Recommended RVU: **7.91**
Global Period: 000 Current Work RVU: RUC Recommended RVU: **7.91**

CPT Descriptor: Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s) for hemodynamic evaluation; normal native connections.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 18-month-old male was noted to have a heart murmur. A 2D echocardiogram and Doppler study demonstrated a large ventricular septal defect. This cardiac catheterization is being performed to measure the magnitude of the left-to-right shunt and to measure the pulmonary artery pressure and resistance to determine if reparative surgery is indicated.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC , In the office

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day , Overnight stay-less than 24 hours , Overnight stay-more than 24 hours

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day

Description of Pre-Service Work: Review of noninvasive work-up including echocardiogram, CXR, EKG, cardiac CT, MRI, 3D printed model, or any other pertinent studies. Determine all potential components required for the procedure are present, plus contingencies and backups. Perform and document a complete and/or interval history and physical exam. Provide a description of the complex procedure and expected results to the parents of the patient, a description of potential hazards, and signature of informed consent for the procedure. Acquaint the patient or parents with the catheterization laboratory. Supervise the administration of anxiolysis, when necessary. Conduct final procedural coordination with technicians, nurses, and the anesthesiology team. Set up a sterile table with all necessary sheaths and catheters, syringes, bowl with sterile heparinized flush, contrast, and any other necessary sterile equipment. Don surgical scrubs and lead. Position patient. Prep, scrub, drape, and wait. Connect sterile tubing to flush system and pressure transducers and ensure the hemodynamic recording system is properly zeroed.

Description of Intra-Service Work: The far majority of all procedures are conducted under general anesthesia. Palpate and identify the access site landmarks and administer local anesthesia. Access is obtained percutaneously, using Seldinger technique into the internal jugular, subclavian, brachial, femoral venous systems, as well as femoral arterial access. Ultrasound guidance may be necessary/used for vascular access. Once the vessel is punctured, a guidewire is passed into the vessel. The vascular sheath is introduced into the vessel, the guidewire and dilator removed, and the sheath flushed with sterile heparinized saline. A diagnostic catheter is passed through this sheath under fluoroscopic guidance. The catheter is directed into any of the right heart structures including, the inferior and superior vena cavae, right atrium, right ventricle, right and left pulmonary arteries, and pulmonary capillary wedge positions. If an atrial septal communication is present, it may be crossed for purpose of sampling the left atrium, individual pulmonary veins, and left ventricle. If an atrial communication is not present and the left atrial or pulmonary venous sampling is required, a trans-septal perforation is performed (additionally reported). For the retrograde left heart catheterization, a diagnostic catheter is passed through the sheath under fluoroscopic guidance, and directed in retrograde fashion into any of the left heart structures or vessels including, the systemic arterial (usually left) ventricle, then pulled back into the ascending aorta, and further to the descending aorta. Baseline pressures may be recorded and blood sampling may be conducted in each of these chambers and vessels to be used later for hemodynamic calculations. Once hemodynamic data is collected, the diagnostic catheter is removed and an angiographic catheter inserted and used for any necessary angiography of these chambers or vessels (each

separately reported). Cardiac output is calculated using the Fick equation. In patients without intra-cardiac shunting, cardiac output may be measured by thermodilution (separately reported). Following the completion of the catheterization proper, all catheters and sheaths are removed and compression hemostasis is achieved in the catheterization lab, prior to the patient being taken to recovery.

Description of Post-Service Work: Following catheterization, a procedure note is documented in the medical record. The patient is transported to the recovery area and a verbal report given to the accepting team. Medication reconciliation is performed in the EMR and post procedure orders are placed for nursing care. A detailed catheterization report is documented, which includes a diagram of the congenital heart defect, description of the procedure performed, calculations and interpretations of all hemodynamic data obtained, review and interpretation of the angiograms, and listing of the findings and recommendations. All necessary data is then also entered into the appropriate national data registry, as indicated/appropriate. There is at least one physician bedside visit to assess the patient, including catheterization sites, discuss the findings with the patient and/or family, and review discharge instructions and follow up information prior to discharge.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2020					
Presenter(s):	Richard Wright, MD; Thad Waites, MD; Edward Toggart, MD; Sergio Bartakian, MD; Steven Krug, MD					
Specialty Society(ies):	ACC, AAP, SCAI					
CPT Code:	93596					
Sample Size:	646	**Resp N:**	46			
Description of Sample:	Random interventional cardiologists from ACC, all pediatric cardiologists from AAP & SCAI identifiable from membership rolls					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	20.00	**50.00**	79.00	250.00
Survey RVW:		3.00	6.45	**7.91**	8.89	13.55
Pre-Service Evaluation Time:				**50.00**		
Pre-Service Positioning Time:				**15.00**		
Pre-Service Scrub, Dress, Wait Time:				**15.00**		
Intra-Service Time:		8.00	45.00	**60.00**	89.00	240.00
Immediate Post Service-Time:	**53.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	93596	**Recommended Physician Work RVU: 7.91**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**50.00**	**40.00**	**10.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**60.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**53.00**	**33.00**	**20.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93460	000	7.10	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93461	000	7.85	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52353	000	7.50	**RUC Time**	11,180

CPT Descriptor 1 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy (ureteral catheterization is included)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52356	000	8.00	**RUC Time**	78,507

CPT Descriptor 2 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy including insertion of indwelling ureteral stent (eg, Gibbons or double-J type)

Other Reference CPT Code	Global	Work RVU	Time Source
33952	000	8.15	**RUC Time**

CPT Descriptor Extracorporeal membrane oxygenation (ECMO)/extracorporeal life support (ECLS) provided by physician; insertion of peripheral (arterial and/or venous) cannula(e), percutaneous, 6 years and older (includes fluoroscopic guidance, when performed)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 13 **% of respondents:** 28.2 **%**

Number of respondents who choose 2nd Key Reference Code: 8 **% of respondents:** 17.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 93596	Top Key Reference CPT Code: 93460	2nd Key Reference CPT Code: 93461
Median Pre-Service Time	68.00	30.00	35.00
Median Intra-Service Time	60.00	50.00	65.00
Median Immediate Post-service Time	53.00	30.00	35.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**181.00**	**110.00**	**135.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	23%	69%	8%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	8%	23%	79%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	8%	38%	54%
Physical effort required	0%	46%	54%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	38%	54%

2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	25%	50%	25%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	38%	62%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	38%	63%
Physical effort required	0%	88%	12%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	63%	37%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

History and Background

In May 2020, the ACC and SCAI presented a code change application to the CPT Editorial Panel to replace four congenital cardiac catheterization codes with five new codes to report cardiac catheterization for congenital cardiac defect(s); the proposal also included replacement of two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects; revision of guidelines and parenthetical notes to reflect the proposed new and deleted codes; and revision of the Modifier 63 Procedure Performed on Infants Less than 4 kg guidelines to reflect these changes.

These changes were recommended to address gaps in the prior codes and significant changes in the service as a result of technology evolution over the past two decades. Whereas a predominance of diagnostic catheterizations were previously performed in a healthier population of children, with simpler cardiac defects, the specialty has evolved towards performing a substantially larger number of more complex diagnostic evaluations to guide complex interventional procedures. Members felt the existing codes, created in the 1990s no longer captured the wider range of patient and procedural complexity. As a result, the ACC, AAP, and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes. The 000-global day survey was completed by physicians who have experience with the service. This is the fourth of five new codes to report cardiac catheterization for congenital heart disease.

The key reference code is 93460 for catheter placement in coronary artery. It was selected by 28% of respondents. Over three quarters of the respondents indicated that 93596 was more complex. The second reference code was 93461 for catheter placement in coronary artery. It was selected by approximately 17% of respondents. 75% of the respondents indicated that 93596 was more intense/complex overall.

Rationale

Since 1997, when to-be-deleted codes were surveyed, there has been a shift in patient population and change in how these codes are billed. The typical patient is now a more complex patient with significantly more pathology. Due to the shift in patient population, the IWPUT increases dramatically and more correctly, in line with other codes in the cardiac catherization family. We believe this also shows there are differences in RUC survey methodology from 1997 to now, and that the current codes' times and RVUs may no longer be accurate because of that evolution.

Originally, there were three codes created for various forms of combined right and left heart catheterization for congenital heart disease (93531, 93532, and 93533). Proceduralists believe these codes fail to properly capture the work performed in 2020 and beyond. Additionally, the existing codes had numerous significant flaws in the original valuation. For instance, 93533 combined right and left heart catheterization, through an existing septal opening was valued at significantly less than 93531, combined right and retrograde left heart catheterization (6.69 vs 8.34 RVU), despite the fact the description of work for 93533 clearly includes all of the work of 93531 as well as the additional work of evaluating the left atrium and pulmonary veins through the atrial septal opening.

The previous errors in valuation along with the significant change in patient population brought about a need to create two new codes rather than three; one for those with simple defects, defined in CPT as having normal connections, and a second code for the more complex patients with abnormal connections. This, fourth of five new codes, is for the former and designed to capture a right and left heart catheterization procedure in patients with normal native connections.

Furthermore, as the specialty has evolved into a much more complex patient population, several elements of the pre and post service packages, simply do not suit the work performed in a children's hospital. As previously described, there are additional reporting requirements and significant communication barriers not captured by these packages.

Recommendation

Therefore, for code 93596 the societies recommend an RVW of 7.91 with 68 minutes preservice time, 60 minutes intraservice time from the survey median, and 53 minutes postservice time. This compares favorably with multiple MPC codes and others that have identical or similar intraservice times, though each of those also have shorter total times, as shown in the summary spreadsheet.

We are recommending the complete preservice evaluation time from the survey as we believe it correctly captures additional time that is typically spent to prepare for the procedure, ensure all supplies are available, and discuss informed consent with the parents. We are recommending the complete post-service time from the survey as we believe it correctly captures additional time that is typically spent to diagram the congenital heart defect in the EHR, speak with the family who are typically parents concerned about their infant child, and complete data submission to the registry. Package 9B with the placement of these additional minutes is presented below.

History and Exam (Performance and review of appropriate Pre-Tests)	15	
Prepare for Procedure (Check labs, plan, assess risks, review procedure)	4	+5
Communicate with patient and/or family (Discuss procedure/ obtain consent)	5	
Communicate with other professionals	5	+5
Check/set-up room, supplies and equipment	5	
Check/ prepare patient readiness (Gown, drape, prep, mark)	5	
Prepare/ review/ confirm procedure	1	
Perform/ supervise patient positioning	3	
Administer local/topical anesthesia	0	
Observe (wait anesthesia care)	15	
Dress and scrub for procedure	5	

	9B General Anesthesia or Complex Regional Block/Complex Procedure	
Total Post-Service Time	**33**	
Details:		
Application of Dressing[1]	2	
Transfer of supine patient off table	1	
Operative Note	5	+12
Monitor patient recovery/stabilization	10	
Communication with patient and/or family	5	+8
Written post-operative note	5	
Post-Operative Orders and Order Entry	5	

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93531-93533

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatric Cardiology How often? Commonly

Specialty Interventional Cardiology How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 33140
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate based on IMPACT Registry data collected on congenital cardiac catheterizations and Medicaid claims data.

Specialty Pediactic Cardiology Frequency 31483 Percentage 95.00 %

Specialty Interventional Cardiology Frequency 1657 Percentage 5.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 424
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on the Medicare data estimation reported in 2019 for 93531-93533. Service will be primarily pediatric.

Specialty Cardiology Frequency 212 Percentage 50.00 %

Specialty Interventional Cardiology Frequency 85 Percentage 20.04 %

Specialty Cardiac Electrophysiology Frequency 127 Percentage 29.95 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93531

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93597 Tracking Number F5 Original Specialty Recommended RVU: **11.74**
Presented Recommended RVU: **11.74**
Global Period: 000 Current Work RVU: RUC Recommended RVU: **9.99**

CPT Descriptor: Right and left heart catheterization for congenital heart defect(s) including imaging guidance by the proceduralist to advance the catheter to the target zone(s); abnormal connections

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 3-year-old male with tricuspid atresia, secundum atrial septal defect, ventricular septal defect, pulmonary artery stenosis, and a hypoplastic right ventricle, who is status post stage II bidirectional Glenn procedure is referred for a cardiac catheterization for hemodynamic evaluation in order to determine if a total right heart bypass (Fontan procedure) is the next appropriate step.

Percentage of Survey Respondents who found Vignette to be Typical: 98%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC , In the office

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day , Overnight stay-less than 24 hours , Overnight stay-more than 24 hours

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day

Description of Pre-Service Work: Review of noninvasive work-up including echocardiogram, CXR, EKG, cardiac CT, MRI, 3D printed model, or any other pertinent studies. Determine all potential components required for the complex procedure are present, plus contingencies and backups, including discussion with industry representatives to provide any atypical supplies which are not already kept in stock. Perform and document a complete and/or interval history and physical exam, noting any and all prior cardiovascular sugeries and interventions. Provide a description of the underlying congenital anamoly and indications for intervention, description of the procedure and expected results to the parents of the patient, a description of potential hazards, and signature of informed consent for the procedure. Acquaint the patient or parents with the catheterization laboratory. Supervise the administration of anxiolysis, when necessary. Conduct final procedural coordination with technicians, nurses, and the anesthesiology team, including discussion regarding the plan for induction of anesthesia the high risk patient. Set up a sterile table with all necessary sheaths and catheters, syringes, bowl with sterile heparinized flush, contrast, and any other necessary sterile equipment. Don surgical scrubs and lead. Supervise positioning of the patient to allow for multiple access sites to be prepped. Prep, scrub, drape, and wait. Connect sterile tubing to flush system and pressure transducers and ensure the hemodynamic recording system is properly zeroed.

Description of Intra-Service Work: The far majority of all procedures are conducted under general anesthesia. Palpate and identify the access site landmarks and administer local anesthesia. Access is obtained percutaneously, using Seldinger technique into the internal jugular, subclavian, axillary, or femoral venous systems, as well as arterial access in the femoral, radial, or axillary arteries, and occasionally, carotid arterial access. Frequently, multiple attempts must be made because of very small vessels and/or vascular thrombosis from previous studies or presence of indwelling catheters. Additional ultrasound guidance for vascular access may be necessary/used due to these problems. In rare cases, the need for hepatic venous access may be necessary due to lack of any other possible venous access, and is separately reported. Once the vessel is punctured, a guidewire is passed into the vessel. The vascular sheath is introduced into the vessel, the guidewire and dilator removed, and the sheath flushed with sterile heparinized saline. A diagnostic catheter is passed through this sheath under fluoroscopic guidance. Catheter introductions are then performed through these sheaths and manipulated into the necessary positions. For the right heart catheterization, a catheter is passed through the sheath under fluoroscopic guidance and directed into any necessary venous structures and chambers comprising the “right heart”, which will vary depending on the congenital heart defect. Frequently, there are additional vessels, not encountered in patients with normal

connections that must also selectively be catheterized, such as a left sided vena cava. If an atrial septal communication is present, it may be crossed for purpose of sampling the left sided atrium, individual pulmonary veins, and left sided ventricle. If an atrial communication is not present and the left atrial or pulmonary venous sampling is required, a trans-septal perforation is performed and additionally reportable. For the left heart catheterization, a diagnostic catheter is passed through the sheath under fluoroscopic guidance, and directed typically in retrograde fashion into the systemic (right or left) ventricle, then pulled back into the ascending aorta, and further to the descending aorta. Frequently, the pulmonary arteries must be accessed from the left heart catheterization due to presence of an aorto-pulmonary surgical shunt. Alternatively, both the systemic arterial and pulmonary arterial catheterization must be performed from the same ventricle in patients with transposition of the great arteries, and a surgical right ventricle to pulmonary artery (SANO) shunt. In these scenarios, catheter placement across the systemic to pulmonary shunts, can be very poorly tolerated, as the pulmonary blood flow is obstructed by the catheter, and great care must be taken, as well as close communication between the cardiologist and anesthesiologist to ensure stable hemodynamics are maintained. Frequently, patients require catheterization from both venous (right heart), and arterial (left heart) in order to identify all possible sources of pulmonary blood supply. In these situations selective catheterizations of numerous individual vessels is performed for sampling and angiography (each being separately reported). Baseline pressures may be recorded and blood sampling may be conducted in each of these chambers and vessels to be used later for hemodynamic calculations. Positioning for angiography may occur in any of the heart chambers or blood vessels, which includes exchanging the diagnostic catheter used for physiologic data for an angiographic catheter, and each are separately reportable. Cardiac output is typically calculated using the Fick equation. In patients without intra-cardiac shunting, cardiac output may be measured by thermodilution, and is separately reported. Following the completion of the procedure, all catheters and sheaths are removed and compression hemostasis achieved in the catheterization lab, prior to the patient being taken to recovery.

Description of Post-Service Work: Following catheterization, a brief procedure note is documented in the medical record. The patient is transported to the recovery area and a verbal report given to the accepting team. Medication reconciliation is performed in the EMR and post procedure orders are placed for nursing care. A very detailed catheterization report is documented, which includes a complex diagram of the congenital heart defect, description of the procedure performed, calculations and interpretations of all hemodynamic data obtained, review and interpretation of the angiograms, and listing of the findings and recommendations. All necessary data is then also entered into the appropriate national data registry, as indicated/appropriate. There is at least one physician bedside visit to assess the patient, including catheterization sites, discuss the findings with the patient and/or family, and review discharge instructions and follow up information prior to discharge..

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2020					
Presenter(s):	Richard Wright, MD; Thad Waites, MD; Edward Toggart, MD; Sergio Bartakian, MD; Steven Krug, MD					
Specialty Society(ies):	ACC, AAP, SCAI					
CPT Code:	93597					
Sample Size:	646	**Resp N:**	46			
Description of Sample:	Random interventional cardiologists from ACC, all pediatric cardiologists from AAP & SCAI identifiable from membership rolls					

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	23.00	**50.00**	79.00	250.00
Survey RVW:	3.50	7.81	**8.88**	10.00	15.70
Pre-Service Evaluation Time:			**55.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	60.00	**83.00**	99.00	300.00

Immediate Post Service-Time:	**60.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

4-FAC Difficult Patient/Difficult Procedure

CPT Code:	93597	**Recommended Physician Work RVU: 9.99**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**55.00**	**40.00**	**15.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**20.00**	**-5.00**
Intra-Service Time:		**83.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

9B General Anes or Complex Regional Blk/Cmplx Proc

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**60.00**	**33.00**	**27.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93461	000	7.85	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93460	000	7.10	**RUC Time**

CPT Descriptor Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
52356	000	8.00	**RUC Time**	78,507

CPT Descriptor 1 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy including insertion of indwelling ureteral stent (eg, Gibbons or double-J type)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36905	000	9.00	**RUC Time**	41,205

CPT Descriptor 2 Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty

Other Reference CPT Code	Global	Work RVU	Time Source
37241	000	8.75	**RUC Time**

CPT Descriptor Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; venous, other than hemorrhage (eg, congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 16 **% of respondents:** 34.7 **%**

Number of respondents who choose 2nd Key Reference Code: 9 **% of respondents:** 19.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93597	Top Key Reference CPT Code: 93461	2nd Key Reference CPT Code: **93460**
Median Pre-Service Time	73.00	35.00	30.00
Median Intra-Service Time	83.00	65.00	50.00
Median Immediate Post-service Time	60.00	35.00	30.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**216.00**	**135.00**	**110.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	6%	31%	63%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	19%	81%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	13%	87%
Physical effort required	0%	40%	60%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	6%	13%	81%

2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	11%	22%	67%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	11%	89%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	11%	89%
Physical effort required	0%	11%	89%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	11%	89%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

History and Background

In May 2020, the ACC and SCAI presented a code change application to the CPT Editorial Panel to replace four congenital cardiac catheterization codes with five new codes to report cardiac catheterization for congenital cardiac defect(s); the proposal also included replacement of two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects; revision of guidelines and parenthetical notes to reflect the proposed new and deleted codes; and revision of the Modifier 63 Procedure Performed on Infants Less than 4 kg guidelines to reflect these changes.

These changes were recommended to address gaps in the prior codes and significant changes in the service as a result of technology evolution over the past two decades. Whereas a predominance of diagnostic catheterizations were previously performed in a healthier population of children, with simpler cardiac defects, the specialty has evolved towards performing a substantially larger number of more complex diagnostic evaluations to guide complex interventional procedures. Members felt the existing codes, created in the 1990s no longer captured the wider range of patient and procedural complexity. As a result, the ACC, AAP, and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes. The 000-global day survey was completed by physicians who have experience with the service. This is the fifth of five new codes to report cardiac catheterization for congenital heart disease.

The key reference code is 93461 catheter placement in coronary artery. It was selected by 35% of respondents. 94% of the respondents indicated that 93597 was more complex. The second reference code was 93460 for catheter placement in coronary artery. It was selected by approximately 20% of respondents. 89% of the respondents indicated that 93597 was more intense/complex overall.

Rationale

Since 1997, when to-be-deleted codes were surveyed, there has been a shift in patient population and change in how these codes are billed. The typical patient is now a more complex patient with significantly more pathology. Due to the shift in patient population, the IWPUT increases dramatically and more correctly, in line with other codes in the cardiac catherization family. We believe this also shows there are differences in RUC survey methodology from 1997 to now, and that the current codes' times and RVUs may no longer be accurate because of that evolution.

Originally, there were three codes created for various forms of combined right and left heart catheterization for congenital heart disease (93531, 93532, and 93533). Proceduralists believe these codes fail to properly capture the work performed in 2020 and beyond. Additionally, the existing codes had numerous significant flaws in the original valuation. For instance, 93533 combined right and left heart catheterization, through an existing septal opening was valued less than 93531, combined right and retrograde left heart catheterization (6.69 vs 8.34 RVU), despite the fact the description of work for 93533 clearly includes all of the work of 93531 as well as the additional work of evaluating the left atrium and pulmonary veins through the atrial septal opening.

The previous errors in valuation along with the significant change in patient population brought about a need to create two new codes rather than three; one for those with simple defects, defined in CPT as having normal connections, and a second code for the more complex patients with abnormal connections. This, fifth of five new codes, is for the latter and designed to capture a right and left heart catheterization procedure in patients with abnormal native connections, and some of the most complex congenital heart defects which the specialty encounters very frequently.

Furthermore, as the specialty has evolved into a much more complex patient population, several elements of the pre and post service packages, simply do not suit the work performed in a children's hospital. As previously described, there are additional reporting requirements and significant communication barriers not captured by these packages.

Recommendation

Unlike the previous four codes where the survey produced a rational progression through the family with intensity increasing with each code, the fairly long service time here diluted that progression, we feel incorrectly. Therefore, for code 93597 the societies recommend crosswalking to 92924 to an RVW of 11.74 with 73 minutes preservice time, 83 minutes

intraservice time from the survey median, and 60 minutes postservice time. This produces an IWPUT that is appropriately the highest of the family.

We are recommending the complete preservice evaluation time from the survey as we believe it correctly captures additional time that is typically spent to prepare for the procedure, ensure all supplies are available, and discuss informed consent with the parents. We are recommending the complete post-service time from the survey as we believe it correctly captures additional time that is typically spent to diagram the congenital heart defect in the EHR, speak with the family who are typically parents concerned about their infant child, and complete data submission to the registry. Package 9B with the placement of these additional minutes is presented below.

History and Exam (Performance and review of appropriate Pre-Tests)	15	
Prepare for Procedure (Check labs, plan, assess risks, review procedure)	4	+7
Communicate with patient and/or family (Discuss procedure/ obtain consent)	5	
Communicate with other professionals	5	+8
Check/set-up room, supplies and equipment	5	
Check/ prepare patient readiness (Gown, drape, prep, mark)	5	
Prepare/ review/ confirm procedure	1	
Perform/ supervise patient positioning	3	
Administer local/topical anesthesia	0	
Observe (wait anesthesia care)	15	
Dress and scrub for procedure	5	

	9B General Anesthesia or Complex Regional Block/Complex Procedure	
Total Post-Service Time	**33**	
Details:		
Application of Dressing[1]	2	
Transfer of supine patient off table	1	
Operative Note	5	+15
Monitor patient recovery/stabilization	10	
Communication with patient and/or family	5	+12
Written post-operative note	5	
Post-Operative Orders and Order Entry	5	

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.

- ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
- ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
- ☐ Multiple codes are used to maintain consistency with similar codes.
- ☐ Historical precedents.
- ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93531-93533

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatric Cardiology How often? Commonly

Specialty Interventional Cardiology How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 33140
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate based on IMPACT Registry data collected on congenital cardiac catheterizations and Medicaid claims data.

Specialty ACC Frequency 31483 Percentage 95.00 %

Specialty AAP Frequency 1657 Percentage 5.00 %

Specialty Frequency Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 0 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Procedure is intended for pediatric patients.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:
Cardiovascular-Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93531

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93598 Tracking Number F6 Original Specialty Recommended RVU: **2.00**
Presented Recommended RVU: **2.00**
Global Period: ZZZ Current Work RVU: RUC Recommended RVU: **1.75**

CPT Descriptor: Cardiac output measurement(s), thermodilution or other indicator dilution method, performed during cardiac catheterization for the evaluation of congenital heart defects
(List separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 3-year-old female with history of prematurity, chronic lung disease, and a previously repaired ventricular septal defect undergoes diagnostic right and left heart catheterization for evaluation of her congenital heart disease. Proper calculation of cardiac index by the Fick method is compromised as an accurate oxygen consumption cannot be measured. Therefore, following completion of the diagnostic hemodynamic evaluation, thermodilution studies are performed to confirm cardiac index. Pulmonary vasoreactivity testing is then performed (separately reported).

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC , In the office

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day , Overnight stay-less than 24 hours , Overnight stay-more than 24 hours

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day

Description of Pre-Service Work:

Description of Intra-Service Work: Following completion of a congenital, right heart catheterization or combined right and left heart catheterization (separately reported), the diagnostic catheter previously used is removed and a Swan Ganz catheter is introduced from the venous sheath, advanced through the right heart, and placed into the pulmonary artery for purpose of assessing cardiac output by thermodilution. The catheter is connected to the hemodynamic recording system. A series of saline injections are performed by the operator through the proximal port and the results recorded. Multiple, typically between 3 and 6 injections are performed and evaluated. If there is consistency in the initial 3 or 4, these are averaged. If not, additional injections are performed until the operator is satisfied that enough measurements have been obtained to represent the true cardiac output. If there are clinical changes in the patient's condition or changes in the level of anesthesia, administration of pressers, repeat thermo-dilution assessment may be performed and not additionally reportable. Following completion of the cardiac catheterization, the cardiac output data is evaluated, and the results converted to a cardiac Index and entered as part of the official catheterization report.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2020					
Presenter(s):	Richard Wright, MD; Thad Waites, MD; Edward Toggart, MD; Sergio Bartakian, MD; Steven Krug, MD					
Specialty Society(ies):	ACC, AAP, SCAI					
CPT Code:	93598					
Sample Size:	676	**Resp N:**	46			
Description of Sample:	Random interventional cardiologists from ACC, all pediatric cardiologists from AAP & SCAI identifiable from membership rolls					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	5.00	**10.00**	30.00	300.00	
Survey RVW:	0.20	1.00	**2.00**	3.00	13.00	
Pre-Service Evaluation Time:			**0.00**			
Pre-Service Positioning Time:			**0.00**			
Pre-Service Scrub, Dress, Wait Time:			**0.00**			
Intra-Service Time:	5.00	12.00	**20.00**	45.00	300.00	
Immediate Post Service-Time:	**0.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

ZZZ Global Code

CPT Code:	93598	**Recommended Physician Work RVU: 1.75**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

ZZZ Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**0.00**	**0.00**	**0.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93567	ZZZ	0.97	**RUC Time**

CPT Descriptor Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for supravalvular aortography (List separately in addition to code for primary procedure)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
36227	ZZZ	2.09	**RUC Time**

CPT Descriptor Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
37253	ZZZ	1.44	**RUC Time**	91,408

CPT Descriptor 1 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36227	ZZZ	2.09	**RUC Time**	13,979

CPT Descriptor 2 Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

Other Reference CPT Code	Global	Work RVU	Time Source
20931	ZZZ	1.81	**RUC Time**

CPT Descriptor Allograft, structural, for spine surgery only (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 15 **% of respondents:** 32.6 **%**

Number of respondents who choose 2nd Key Reference Code: 12 **% of respondents:** 26.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93598	Top Key Reference CPT Code: 93567	2nd Key Reference CPT Code: **36227**
Median Pre-Service Time	0.00	0.00	0.00
Median Intra-Service Time	20.00	15.00	15.00
Median Immediate Post-service Time	0.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**20.00**	**15.00**	**15.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	20%	66%	7%	7%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	33%	53%	14%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	7%	66%	27%

Physical effort required	7%	80%	14%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	33%	53%	14%

2nd Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	8%	33%	59%	0%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	17%	33%	50%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	17%	33%	50%
Physical effort required	0%	58%	42%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	8%	59%	33%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

In May 2020, the ACC and SCAI presented a code change application to the CPT Editorial Panel to replace four congenital cardiac catheterization codes with five new codes to report cardiac catheterization for congenital cardiac defect(s); the proposal also included replacement of two cardiac output measurement codes with one new add-on code to report cardiac output measurement(s), performed during cardiac catheterization for congenital cardiac defects; revision of guidelines and parenthetical notes to reflect the proposed new and deleted codes; and revision of the Modifier 63

Procedure Performed on Infants Less than 4 kg guidelines to reflect these changes. These changes were recommended to address gaps in the prior codes and changes in the service as a result of technology evolution in the past two decades. As a result, the ACC, AAP, and SCAI randomly surveyed interventional cardiologists and pediatric interventional cardiologists, as designated by membership rolls, on the newly created codes. The ZZZ survey was completed by physicians who have experience with the service. This is the new add-on code to report cardiac output measurement(s), performed during catheterization for congenital cardiac defects.

This new code replaces codes 93561 and 93562 that describe congenital cardiac indicator dilution studies—predominantly performed on pediatric patients—to measure cardiac output. These services were previously identified by societies for consideration under the RAW negative IWPUT screen. These were Harvard-valued codes that were 000 global procedures with the archaic "(separate procedure)" parenthetical. However, in reality they were always billed as an adjunct to congenital cardiac catheterization codes. In consultation with the Research Subcommittee a parallel CPT code change application was submitted for consideration at February 2019 CPT to align these codes with the current presentation of ZZZ global procedures codes which are tagged with an "add-on"/"+" sign and include "(List separately…)" language. The codes were surveyed as ZZZ procedures. The Research subcommittee also reviewed the newly written typical patient vignettes in advance of that 2019 survey.

The key reference code is 93567 for injection procedure. It was selected by 33% of respondents. Over half of the respondents indicated that 93598 was nearly identical. The second reference code was 36227 for selective catheter placement. It was selected by approximately 26% of respondents. Nearly 60% of the respondents indicated that 93598 was more intense/complex overall.

We believe the new code definition that discards archaic "separate procedure" nomenclature provided respondents with a better understanding of the service and the survey results track accordingly.

Recommendation

Therefore, for code 93598 the societies recommend an RVW of 2.00 with 20 minutes intraservice time from the survey median. This compares favorably with multiple MPC codes and others that have identical or similar intraservice times, though each of those also have shorter total times, as shown in the summary spreadsheet.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed)

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatric Cardiology How often? Commonly

Specialty Interventional Cardiology How often? Rarely

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 1000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. 300-400 interventional cardiologists focus on pediatric cases. Some perform these procedures several times a month while others' utilization is less frequent. Based on the estimated number of pediatric interventional cardiologists in the U.S. and known pediatric cardiac programs, we estimate approximately 1000 of these procedures are performed a year.

Specialty Pediatric Coardiology Frequency 900 Percentage 90.00 %

Specialty Interventional Cardiology Frequency 100 Percentage 10.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 100
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. This congenital service has been consistently below 100 services the past few years.

Specialty Pediatric Cardiology Frequency 90 Percentage 90.00 %

Specialty Interventional Cardiology Frequency 10 Percentage 10.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Major procedure

BETOS Sub-classification Level II:

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 93561

CARDIAC CATHETERIZATION IN THE DIAGNOSIS OF CONGENITAL HEART DISEASE *

BY

H. E. HOLLING AND G. A. ZAK *

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Cardiac catheterization is now a recognized method of clinical investigation and in recent years has been applied to the diagnosis of malformed hearts (Cournand *et al.*, 1949; Warren *et al.*, 1946; Groom *et al.*, 1948; Handelsman *et al.*, 1948; Dexter *et al.*, 1947; Bing *et al.*, 1947; Taylor *et al.*, 1948; Burchell *et al.*, 1948; Geiger *et al.*, 1946; Brannon *et al.*, 1945; Howarth *et al.*, 1947; Baldwin *et al.*, 1946; Soulie *et al.*, 1949). So far we have used this method on a group of 70 patients with a wide range of cardiac malformations. Here we attempt to evaluate the method as a diagnostic procedure, using the published results of other workers to supplement our own experience.

Cases Investigated

The cases were selected from a large number sent to Guy's Hospital mainly with a view to surgical treatment of their condition; they were under the care of Dr. Maurice Campbell, Mr. R. C. Brock, and Dr. Charles Baker, and clinical diagnoses were often discussed together. Patients with congenital heart disease often have multiple cardiac malformations of which one may be judged as functionally the most important, and in the table below they are listed under what appears to be the chief lesion. Thirty-six were over 15 years of age, twenty-two between the ages of 10 and 15, and twelve between the ages of 5 and 10 years.

Diagnosis	Number of Cases
Fallot's tetralogy	29
Pulmonary stenosis with closed ventricular septum	9
Pulmonary or tricuspid atresia	8
Transposition of the great vessels	4
Eisenmenger's complex	2
Patent ductus arteriosus	3
Isolated atrial septal defect	1
Truncus arteriosus	2
Lutembacher's syndrome	1
Ebstein's disease	1
Partial dextrocardia	3
Diagnosis uncertain	5
Pulmonary hæmangioma	2

At the end of the paper the results of catheterization of 18 illustrative cases are given, with explanatory notes intended to show how the general principles of interpreting results apply in particular cases. The diagnosis of some of these cases, in spite of angiocardiography and cardiac

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catheterization, is still in doubt, but they have been included to represent problems that arise in practice. Several of the cases have been or will be discussed elsewhere (Allanby and Campbell, 1949; Baker *et al.*, 1949; Brock, 1948; Campbell and Hills, 1950). We have not attempted to catheterize all the cases admitted, because we find the procedure too time-consuming to be used in this way. It requires a full day's work for two investigators and a technician, and the co-operation of the X-ray staff for at least two hours. Moreover, the investigation is not without danger to the patient, who in any case is likely to find it an uncomfortable experience. We have therefore restricted its use mainly to those where the clinical diagnosis was in doubt, or where it seemed important to obtain the information that cardiac catheterization can yield.

METHODS

The methods used do not differ materially from those of other workers and we comment only on points that seem important.

Sedation and anæsthesia. It is known (Hickam *et al.*, 1948) that anxiety on the part of the patient may increase the cardiac output without a parallel increase in oxygen consumption, thus decreasing the arteriovenous oxygen difference. Moreover, breath holding, crying, or struggling may materially alter the intracardiac pressures and gaseous content of the blood. It is important, therefore, that so far as possible the patient should remain under basal conditions throughout the catheterization. It is not easy to achieve this, particularly with children, because the method requires that the patient lie on the X-ray table for at least an hour. Moreover, the passage of the catheter into the heart often provokes tachycardia and sometimes extrasystoles, and in some patients manipulation of the catheter in the right ventricle causes a complaint of soreness under the sternum. We found that to engage the patient in easy conversation throughout the procedures is the best way of ensuring equable conditions. It is certainly undesirable to discuss technical points in the hearing of the patient. One to three grains of phenobarbitone were given about two hours before the start to adults and children down to the age of 8 years. Younger children, with one exception, required an anæsthetic. For this we first tried trilene or paraldehyde, which were recommended by the anæsthetists as being the safest agents, but their use disturbed the subsequent blood gas determinations. We have since found avertin satisfactory, given per rectum in a dose of 0·125 g. per kg. about half an hour before the insertion of the catheter. When deeper unconsciousness was required, avertin was supplemented with pentothal (about 0·15 g.). Though deepening of the anæsthesia probably altered the condition of the patient, it seemed preferable to risk this rather than to withdraw blood samples from a crying or struggling child.

Catheterization. The Cournand catheter was introduced into a cubital vein draining into the basilic system. The catheter sizes used ranged from 7 to 10, but usually an 8 or 9 was employed. A number of difficulties were met with during catheterization. It is inadvisable to try to force a catheter into a vein too small to accommodate it comfortably. In one instance when we attempted this an extensive thrombosis of the vein followed. On occasion the vein appeared to contract strongly, gripping the catheter and making its passage difficult. Usually in the experience of others and ourselves this can be avoided by gentle and smooth manipulation of the catheter. This happened once when the catheter tip was at the level of the outer border of the first rib, and for an hour and a half the catheter could neither be advanced nor withdrawn. Then following the injection of 1·5 ml. of 1 per cent procaine, through and alongside the catheter, and the application of hot water bottles to the arm, the catheter became free.

Either arm has been used for the insertion of the catheter, but in cases with a right-sided aortic arch it has seemed easier to enter the superior vena cava from the left, probably because of the more favourable angle between the left innominate vein and the superior vena cava. In one such case the catheter could not be advanced into the superior vena cava from the right in spite of a prolonged trial, but from the left arm this was achieved without difficulty.

On several occasions during the exploration of the right atrium for suspected septal defects

the tip of the catheter re-entered the superior vena cava and so formed a loop in the atrium. This has given rise to anxiety on the part of the operator because pushing the catheter caused the tip to move further into the vena cava, and pulling it caused the tip of the catheter to become wedged in the opening of the superior vena cava. On each occasion gentle manipulation of the catheter released it within a minute or two.

Since in our experience embolism has followed catheterization (see later) we emphasize the need for strict precautions against the formation of thrombi within the catheter or damage to the endocardium. The heparin saline drip (3000 units heparin per litre of normal saline) should be checked frequently, especially when entering chambers in which the blood is under high pressure, when it may be necessary to raise the saline reservoir. Manipulation of the catheter when inside the heart and great vessels, especially in the left ventricle, should be gentle to minimize the risk of trauma to the endothelium with subsequent thrombus formation. Cleaning the catheter should begin immediately after it is withdrawn.

Location of the catheter tip. In dealing with abnormal hearts in which unusual communications or obstructions may exist between the various chambers, it is important to locate the tip of the catheter as precisely as possible. The value of the lateral position should be remembered.

Fluoroscopic observation should start from the moment the catheter enters the thorax. The X-ray screening time has, however, to be limited, and in accordance with the measurements of Hills and Stanford (1950) we endeavoured not to exceed 25 per cent of the erythema dose. For us this meant about 20 minutes' screening time, though the diaphragms of the apparatus were adjusted to give as small a field as was required for directing the catheter tip within the heart. It is permissible to extend the screening time by 25 per cent when necessary for the completion of an important case.

Frequent measurement of intracardiac pressure is a great help in locating the tip of the catheter. For this purpose we have used saline, aneroid, and Hamilton manometers (Hamilton, 1934). The saline manometer is unsatisfactory mainly because of the slowness with which it reaches equilibrium, particularly when blood has passed into the catheter. The aneroid manometer requires the movement of only a small volume of fluid through the system before equilibrium is reached and so records quickly, but like the saline manometer it does not record systolic and diastolic pressures. However, the mean pressure is usually sufficient for diagnostic purposes, and because the aneroid manometer is so simple to use it can be generally recommended. Since it is not unlikely that evidence of value for diagnosis may be derived from a study of the form of the intracardiac pulse tracings, we have also used a Hamilton manometer with optical recording.

To aid in locating the catheter tip it is an advantage to ascertain the oxygen content of the blood samples while the catheterization is in progress. With this object some workers have arranged to have the blood analysed as it is taken so that the results may be known before the catheter is withdrawn, and further samples taken if necessary. We have not been able to do this, but undoubtedly it would be of great value. Wood *et al.* (1948) have described a photoelectric apparatus that may prove useful. Using this, the oxygen saturation of blood withdrawn from the catheter can be estimated almost as soon as it is taken, and samples from different parts of a cardiac chamber or chambers can be compared; and if they vary considerably, as many samples as necessary can be taken to estimate the average oxygen saturation of blood in the particular chamber.

The catheter sometimes enters the coronary sinus from the right atrium, but with experience this is quickly recognized and corrected; the following points are important. (1) As the catheter passes along the narrow coronary sinus it follows a fixed path and the curved tip cannot be turned around as when lying in the ventricle. (2) The catheter may appear as if its tip is about to pass into the pulmonary artery and occasionally as if it had entered the left branch of the pulmonary artery, but it always comes to a full stop within the cardiac shadow. (3) Although the catheter tip looks as if it is in the ventricle the pressure recorded is as low as in the atrium. However, if the catheter is advanced until it blocks the cardiac vein the pressure rises towards ventricular pressure (60/16 mm. Hg in Case 13, Fig. 12). Bing (1949) gives a record of the fall in pressure as the catheter

is withdrawn from blocking the cardiac vein. (4) The blood samples withdrawn from the coronary sinus are of a very low oxygen content (20 to 30% saturated).

Estimation of blood oxygen content. Blood samples from the catheter were withdrawn into vaselined syringes, and kept in them in the dark and in ice water until their oxygen content could be determined in a Haldane blood gas apparatus (Douglas and Priestley, 1948).

We found, as did Wassermann *et al.* (1949) and other investigators, that the oxygen content of the blood sometimes decreases if the blood is allowed to stand at room temperature. Our observations suggest this is not constant, for the blood sometimes shows only a negligible fall after standing at room temperature for 4 to 5 hours. In other cases, however, the blood oxygen content may show a considerable drop within an hour. In our experience the addition of sodium fluoride (0·6 mg./ml. blood) does not prevent the loss of oxygen. It is, however, greatly slowed by keeping the blood syringe in iced water, and kept in this way there is no material loss of oxygen over a period of 6 hours. For example, arterial blood was taken and the oxygen content (measured within 10 minutes of withdrawal) was found to be 15·4 ml./100 ml. (81% saturation) : one-half of the sample was kept in iced water, the other at room temperature (21° C.), and in all 13 estimations of oxygen content were done in the next 6 hours; these showed that the oxygen content of the blood kept in iced water remained steady for 6 hours at 15·4 to 15·3 ml. oxygen per 100 ml. but the oxygen content of that kept at room temperature slowly fell over 5½ hours to 14·6 ml. oxygen per 100 ml.

The blood was kept in the dark in order to prevent the formation of methæmoglobin, which is liable to form when blood is exposed to light.

Complications of Catheterization

Cardiac arrhythmias. Tachycardia up to 140 a minute in children may occur during catheterization, and is best avoided by the methods described under sedation. When the catheter tip is in the right ventricle the patient may be disturbed by extrasystoles but we have seen no harm come from them and our practice is to forewarn the patient and to reassure him that they are not of importance. Johnson *et al.* (1947) describe the onset of a paroxysm of auricular tachycardia or of 1 to 1 flutter which lasted for two hours after passing of a loop of catheter through the tricuspid orifice. Dexter *et al.* (1947) report auricular fibrillation in two of their patients with spontaneous restoration of normal rhythm within half an hour. Ventricular fibrillation is presumably a possibility though it has not been recorded.

General reactions. During the insertion of the catheter two of our female patients fainted, showing a cold, pale, sweating skin and a slow pulse; this occurred though they were supine and not complaining of any pain or discomfort. Several patients, especially when the catheterization has been prolonged, have complained of nausea immediately after the withdrawal of the catheter, and for the next five or six hours have felt very tired. Three children vomited immediately after and became temporarily more cyanosed; they also were extremely fatigued. Since any increase in the degree of the anoxia of these patients is dangerous, we have always had means of administering oxygen at hand.

Thrombosis and embolism. Localized thrombosis of the vein where the catheter was inserted often occurs, but it seldom extends far up the vein. Cournand (1949) finds that thrombosis is more likely to be limited if the incision is made at least 5 cm. distal to the opening of a branch vein into the basilic system.

It is generally held that cardiac catheterization is a safe procedure in man, and so far as we are aware there is only one reported case in which it is possible that catheterization had given rise to fatal thrombosis and embolism (Johnson *et al.*, 1947). The child died of an unspecified cause one month after catheterization and an unsuspected thrombus was found in the right atrium, inferior vena cava, and iliac and renal veins. Presumably the thrombosis had arisen at the site of the insertion of the catheter into the saphenous vein, or perhaps at the base of one of the tricuspid valves to which it was attached. Kinney *et al.* (1945) subjected the hearts of dogs to " traumatic "

catheterization for short periods and subsequent pathological examination of the hearts and great vessels showed no lesions attributable to the procedure. On the other hand some members of the same group later reported verbally endocardial lesions in dogs after catheterization of the pulmonary artery (Goodale *et al.*, 1947). Goodale had found mural thrombi and subendocardial hæmorrhages in the hearts of dogs that had been catheterized. These lesions were found to be more distinct when the animals were sacrificed more than 24 hours after the catheterization, and perhaps this may be the reason for the conflicting descriptions. In our experience with cases of congenital heart disease, cardiac catheterization is not without danger to the patient. Symptoms and signs indicating pulmonary or systemic thromboses or emboli have developed within 14 days of catheterization in no less than 6 of the 70 cases here reported. Details of these cases are as follows:

(1) O. D., aged 23 years (Case 9 of the appendix), a case of Eisenmenger's complex developed (the day after catheterization) an extensive thrombosis of her brachial vein. Seven days later she complained of pain in her chest and coughed up blood-stained sputum.

(2) C. L., aged 7 years (Case 13 of the appendix), had an unusual malformation of the heart described there. She was deeply cyanosed and bedridden, and was the most severley incapacitated of the children we have examined. Immediately after the withdrawal of the catheter she vomited and rapidly became unconscious and stopped breathing. Artificial respiration and oxygen were given for several minutes before consciousness returned. The next day she coughed up bloody sputum and remained critically ill for a fortnight. Having apparently recovered from the catheterization and a subsequent angiocardiogram, she died suddenly about seven weeks after the catheterization. No evidence of presumed pulmonary infarcts or of intravascular thrombi was found at necropsy.

(3) and (4) J. C. and R. C., aged 8 years, Fallot's tetralogy and tricuspid atresia respectively. Both complained of pain in the chest a few hours after catheterization, became dyspnœic and more cyanosed. J. C. had blood-stained sputum. They were nursed in an oxygen tent for a few days till they recovered.

(5) B. H., aged 10 years, a case of transposition of the great vessels. During catheterization the aorta was entered a number of times. About 8 hours after the catheterization he developed pyrexia, headache, and increasing drowsiness. The next day he was semiconscious, had neck rigidity, and a positive Kernig's sign. Lumbar puncture showed the cerebrospinal fluid to be under pressure and to contain blood. Several days later he also had diarrhœa. Chemotherapy was given from the start of his symptoms, but it was 3 weeks before he was well again. This unexpected sequel was thought to be the result of intravascular thrombosis.

(6) L. H., aged 19. Case described in detail (Baker *et al.*, 1950). One week after catheterization he developed sudden pain in both calves and died with bilateral gangrene of the legs 10 days later. At necropsy he was found to have the abnormality of the tricuspid valves known as Ebstein's disease. A partly organized thrombus was found on the septal wall of the left ventricle, which the catheter had entered via an atrial septal defect. In both popliteal arteries emboli were found, which had presumably originated from the intracardiac thrombosis.

Even without catheterization, thromboses and emboli may occur in these patients and at necropsy vegetations are often found on the deformed valves and edges of septal defects. In view of this tendency to spontaneous thromboses it is perhaps not unexpected that it should sometimes follow cardiac catheterization. To reduce the likelihood of endothelial damage we prefer to use the thinner and more flexible catheters, even though they are more difficult to direct in the heart.

The Interpretation of the Results of Blood Gas Estimations

The clinical differentiation of congenital heart disease may be uncertain because of the frequent occurrence of multiple defects. It is in this field that cardiac catheterization is being applied extensively, for by its use the presence of certain malformations may be proved. If, for instance, the catheter passes through a septal defect the fact can be recognized on the X-ray screen, or if the catheter is passed in to the pulmonary artery the stenosis can be recognized by the fall in pressure as the catheter tip passes through it. Often, however, direct proof is not obtained, though evidence of the defect may be found indirectly from comparison of the oxygen content of blood from the great vessels and chambers of the right heart.

An atrial septal defect with an arteriovenous shunt will result in blood in the right atrium being more oxygenated than blood in the venæ cavæ, or a patent ductus arteriosus will result in the blood

in the pulmonary artery being more oxygenated than in the right ventricle. Blood may flow either into the right or the left heart, and while an arteriovenous shunt would cause an increase in the oxygen content of the right heart blood, a venoarterial shunt would have no such effect. In practice it is not always easy to say whether an increase in oxygen content of the blood from right atrium, ventricle, or pulmonary artery indicates an admixture of oxygenated blood through a septal defect. This is because there are considerable variations in oxygen content of right heart blood, even in hearts with no septal defects or other abnormal communications. It is, therefore, important to know these variations so that the diagnosis of a septal defect may be made with more confidence.

Comparison of Blood from the Venæ Cavæ and Atrium

The difference in oxygen content that may occur between the blood of the venæ cavæ and the right atrium in the absence or presence of atrial septal defects is shown by the data from our own cases and those of other workers in Fig. 1, 2, and 3. The cases without atrial septal defect include not only malformed hearts, but also acquired heart disease and normal hearts. The diagnosis of an atrial septal defect, and whether the shunt through it was venoarterial or arteriovenous, was made on good clinical evidence, and in some cases confirmed by examination of the heart after

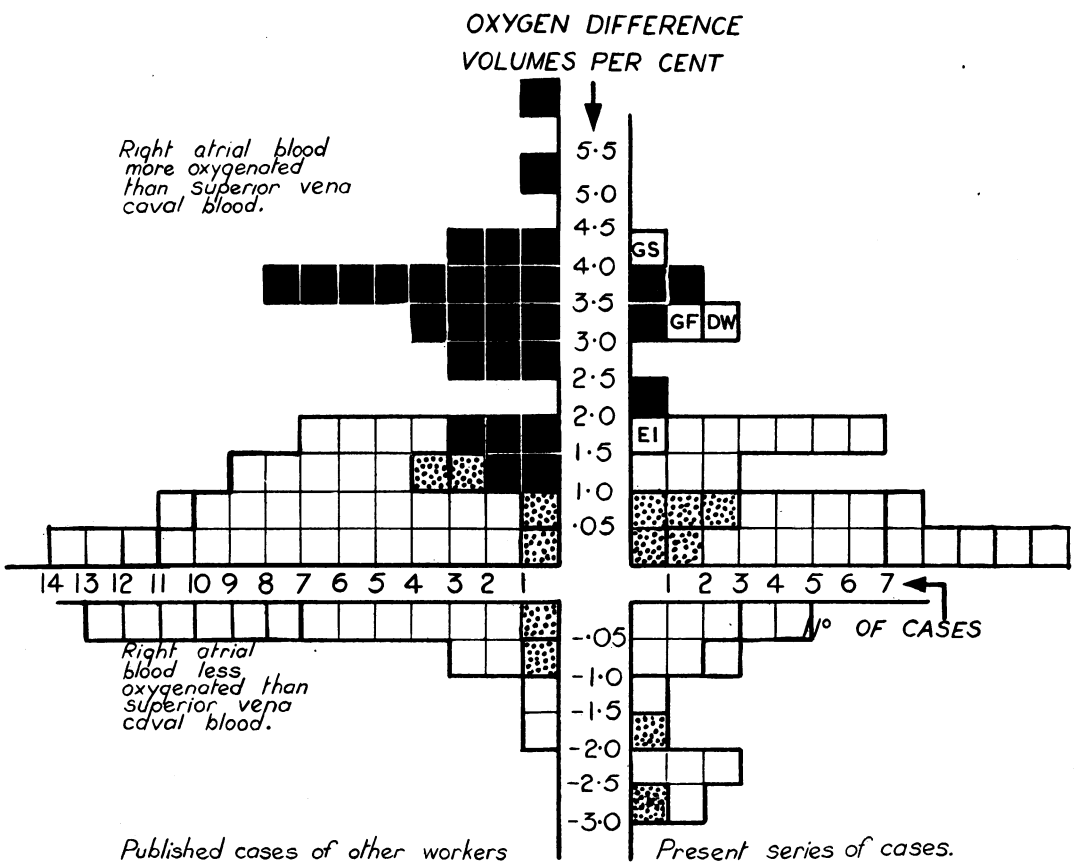

FIG. 1.—Differences in oxygen content (volumes per cent) of superior vena caval and right atrial bloods in 131 patients. The white squares represent cases with no atrial septal defect, black squares with an atrial septal defect through which a predominantly arteriovenous shunt occurs, and stippled squares with an atrial septal defect through which a predominantly venoarterial shunt occurs. The significance of the initialled squares is given in the text.

death. Cases in which the diagnosis of atrial septal defect was made largely or solely on the comparison of the oxygen content of blood samples could not, of course, be included in this series.

In Fig. 1, 2, and 3, the cases without atrial septal defect are shown as white squares, those with an atrial septal defect and a predominantly venoarterial shunt as stippled squares, and those with a predominantly arteriovenous shunt as black squares. The four lettered squares refer to cases that are discussed below.

Superior Vena Caval and Right Atrial Blood (Fig. 1)

Fig. 1 shows that in two-thirds of 95 patients with no atrial septal defect the oxygen content of right atrial blood exceeds that of superior vena caval blood, and that the difference may be as much as 2·0 volumes per cent. Of the other one-third with oxygen content of blood in the atrium lower than that in the superior vena cava, the majority show a difference of no more than 1 volume per cent, though this may reach as much as 3 volumes per cent. It follows that the diagnosis of an atrial septal defect with an arteriovenous shunt can only be made on the comparison of the oxygen content of blood samples if that from the right atrium exceeds that from the superior vena cava by more than 2 volumes per cent.

Using the standard of 2 volumes per cent a septal defect with arteriovenous shunt will be recognized in the large majority of cases; but a few, in which the difference lies between 1 and 2 volumes per cent, will be missed.

In those cases of atrial septal defect with a venoarterial shunt, the difference of oxygen content between superior vena caval blood and right atrial blood lies as would be expected, within the range of those with no atrial septal defect.

Inferior Vena Caval and Right Atrial Blood (Fig. 2)

Most workers have compared only superior vena caval and right atrial blood. Dexter *et al.* (1947), however, took blood samples from a few centimetres below the diaphragm and found that such blood from the inferior vena cava had a uniformly higher oxygen content than that from the superior vena cava or atrium. They believed that this was largely due to the influence of renal vein blood and abandoned the use of blood from the inferior vena cava for comparative purposes, relying solely on the comparison of right atrial and superior vena caval bloods. We have taken inferior vena caval samples routinely from a point just below the diaphram and find that the oxygen content is often, though not always, higher than that of atrial blood. Thus Fig. 2 shows that of 55 cases with intact atrial septa, in 34 the inferior vena caval blood was more oxygenated than that of the atrium, usually the difference was within 1 volume per cent, but reached as much as 3 volumes per cent. On the other hand, in 21 cases the inferior vena caval blood was less oxygenated than atrial blood; in most cases the difference was no more than 1 volume per cent, but exceptionally it was as great as 3 volumes per cent.

It is clear that if inferior vena caval blood is used for comparative purposes a higher oxygen difference (as much as 3 volumes per cent) must exist before a diagnosis of atrial septal defect can be made, and also that in a greater proportion of cases the diagnosis would be missed than when using superior vena caval blood.

It will be noted that in cases with a venoarterial shunt through the atrial septal defect the oxygen difference of inferior vena caval blood and atrial blood lies within the normal range.

Consideration of the oxygen content of inferior caval blood further demonstrates that (1) the vessel may contribute a stream of relatively oxygenated blood to the right atrium, (2) that for comparative purposes it would be better to use samples of both superior and inferior caval bloods, and to compare the mean of these two with that of the atrium.

Comparison of Right Atrial and Mean of Superior and Inferior Vena Caval Blood Samples (Fig. 3)

The difference in oxygen content of right atrial blood and the mean of inferior and superior vena caval blood (caval blood) in 84 patients is seen in Fig. 3. In 29 cases the right atrial blood was

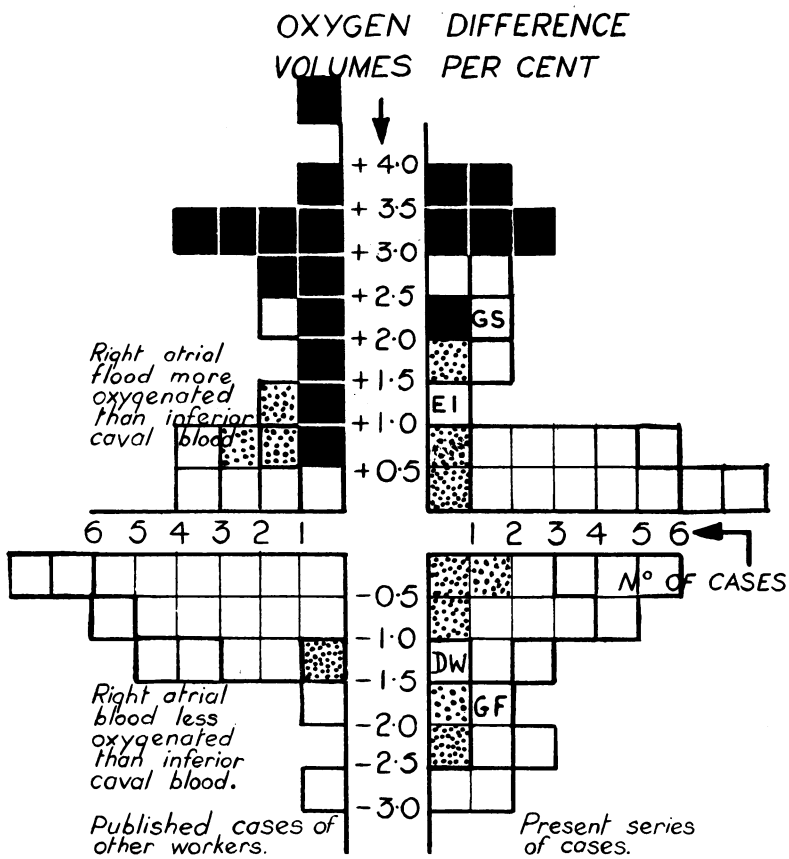

FIG. 2.—Differences in oxygen content (volumes per cent) of inferior vena caval and right atrial blood in 89 patients. White squares represent cases with no atrial septal defect, black squares cases with an atrial septal defect through which a predominantly arteriovenous shunt occurs, and stippled squares with an atrial septal defect through which a predominantly venoarterial shunt occurs.

more oxygenated than caval blood, in most cases by less than 1 volume per cent, and exceptionally by 1·5 volumes per cent. On the other hand, in 25 cases it was less oxygenated than atrial blood, in most cases by less than 1·5 volumes per cent, but exceptionally by as much as 2·5 volumes per cent. In all the cases of atrial septal defect with an arteriovenous shunt, the atrial blood was more than 2 volumes per cent higher in oxygen content than the mean of the superior and inferior caval bloods; so that taking the mean gives a better separation than if either the inferior or superior vena caval blood is used alone for comparison. In two of our cases, G. F. and D. W. (CB08 and O207) there was no reason to think that there was an atrial septal defect with an arteriovenous shunt. In these cases the right atrial blood sample was found to be 3·7 and 3·3 volumes per cent higher than that of the superior vena cava (Fig. 1), but in both the inferior vena caval blood had a considerably higher oxygen content than the atrial blood (Fig. 2). Fig. 3 shows that if the mean of the vena caval blood samples is taken in these two cases the oxygen difference between this and the right atrial blood falls within the range of cases without an atrial septal defect.

In Fig. 3 it is shown, as in previous figures, that when the shunt through an atrial septal defect is venoarterial the difference in oxygen content between caval and right atrial blood lies within the normal range. There is one exception in our cases, which was shown at necropsy to have an atrial septal defect so large that the two atria formed almost one chamber.

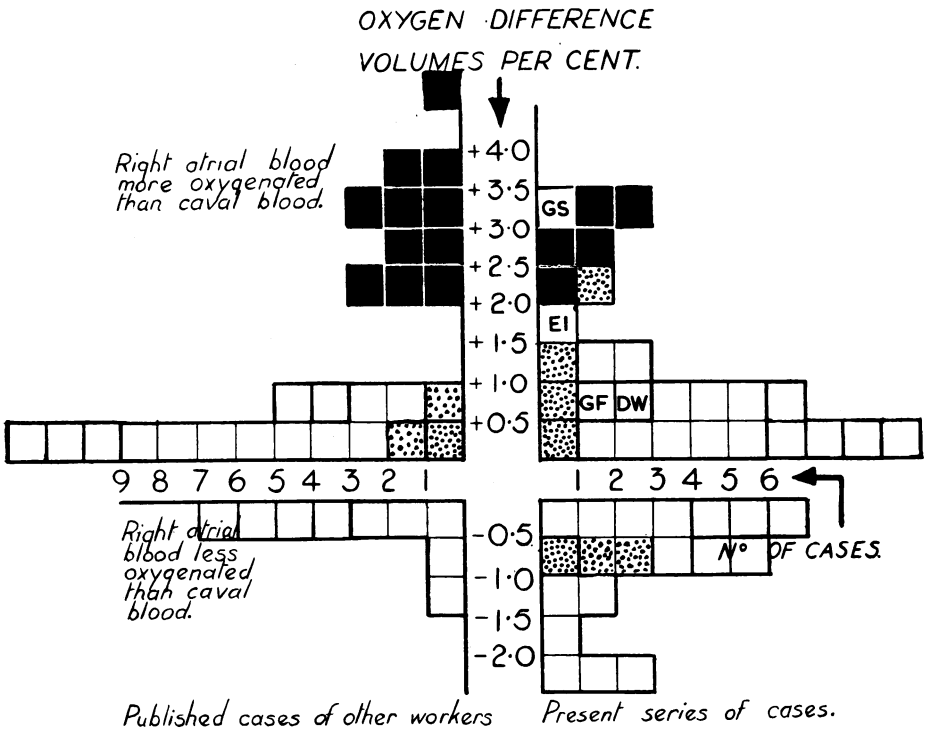

FIG. 3.—Difference in oxygen content between right atrial blood and the mean of the oxygen contents of the inferior and superior vena caval bloods in 84 patients. The white squares represent cases with no atrial septal defect, black squares cases with atrial septal defect through which a predominantly arteriovenous shunt occurs, and stippled squares cases with an atrial septal defect through which a predominantly venoarterial shunt occurs.

COMPARISON OF RIGHT ATRIAL AND RIGHT VENTRICULAR BLOOD SAMPLES

In Fig. 4 are shown the variations in oxygen content of right atrial and right ventricular blood in 49 cases considered to be without a ventricular septal defect and 98 with a presumed ventricular septal defect. In cases without ventricular septal defect the oxygen content of blood from the right ventricle may differ from that of the right atrium by $\pm 1{\cdot}0$ volumes per cent, and seldom more. This finding is not unexpected since blood in the right atrium, derived from superior vena cava, inferior vena cava, and coronary sinus is not uniformly mixed. Warren *et al.* (1945) showed that samples of blood taken from the right atrium might differ in oxygen content by as much as 2·3 volumes per cent. On the other hand, the blood in the right ventricle is better mixed so that samples taken from different parts of the ventricle differ by less than 1·0 volumes per cent. It follows, therefore, that when comparing the oxygen contents of blood samples from the venæ cavæ and right atrium it is useful also to compare the oxygen content of the atrium against that of the ventricle. If this is done the finding of an oxygen content of blood in the right atrium higher than the mean of the oxygen contents of caval bloods may arise (*a*) because the caval blood samples are not uniformly mixed and the catheter has withdrawn a sample derived mainly from the inferior vena cava, or (*b*) because the catheter had withdrawn a sample derived from an influx of highly oxygenated blood from the left atrium. If the high oxygen is due to (*a*) then the right ventricular blood should have a lower oxygen content than that of the atrial sample and should be about the mean of the caval samples. If the high oxygen content is due to (*b*) then the ventricular sample should also have a higher oxygen content than the mean of the caval samples. There are exceptional cases which do not fit into this conception ; for example in Case 2 (G. S., Fig. 1, 2, and 3) the right atrial sample

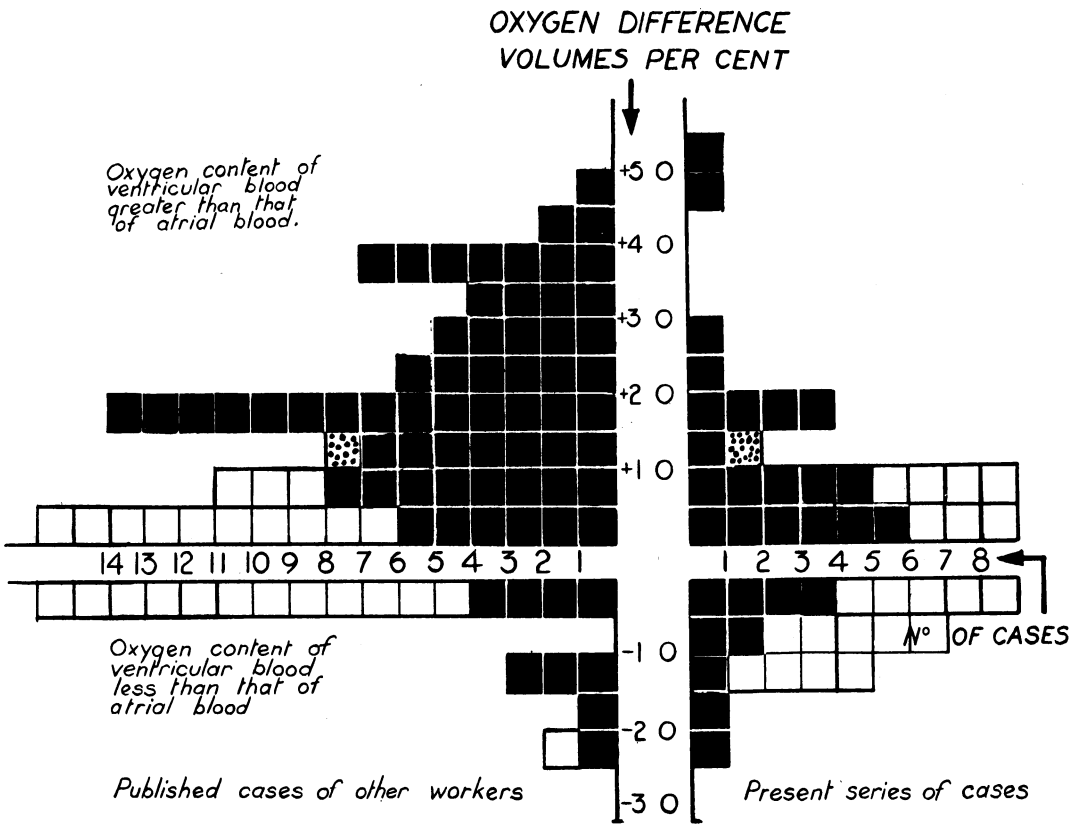

FIG. 4.—Difference in oxygen content (volumes per cent) between right atrial blood and right ventricular blood in 147 patients. The cases with ventricular septal defects are indicated by black squares, those with intact ventricular septums by white squares. The two stippled squares indicated that in two cases of patent ductus arteriosus in which probable pulmonary regurgitation had resulted in an increase in the oxygen content of right ventricular blood. The square indicating that the oxygen content of the ventricular sample was 2 to 2·5 volumes per cent less than the atrial sample represents a case of atrial septal defect in which the atrial sample had presumably been taken close to the defect.

was 3·5 volumes per cent higher than that of the mean of the caval blood samples and 2·5 volumes per cent higher than that of the inferior vena caval sample; this seems to point to an influx of blood through a septal defect. Nevertheless, the blood from the right ventricle was of considerably lower oxygen content than right atrial blood. A possible explanation of the case is that when the right atrial sample was taken the tip of the catheter lay close to a small atrial septal defect, and so withdrew blood of a high oxygen content. We have not been able to prove that such an atrial septal defect was present. In a second and similar case, E. I., with Fallot's tetralogy, the difference between caval and right atrial bloods was 1·7 volumes per cent, indicating a probable atrial septal defect (Fig. 3). In this case the right ventricular blood was nearer that of the atrium in oxygen content, which would also support the diagnosis of an atrial septal defect. However, at necropsy no atrial septal defect was found (Case P061). The explanation of these findings is unknown.

Of the 98 cases with a ventricular septal defect, the difference between right ventricular and right atrial blood oxygen content was greater in 55 than in cases without ventricular septal defect. It is clear, therefore, that only about one-half of the cases of ventricular septal defect can be recognized by a higher oxygen content of the ventricular blood. It is to be noted that this increase in oxygen content occurred in spite of the fact that in almost all these cases the predominant shunt was from right to left ventricle. This is because of turbulence in the neighbourhood of the defect.

A high oxygen content of the right ventricular blood may be brought about not only by a septal defect, but also by regurgitation of blood through the pulmonary valves in cases of patent ductus arteriosus. This is clearly displayed by Cournand's (1949) Case 7, where the blood from the right atrium contained 10·6 volumes per cent oxygen, that from the right ventricle 12·5, and that from the pulmonary artery 14·2. After ligature of the ductus arteriosus the oxygen content of the right ventricle and pulmonary artery fell to the same level as that of the blood in the right atrium. The same phenomenon possibly accounts for the findings in the two cases of patent ductus arteriosus, indicated by stippled squares in Fig. 4, in which the oxygen content of the ventricular blood exceeded that of the atrial blood by 2·0 to 2·5 volumes per cent.

Comparison of Right Ventricular and Pulmonary Blood Samples

Fig. 5 shows the difference in oxygen content between right ventricular and pulmonary artery bloods in 82 patients. Thirty-three cases were considered to have neither ventricular septal defects

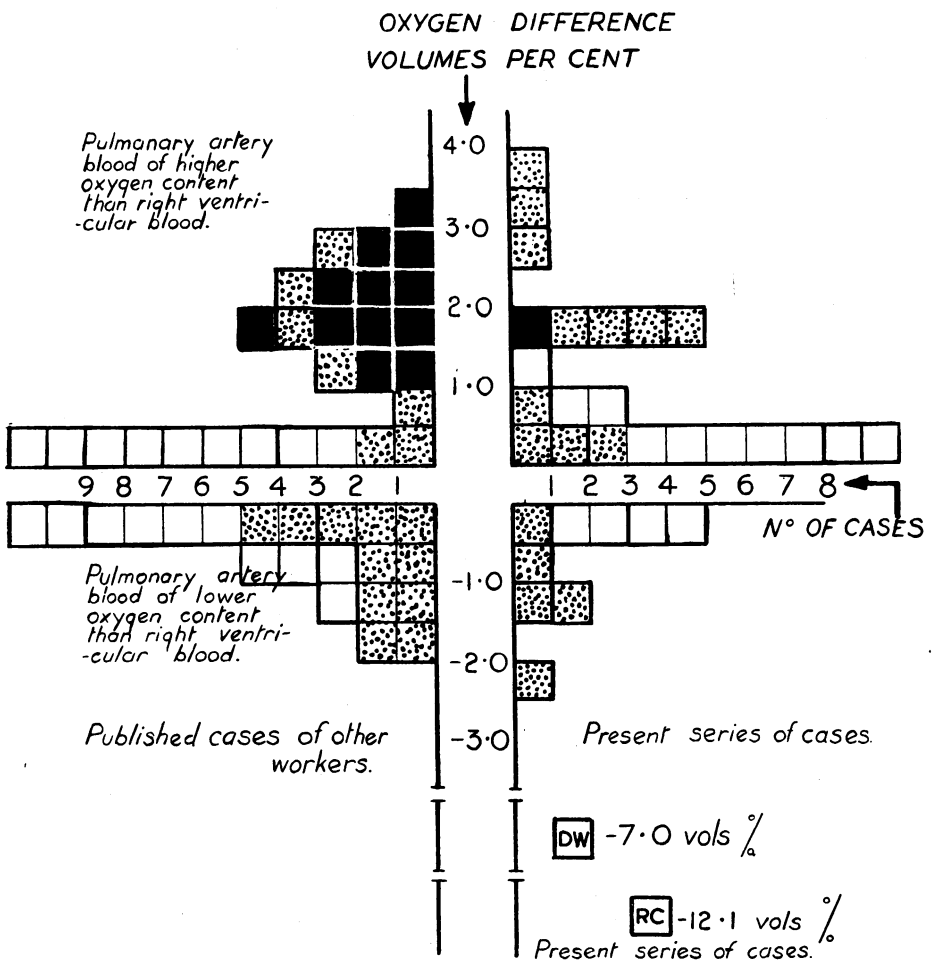

FIG. 5.—Difference in oxygen content (volumes per cent) of right ventricular and pulmonary artery bloods in 82 patients. White squares represent cases with no ventricular septal defect or patent ductus arteriosus, black squares represent cases with a patent ductus arteriosus, and stippled squares cases with a known ventricular septal defect. The significance of the two squares labelled D.W. and R.C. is given in the text.

nor patent ductus arteriosus. In the large majority the oxygen content of the right ventricular and pulmonary artery bloods differs by no more than 0·5 volumes per cent, and in only two by little more than 1·0 volumes per cent. In all 13 cases with a patent ductus arteriosus the difference in oxygen content was more than 1 volume per cent. Of the 34 cases with a ventricular septal defect but no patent ductus arteriosus, there are 11 with the pulmonary artery samples more than 1 volume per cent higher than that of the right ventricle. The explanation of this is probably that the defect is high in the ventricular septum so that the mixture of blood occurred in the region of the infundibulum and not in the main chamber of the ventricle from which the sample was taken. Whatever the reason it is clear that a higher oxygen content of the pulmonary artery blood may arise either from a patent ductus arteriosus or a high ventricular septal defect. A third possible cause of the oxygen content of the pulmonary artery blood being higher than that of the ventricular blood is pointed out by Dexter (1947). If the catheter is pushed too far into the pulmonary artery it may occlude the branch in which it lies so that when a sample is withdrawn oxygenated blood is aspirated from the pulmonary capillaries. This may be the explanation of the high oxygen content of the pulmonary artery blood reported by Soulie *et al.* (1949) in two cases in which there was neither a patent ductus arteriosus nor a septal defect. For this reason all our samples from the pulmonary artery have been taken not further than one inch past the bifurcation.

There are 10 cases in which the oxygen content of the pulmonary artery blood is more than 1 volume per cent lower than that of the right ventricle. This is difficult to account for, but since all but one of these cases had pulmonary stenosis this may have been a factor. A further clue is given by considering the two cases D. W. and R. C., in which the pulmonary artery blood sample was as much as 7 and 12 volumes per cent lower than that of the right ventricle. In both these cases there was probably a very gross stenosis of the pulmonary artery because the catheter seemed to be gripped in the orifice, and when it was withdrawn a sense of release of grip was obtained. Also in another (Case 7), a sample taken when the catheter had been in the pulmonary artery about five minutes was 29 per cent saturated with oxygen, but after another minute or two a second sample showed the saturation to have fallen to 15 per cent. These findings suggest that the catheter had materially obstructed the pulmonary orifice, reducing the amount of blood passing through the lungs and exaggerating the venoarterial shunt, thus increasing the patient's anoxia. The patients made no complaint whilst the catheter was in the pulmonary artery, and the darkness of the X-ray room prevented us from seeing an increase in cyanosis.

Calculation of Blood Flows and Shunts

In normal hearts the cardiac output can be calculated with a fair degree of accuracy by the Fick principle, using the oxygen consumption and the difference in oxygen content of arterial and mixed venous blood. It is clear that in malformed hearts calculation may be liable to error because of the existence of shunts. Nevertheless, in most instances an estimate may be made of the blood flow through the pulmonary artery and through the aorta, and thus of the volume of any shunt present. The pulmonary blood flow is calculated from the oxygen consumption and the difference in oxygen content between pulmonary venous and pulmonary artery blood, aortic blood flow is calculated from the oxygen consumption and the difference in oxygen content of arterial and mixed venous blood. It is usually easy to obtain a satisfactory sample of arterial blood but in malformed hearts it is not always easy to obtain equally satisfactory samples of mixed venous or pulmonary artery blood.

Mixed venous blood. In a heart with no arteriovenous shunts the blood from the outflow tract of the right ventricle can be regarded as mixed venous blood. In many malformed hearts with which we have dealt, right ventricular blood is not acceptable as mixed venous blood because of admixture of oxygenated blood either in the atrium or ventricle. In only 6 of 18 cases shown in the appendix could the right ventricular blood be regarded as free from admixture with arterialized blood. When blood from the right ventricle cannot be accepted as mixed venous blood, most authors, and we ourselves, have used a blood sample from the right atrium, provided there was no

evidence of an arteriovenous shunt through an atrial septal defect. If there was evidence of arterial admixture we have used the mean of the oxygen contents of the superior and inferior vena caval blood as representing that of mixed venous blood. This, however, is not altogether satisfactory because it is not known what volume each vena cava contributes to the blood entering the atrium, and the contribution to the mixed venous blood made by the coronary sinus and other veins entering the right atrium is neglected.

Pulmonary artery blood. Two factors may result in an unsatisfactory sample of blood being obtained from the pulmonary artery. If the catheter blocks the branch of the pulmonary artery in which it lies so that oxygenated blood is drawn from the lung capillaries the oxygen content of the blood sample will be unduly high. If the catheter obstructs even for a short time the stenosed pulmonary orifice the oxygen content of the sample of blood obtained may be unusually low. The presence of a ductus arteriosus makes it almost impossible to obtain a sample on which the estimation of the pulmonary blood flow can be reliably based. An approximation can be made by taking, as Cournand (1949) does, one sample from the artery and one from each main branch.

A further difficulty arises in many cases of suspected pulmonary stenosis when it is not possible to introduce the catheter into the pulmonary artery. In such cases blood from the right ventricular outflow tract is used as the best approximation. It is obvious from Fig. 5 that this would give rise to no great error, except when the ventricular septum is defective. For example, in Case 9, which showed the greatest difference between pulmonary artery and right ventricular blood (+4 volumes per cent) the pulmonary artery blood flow calculated on the pulmonary artery sample was 2 litres a minute per square metre, whereas when calculated on the right ventricular sample the pulmonary artery blood flow was 1·3 litres, or 35 per cent less. Apart from this case and those of patent ductus arteriosus, the two results never differed by more than 15 per cent when we have been able to calculate the pulmonary blood flow from both right ventricular and pulmonary artery samples. Even taking the higher of the two calculated flows the pulmonary blood flow in pulmonary stenosis was still reduced below normal.

Pulmonary venous blood. It is necessary in cases of cyanotic congenital heart disease to obtain evidence of the degree of saturation of the blood in the pulmonary veins, for though in patients with normal hearts it may be accepted that arterial blood gives a measure of pulmonary vein blood saturation, in cases of malformed hearts with a venoarterial shunt this assumption cannot be made. Bing *et al.* (1947) in 4 cases of Fallot's tetralogy obtained blood from a pulmonary vein by passing a catheter through an atrial septal defect and in each case the pulmonary vein blood was 95 per cent saturated. A few other isolated case reports have since been published which agree with this finding, and we have obtained pulmonary venous blood in 5 cases, either through an atrial septal defect or from a pulmonary vein draining into the right atrium. In each case we have found it to be 95 to 97 per cent saturated. None of these had signs of congestive failure or of pulmonary disease, either of which might have interfered with oxygenation of blood in the lungs; all had polycythemia, a factor that in the past has been thought to result in impaired oxygenation of blood passing through the lungs. It seems justifiable to conclude that in cases of congenital heart disease, provided that there is no congestive failure or pulmonary disease, the blood becomes 95 per cent saturated in passing through the lungs.

The Application of Cardiac Catheterization to the Diagnosis of Congenital Heart Disease

Fallot's tetralogy. The success of the operative treatment of Fallot's tetralogy has led to emphasis of the physiological features of the malformation (reduced pulmonary blood flow and venoarterial shunt) rather than the four anatomical features described by Fallot.

Operative treatment is directed towards increasing the blood flow through the lungs which is reduced by the pulmonary stenosis. Before operation one should, therefore, know that the pulmonary blood flow is in fact reduced below the normal. In the majority of cases clinical methods suffice to establish this, but there remain a few in which the reduction of the pulmonary blood flow

is in doubt. It is to be remembered that slighter degrees of stenosis of the pulmonary orifice do not necessarily result in a materially reduced pulmonary blood flow (see Case 5).

Cardiac catheterization can demonstrate the pulmonary stenosis by showing a reduction in blood pressure as the catheter tip passes from the right ventricle into the pulmonary artery (Fig. 6). By correlating the position of the catheter tip with the changes in pressure it can sometimes be shown whether the stenosis is at the pulmonary valves or in the infundibulum.

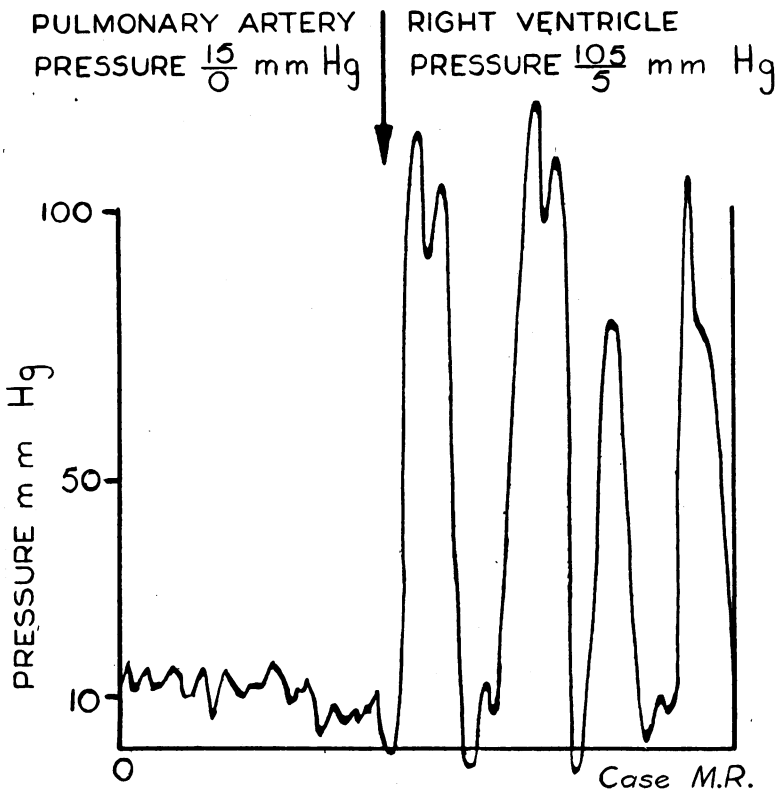

FIG. 6.—Tracing of pulse curve obtained on withdrawing the catheter through a pulmonary stenosis into the right ventricle. Case 3 (0051).

In our own experience, and that of other workers, catheterization directly demonstrates the stenosis in only about one-half of the cases of Fallot's tetralogy. In the other half of the cases it has not been found possible to catheterize the pulmonary artery, seldom because the stenosed ostium is too narrow but, as judged by the position of the catheter on the X-ray screen, because its tip is caught up by the muscle ridge surrounding an infundibular stenosis, or by the hypertrophied papillary muscles. In such cases the finding of a high pressure in the ventricle is not sufficient evidence on which to base a diagnosis of pulmonary stenosis, for this may occur in the absence of obstruction to the pulmonary orifice as, for example, in such conditions as patency of the ventricular septum, Eisenmenger's syndrome, or transposition of the great vessels. Estimation of the pulmonary blood flow, using the right ventricular sample of blood, may show whether the pulmonary blood flow is materially reduced. We have pointed out, however, that for various reasons this calculation is only approximate.

In a few cases dextroposition of the aorta can be demonstrated by passing the catheter through into it from the right ventricle (Fig. 8). Usually, however, the catheter passes into the pulmonary artery. The venoarterial shunt, resulting from the dextroposition, is shown by the lowered oxygen

saturation of the arterial blood. An approximate estimation of the volume of the shunt can be made by subtracting the pulmonary from the systemic blood flow.

For the selection of cases for operation, Taussig (1948) stresses the importance of showing a reduced pulmonary blood flow. From our own experience, however, the demonstration of a lowered arterial oxygen is of equal importance because the lower the saturation of the arterial blood the more useful will be its circulation through the lungs. For example, in a case of pulmonary stenosis with a very small septal defect, such as Case 6, with an arterial saturation of 91 per cent and a much reduced systemic blood flow, recirculation of the already arterialized blood through the lungs could improve the saturation but little. Moreover, it might be harmful to reduce further the systemic blood flow by diverting blood through the lungs.

Examples of the findings at catheterization in four cases of Fallot's tetralogy are given in the appendix (Cases 1, 2, 3, and 4).

Eisenmenger's Complex

Eisenmenger's complex consists of a high ventricular septal defect with an aorta that overrides the right ventricle, and a pulmonary artery that may be dilated. Though much less common, this condition is important because it may be confused clinically with Fallot's tetralogy. It differs from this, however, in that there is no pulmonary stenosis and little or no reduction in blood flow to the lungs. The operation of systemic-pulmonary anastomosis is therefore unlikely to help the patient.

Catheterization clearly excludes pulmonary stenosis by showing equal systolic pressures in right ventricle and pulmonary artery (Fig. 7). There should be no gross reduction in the pulmonary blood supply.

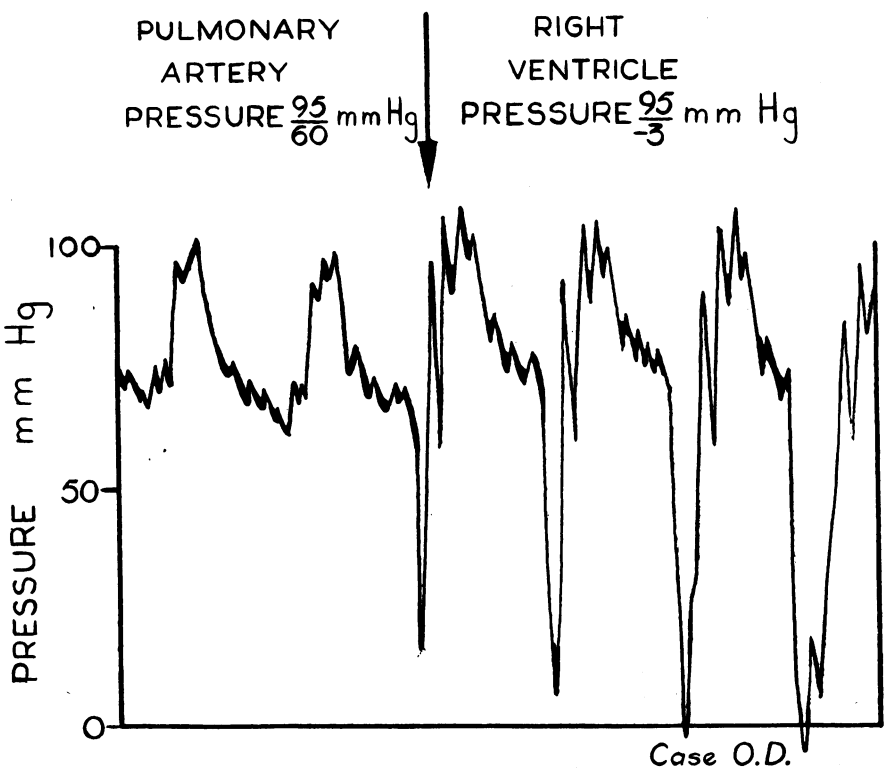

FIG. 7.—Pulse curve obtained in a case of Eisenmenger's syndrome on withdrawing the catheter from the pulmonary artery into the right ventricle. Case 9 (O261).

In Case 3 (see appendix) it was difficult on clinical grounds to know if the increased pulmonary shadows indicated Eisenmenger's complex or an increased collateral circulation. Cardiac catheterization, however, showed a pulmonary stenosis. The calculated pulmonary blood flow was 2·6, and the systemic blood flow 4·3 litres per square metre a minute. The reduction in pulmonary blood flow was therefore small, though there was no doubt about the pulmonary stenosis.

Eisenmenger's complex is generally regarded as a malformation distinct from transposition of the great vessels. There is evidence, however, to show that the effect upon the circulation is the same in the two conditions. In one (Case 9) of our cases of Eisenmenger's complex we were able to pass the catheter into the pulmonary artery. The oxygen content of the blood sample withdrawn from it was higher (25·6 volumes per cent) than that from the right ventricle (21·6 volumes per cent), thus showing that the pulmonary artery received blood from both ventricles. The reduced arterial saturation showed that the aorta also received blood from both ventricles. Analysis of the data given by Bing (1947*b*) for four cases of Eisenmenger's complex shows that in three the oxygen content of the pulmonary artery blood was, as in our case, higher than that in the right ventricle and that the arterial oxygen saturation was reduced. Eisenmenger's complex may therefore be regarded as in effect a functional form of transposition of the great vessels.

A point of interest may be noted in passing. Bing (1947) finds that in all four of his cases the diastolic pressure in the pulmonary artery was raised, and this, together with a nearly normal blood flow through the lungs, points to an increased resistance in the pulmonary vascular bed. Fig. 7 shows the high diastolic pressure in the pulmonary artery in our Case 9. In this instance the calculated pulmonary blood flow was 2·1 litres per square metre a minute. The cause of this increased resistance is not known, though Bing seems to suggest that it is due to an endarteritic change in the pulmonary arterioles. In other conditions, however, in which the pulmonary vascular bed is subjected to a high blood pressure (transposition of great vessels and widely patent ductus arteriosus) the pulmonary blood flow is often increased and not reduced.

Transposition of the Great Vessels

Catheterization is of great value in establishing the diagnosis of transposition of the great vessels since only by this means can it be shown that the blood in the pulmonary artery is of higher oxygen content than blood in the aorta. Also, an estimation can be made of the relative amounts of right ventricular and left ventricular blood entering the two great vessels. In two of our four suspected cases the catheter passed, from the right ventricle into the aorta but could not be inserted into the pulmonary artery (Fig. 8). In these two cases, therefore, catheterization did not establish the diagnosis of transposition of the great vessels. One of them, thought clinically to be a case of Fallot's tetralogy, later came to necropsy, and transposition with stenosis of the pulmonary artery was revealed (Case P088); in the other transposition of the aorta and pulmonary artery was suspected on clinical grounds and confirmed by angiocardiography (Case O052). In the other two of our four (Cases 10 and 11) the catheter passed from the right ventricle into the pulmonary artery and not into the aorta. Transposition was shown by the finding that the pulmonary artery blood was more oxygenated than that in the systemic arteries. The calculated pulmonary blood flow in both these cases was greater than normal (5·1 and 8·3 litres per square metre a minute) and the pressure in the pulmonary artery increased (88 mm. Hg mean pressure and 80/50 mm. Hg respectively).

Pulmonary Stenosis with Closed Ventricular Septum

This condition has been termed " pure pulmonary stenosis," but for reasons discussed by Allanby and Campbell (1949) the term " pulmonary stenosis with closed ventricular septum " is to be preferred. In most cases there is a defect of the atrial septum through which a venoarterial shunt occurs, though some are entirely without septal defects. There is no difficulty in recognizing the pulmonary stenosis, clinically or by the pressure readings during catheterization of the pulmonary artery, or indirectly by calculation of the pulmonary blood flow. A case with no atrial septal defect,

and therefore no venoarterial shunt, is readily recognized by the normal arterial oxygen saturation (Case 5), even though the greatly reduced cardiac output may be associated with a high degree of peripheral cyanosis (Case 6).

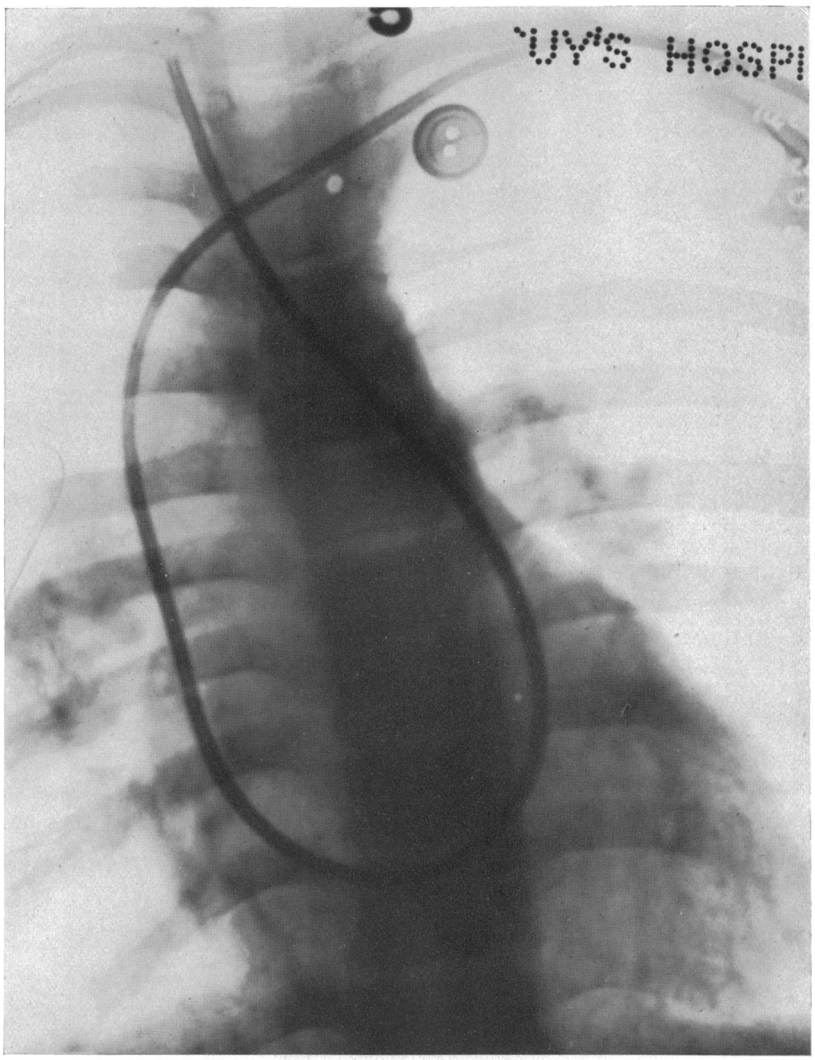

FIG. 8.—Passage of the catheter from the right ventricle into the carotid artery in a case of transposition of the great vessels with right-sided aortic arch. Reference No. O052.

There are patients in whom it is difficult to decide whether the venoarterial shunt occurring with a pulmonary stenosis passes through a ventricular septal defect (Fallot's tetralogy) or through a defect of the atrial septum (pulmonary stenosis with closed ventricular septum) or through both. Unfortunately cardiac catheterization often fails to make the differentiation (see Case 8). The defect, generally a patent foramen ovale, is small in these cases and there is no record of it having been recognized by passing the catheter through it into the left atrium. It has also been shown (Fig. 1, 2, and 3) that an atrial septal defect with a venoarterial shunt can very seldom be recognized by the comparison of the oxygen content of atrial and vena caval bloods. Catheterization, there-

fore, in pulmonary stenosis with closed ventricular septum and atrial septal defect is unlikely to demonstrate the atrial septal defect, but the latter may be inferred when the venoarterial shunt is found to be small. Of those cases of the group that have a ventricular septal defect, only one-half may be expected to be diagnosed by the increase in oxygen content on passing from atrium to ventricle (Fig. 4). In the absence of a patent ductus arteriosus the ventricular septal defect may also be shown by the increase in oxygen content on passing from the right ventricle to the pulmonary artery (Fig. 4 and Case 4). The position of the stenosis can be judged on the X-ray screen by the position of the catheter tip when the abrupt increase in pressure occurs between the pulmonary artery and the right ventricle as the catheter is withdrawn. If the change is seen to take place high in the pulmonary conus it is in favour of a valvular or high infundibular stenosis, and if low in the pulmonary conus in favour of a lower infundibular stenosis. Since a valvular stenosis occurs more frequently with a closed ventricular septum, and an infundibular stenosis with a ventricular septal defect the position of the stenosis may provide a further aid to diagnosis.

Whether the septal defect in these cases is atrial or ventricular is, however, not of great surgical importance. The practical point is to decide on the relative volumes of the cardiac output and venoarterial shunt, for the smaller the venoarterial shunt the more is valvulotomy to be preferred to systemic-pulmonary anastomosis.

Atrial Septal Defect

The shunt through an atrial septal defect is always arteriovenous when the lesion is an isolated one or associated with mitral stenosis (Bedford *et al.*, 1941; Brannon *et al.*, 1945; Cournand, 1947). When, however, the atrial septal defect is associated with other cardiac malformations the shunt through it is usually venoarterial. To account for the reversal of the direction of the intra-atrial shunt (as, for example, in pulmonary stenosis with closed ventricular septum) a fall in the left atrial pressure must be inferred, since measurements show no increase in right atrial pressure. Such a reduction in pressure might result from the diminished pulmonary venous return.

An atrial septal defect can sometimes be recognized by passing the catheter through the defect. Even a direct demonstration of a septal defect does not prove that there is normally a shunt as it may be a patent foramen ovale normally covered by a valve; it is still desirable to show by blood oxygen comparisons that a shunt occurs through it. The course of the catheter passing through an atrial septal defect is characteristic (Fig. 9), crossing to the left at a higher level than when going through the tricuspid valve. The catheter tip can sometimes be advanced into a pulmonary vein, the catheter then leaving the heart shadow. Confirmatory evidence is the high oxygen saturation of the blood obtained from the left side of the heart. When the catheter cannot be passed through the atrial septal defect a comparison of the oxygen content of the vena caval and atrial bloods will reveal the presence of the defect if an arteriovenous shunt occurs, but not if the shunt is venoarterial.

With an arteriovenous shunt through an atrial septal defect, the right heart output and pulmonary blood flow are increased, the pulmonary blood flow being as much as 5 times increased (Taylor *et al.*, 1948, Case 6). In such cases, in spite of the large amount of blood passing through the atrial septal defect into the right atrium, the right atrial pressure is rarely raised above normal. Right ventricular and pulmonary artery pressure may be slightly raised but occasionally may be much increased (Dexter, 1947, Case 1, and Taylor *et al.*, 1948, Case 3). The systemic blood flow, calculated from the mean of the oxygen contents of the superior and inferior venæ cavæ, is not reduced.

It should be noted that a number of malformations may also give rise to increased oxygen content of the right atrial blood and so lead to the suspicion of an atrial septal defect. The most frequently encountered (three times in our series) is the opening of an anomalous pulmonary vein directly into the right atrium. Until recently this condition has been recognized only after death (Brody, 1942; Taussig, 1947) but Cournand *et al.* (1949) have described one case diagnosed during life. In Cournand's, as in our three cases, this was shown when the catheter slipped from the atrium into a pulmonary vein of the right lung (Fig. 10). We have verified the location of the tip by

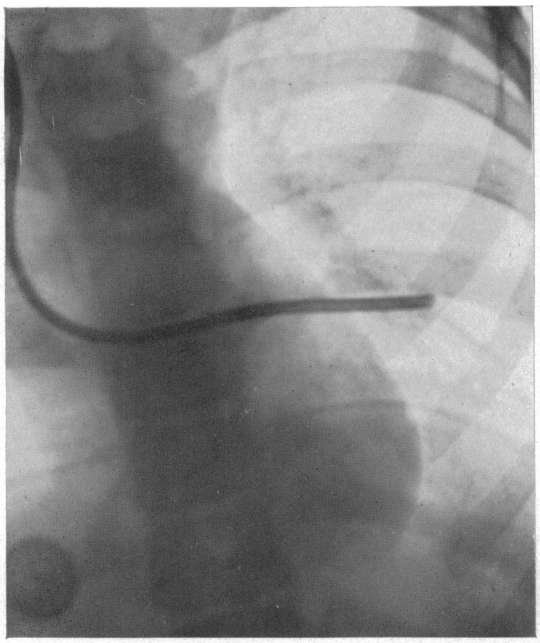

FIG. 9.—Passage of the catheter through an atrial septal defect and into a left pulmonary vein. The catheter passes from the right atrium over to the left side of the heart at a higher level than when passing into the right ventricle. Reference No. P021.

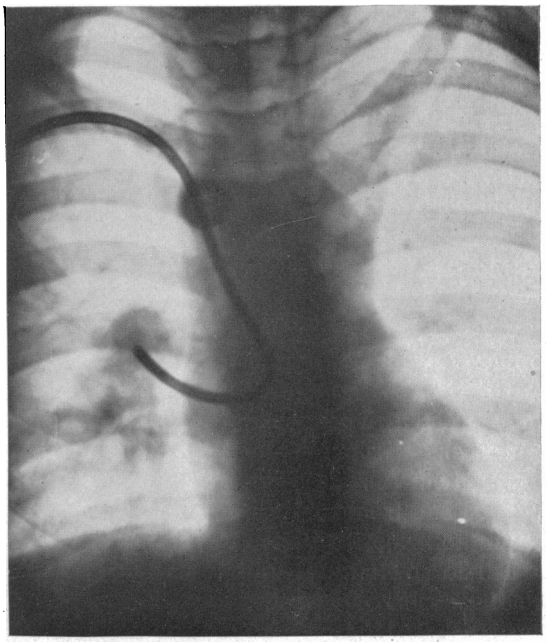

FIG. 10.—Passage of the catheter from the right atrium into a pulmonary vein which opens directly into the atrium. Reference No. P021.

screening in the oblique position and by drawing arterialized blood from the catheter. In two of the three patients an atrial septal defect was also demonstrated. The other and rarer conditions which we have not encountered personally are (1) an arteriovenous fistula between a coronary artery and the coronary sinus, (2) tricuspid insufficiency associated with a ventricular septal defect, (3) pulmonary and tricuspid valve insufficiency in the presence of a patent ductus arteriosus, (4) a congenital communication between the left ventricle and the right atrium (Perry *et al.*, 1949), and (5) a persistent common atrio-ventricular ostium.

Lutembacher's Syndrome

The association of an atrial septal defect with mitral stenosis was first described by Lutembacher (1916). The clinical diagnosis of the condition usually presents no difficulties, but doubt may arise whether mitral stenosis is present in a case of atrial septal defect, or whether an atrial septal defect is present in a case of mitral stenosis.

There is yet insufficient evidence to show how far catheterization can assist in the diagnosis of Lutembacher's syndrome. So far as we are aware no catheterization findings have been reported in this condition. Among Brannon *et al.* (1945) cases of atrial septal defect there is, however, one (Case 8) described as having a low-pitched rumbling diastolic murmur at the apex of the heart which, though the authors do not refer to it, may be an instance of Lutembacher's syndrome. We ourselves have one example (Case 17) in which mitral stenosis was recognized by the characteristic murmur and clinical evidence of atrial septal defect was also present; on catheterization proof of an atrial septal defect consisted in the passage of the catheter through the defect into the left atrium, and the finding of blood of a high oxygen content in the right atrium. In both these cases right atrial, ventricular, and pulmonary artery pressure were raised well above normal. These findings are to

be expected from the combination of mitral stenosis and atrial septal defect. In our patient the systemic flow, calculated from the mean oxygen content of the superior and inferior vena caval bloods was considerably reduced, but was normal in the case of Brannon *et al.* There is as yet no necropsy confirmation of the condition in either of these.

Whilst the findings obtained in these two cases were to be expected in Lutembacher's syndrome, there is some doubt whether they are diagnostic because some instances of atrial septal defect without a suggestion of mitral stenosis have been reported with markedly raised pressures in the right ventricle and pulmonary artery (Dexter *et al.*, 1947, Case 1, and Taylor *et al.*, 1948, Case 3). This rise of pulmonary arterial pressure is unusual in uncomplicated atrial septal defect, and in the discussion Dexter and Taylor do not consider the possibility of mitral stenosis having been present. Whilst a reduced systemic blood flow would be in favour of mitral stenosis, a normal systemic blood flow would not exclude the condition.

Tricuspid Atresia and Pulmonary Atresia

In tricuspid atresia the blood passes from the right atrium through a septal defect into the left atrium and ventricle, and thence directly or indirectly into the pulmonary artery and aorta. In pulmonary atresia the blood reaches the lungs through either a patent ductus arteriosus or from dilated bronchial vessels arising from the aorta. In both tricuspid and pulmonary atresia there may be a small right ventricle. The two abnormalities are considered together since they resemble each other functionally and in both blood for the pulmonary and systemic circulations is derived from the left ventricle. In a patient with the signs and symptoms of Fallot's tetralogy, an electrocardiogram showing left ventricular preponderance is thought to be diagnostic of tricuspid atresia, and angiocardiograms show the abnormal path of the blood through the heart (Campbell and Hills, 1950). On catheterization, the catheter may be seen not only to pass through the atrial septal defect but also to pass into the left ventricle (Case 13, Fig. 11 and 12). Catheterization cannot, however,

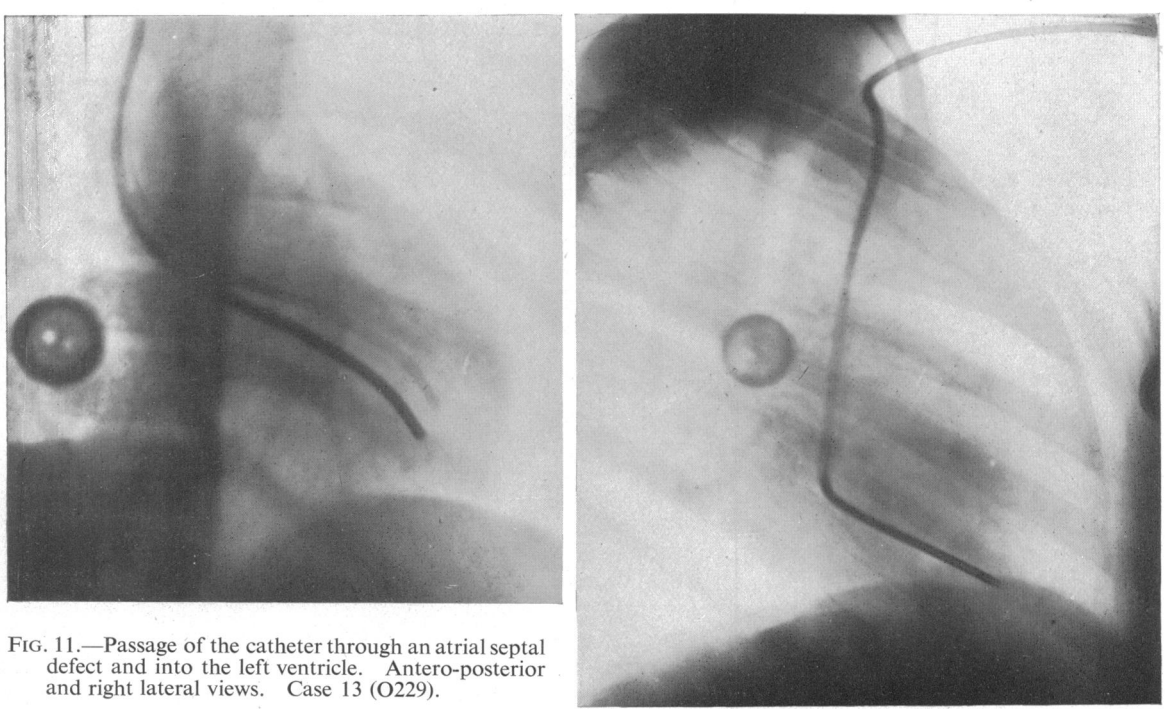

FIG. 11.—Passage of the catheter through an atrial septal defect and into the left ventricle. Antero-posterior and right lateral views. Case 13 (O229).

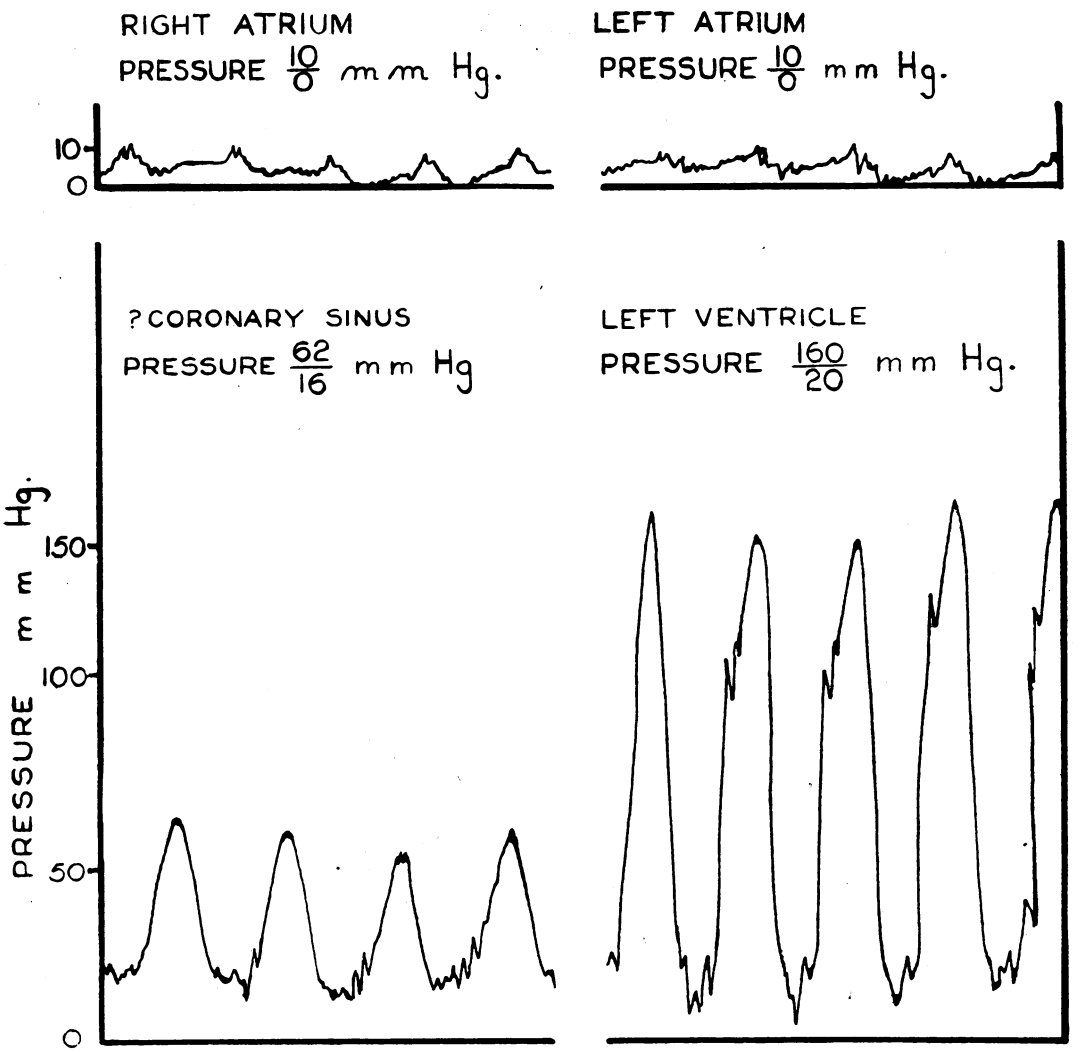

FIG. 12.—Pressure tracings obtained from the right atrium, ? coronary sinus, left atrium, and left ventricle in Case 13 (O229).

distinguish between tricuspid atresia and pulmonary atresia, except in those instances when the catheter is passed from the right atrium into the right ventricle, as, for example, the case reported by Geraci *et al.* (1948).

It is generally assumed that the pulmonary blood flow is reduced, and on this assumption pulmonary systemic anastomosis is carried out with apparent benefit (Potts and Gibson, 1948; Baker *et al.*, 1949; Soulie *et al.*, 1949). The pulmonary blood flow can be calculated if we assume complete mixing of the blood in the left ventricle so that the oxygen content of blood supplied to the lungs can be taken as that of the arterial blood. In 7 of our 9 cases diagnosed on clinical grounds the calculated pulmonary blood flow was decreased (1·2 to 2·5 litres per square metre a minute) but in two slightly increased (3·4 and 3·9 litres per square metre a minute). So far only those of our patients with reduced pulmonary blood flow have been operated on. Operation has been delayed on the two cases with increased blood flow because they have a fairly good exercise tolerance. In most of the accounts given by others data are wanting on which pulmonary blood flow can be

calculated so it is not known whether the successful operations include any in which the pulmonary blood flow was increased. Geraci *et al.* (1948) give the data from two adults, one with tricuspid and the other with pulmonary atresia, from which the pulmonary blood flow can be calculated and shown to be increased. Whether operation was carried out on these two is not recorded, but both are noted to have relatively good exercise tolerances.

That the pulmonary blood flow may be increased or decreased is not unexpected in view of the necropsy findings. In tricuspid atresia the pulmonary artery may arise directly from the left ventricle and if this occurs, as Taussig (1948) points out, increased pulmonary blood flow will be likely. In most cases, however, there is some obstruction to the pulmonary flow.

Truncus Arteriosus and Pulmonary Atresia

Under this heading we are discussing the malformations in which the blood supply to both pulmonary and systemic circulations is derived from a single great vessel which overrides both ventricles. This condition may be either a true truncus arteriosus, or the vessel may be the aorta, in which case an atresic pulmonary artery can be found post-mortem. The diagnosis of these two conditions is difficult to establish by any method and, except at necropsy, the differential diagnosis between them is presumptive. Clinical and X-ray examinations may suggest the condition and angiocardiography and cardiac catheterization may support the diagnosis.

Since the blood supply to the lungs is of the same oxygen content as that of arterial blood it is possible without catheterization to calculate the pulmonary blood flow from the oxygen content of the arterial blood. In three cases where the diagnosis was confirmed (at necropsy in two and at operation in the third), the pulmonary blood flow was thought to be slightly increased in one (3·8 litres) and slightly decreased in the other two (2·5 and 2·0 litres per square metre a minute). The presumed diagnosis of truncus arteriosus in the two catheterized cases has not yet been confirmed. Assuming the diagnosis to be correct, the calculated pulmonary blood flow was normal in one (Case 12); in the other, again assuming the diagnosis, the calculated pulmonary blood flow is about three times the normal. Since the X-ray appearances of the lungs suggest a decreased rather than an increased blood flow, this finding is against the clinical diagnosis.

Patent Ductus Arteriosus

In patent ductus arteriosus, arterial blood flows from the aorta to the pulmonary artery and so an increase in blood oxygen content is found on passing from right ventricle to pulmonary artery. Such an increase in oxygen content may be brought about in several ways (see section on comparison of right ventricular and pulmonary artery bloods) so that confirmatory evidence is required before patent ductus arteriosus can be diagnosed on the grounds of oxygen differences. We have found the characteristic murmur to be the most satisfactory indication of a patent ductus, though proved cases have occurred that do not present this sign.

In most instances of patent ductus arteriosus the pulmonary artery pressure is within normal limits, but in some it is increased. Dexter (1947) found it increased in three of twelve cases. In contrast to Eisenmenger's syndrome (Case 9 and Bing, 1947) in which an increased pulmonary artery pressure was associated with a reduced pulmonary blood flow, the calculated pulmonary blood flow in the three cases was increased (16·9, 14·2, 8·8 litres per square metre a minute). This finding indicates that increased pulmonary artery pressure is not always associated with a marked increase in pulmonary vascular resistance.

Pulmonary Arteriovenous Fistula

The symptoms and some of the signs of pulmonary arteriovenous fistula are so similar to those of congenital heart disease that the condition should be mentioned here. Catheterization does not help in the diagnosis but is useful for assessing the volume of the shunt. From the oxygen saturation of the arterial blood the proportion of the total blood stream passing through the fistulæ can

be calculated, but to calculate the actual blood flows mixed venous blood must be obtained by catheterization (Case 18).

General Remarks

The information that cardiac catheterization can afford in the diagnosis of congenital heart disease has been discussed under the heading of the different malformations. It remains to compare briefly the diagnostic aid to be obtained from cardiac catheterization and angiocardiography, and to state in general terms the value of the former.

Both cardiac catheterization and angiocardiography are proving valuable, the more so because their findings are often complementary. Angiocardiography gives more anatomical, cardiac catheterization more physiological information. Cardiac catheterization gives an indication of the necessity for surgical measures and whether a pulmonary-systemic anastomosis or a valvulotomy operation would be more useful. Angiocardiography is useful, particularly from the surgeons' point of view, in demonstrating the disposition of the great vessels. Angiocardiography is more useful in showing shunts when they are venoarterial whereas cardiac catheterization more surely demonstrates arteriovenous ones. For example, in tricuspid atresia angiocardiography would show the atrial shunt that might escape the cardiac catheter; but in uncomplicated atrial septal defect angiocardiography does not show the shunt as does cardiac catheterization. Angiocardiography does not measure the degree of pulmonary stenosis, and indeed may fail to show minor degrees of the condition; on the other hand, by successful cardiac catheterization pulmonary stenosis can not only be shown but its effects measured, and improvement after surgical treatment can be assessed.

In cases of congenital heart disease presenting no great difficulty in diagnosis, the findings of catheterization can be expected to support the diagnosis. In those instances when difficulties arise in clinical diagnosis, usually when multiple malformations exist, cardiac catheterization may be of great value. If the investigation fails to supply useful information, and this is still a frequent source of disappointment, the reason is either that the catheter cannot be introduced into all the compartments of the heart desirable, or because alternative explanations are possible for the abnormal intracardiac pressures or oxygen contents of the blood samples that have been found. In all but the simplest malformations it is necessary to bring every possible piece of evidence together before making a diagnosis.

Summary

Certain points in the technique of cardiac catheterization are discussed.

In congenital heart disease cardiac catheterization is not without danger. Six of 70 cases developed signs indicative of pulmonary or systemic thrombosis or embolism. One case died.

The difference in oxygen content of blood obtained from the venæ cavæ, right atrium, right ventricle, and pulmonary artery are discussed in relation to the diagnosis of septal defects and patent ductus arteriosus. In the absence of intracardiac shunts and patent ductus arteriosus the oxygen content of right atrial blood should not exceed;

(*a*) that of the superior vena cava by more than 2 volumes per cent * (Fig. 1);
(*b*) that of inferior vena caval blood by more than 3 volumes per cent (Fig. 2);
(*c*) that of the mean of superior and inferior vena caval blood by more than 2 volumes per cent (Fig. 3).

The oxygen content of right ventricular blood should not exceed that of right atrial blood by more than 1 volume per cent (Fig. 4). The oxygen content of pulmonary artery blood should not exceed that of right ventricular blood by more than 0·5 volumes per cent (Fig. 5).

The use of cardiac catheterization in the diagnosis of the following conditions is considered:

* In cases with normal hæmoglobin saturation a difference of oxygen content of 1 volume per cent amounts to 5 per cent difference in oxygen saturation. In polycythæmic cases the same difference of oxygen content represents a smaller difference in oxygen per cent saturation.

Fallot's tetralogy, Eisenmenger's complex, transposition of the great vessels, pulmonary stenosis with closed ventricular septum, tricuspid and pulmonary atresia, truncus arteriosus, atrial and ventricular septal defects, Lutembacher's syndrome, patent ductus arteriosus, and pulmonary hæmangioma.

We are indebted to Dr. Maurice Cambell for his interest in these investigations, and for valuable discussions in the interpretation of clinical and catheterization findings. Our thanks are also due to the Departments of Medical Illustration and Photography for help with the illustrations.

APPENDIX

Normal Standards for Cardiac Output

Cournand (1945) gives the normal cardiac output for the healthy male adult when estimated by the catheter technique as 3·1 litres a minute per square metre of the body surface. The values for females and children are not known.

Intracardiac Pressures

Bloomfield, Cournand *et al.* (1946) give values for normal intracardiac pressures. Their pressure measurements are referred to the plane of 5 cm. below the angle of Ludwig, and ours to the plane of the skin of the back. It is therefore necessary to add 10 mm. Hg to their figures to make them comparable with ours. If this is done the figures for normal intracardiac pressures become:

Right Atrium	8 to 12 mm. Hg
Right Ventricle	
Systolic	35 to 40 mm. Hg
Diastolic	5 to 15 mm. Hg
Mean	20 mm. Hg
Pulmonary Artery	
Systolic	35 to 40 mm. Hg
Diastolic	15 to 20 mm. Hg
Mean	25 mm. Hg

In our cases the systolic and diastolic pressures were obtained from Hamilton manometer records, and the mean pressure from the aneroid manometer readings.

NOTES ON THE 18 CASES

*Fallot's Tetralogy**

Case 1. The clinical diagnosis of Fallot's tetralogy was supported by the catheterization findings. The oxygen content of the right ventricular blood agreed with that from the right atrium, but the oxygen content of the pulmonary artery blood was distinctly lower. This finding was almost certainly an artefact due to obstruction of the stenosed pulmonary orifice by the catheter for several minutes before the specimen was obtained. Therefore, the oxygen content of the right ventricular blood had to be used in calculating the pulmonary blood flow.

Case 2. The clinical diagnosis of Fallot's tetralogy was supported by the catheterization findings. The increased oxygen content of the right atrial blood as compared with that from the venæ cavæ (see Fig. 1, 2, and 3) suggested the presence of an atrial septal defect, but this was made doubtful by the low oxygen content of the right ventricular blood (see p. 162). The mean of the values of the oxygen content of the vena caval samples was used in the calculation of the systemic blood flow.

Case 3. Clinically there was doubt whether the pulmonary shadows were due to collateral circulation or indicated Eisenmenger's complex. The findings, however, showed pulmonary stenosis to be present, and therefore support the diagnosis of Fallot's tetralogy. The significance of the lowered oxygen content of the pulmonary artery as compared with the right ventricular sample is uncertain. It is probably due to the catheter materially obstructing the lumen of the stenosed artery, though it may also have been due to the restlessness of the child. Because of this the oxygen content of the right ventricular sample was used in the calculation of the pulmonary blood flow. The pulmonary stenosis was of moderate severity and a venoarterial shunt occurred presumably through a ventricular septal defect.

Case 4. The clinical diagnosis was pulmonary stenosis with doubt about the condition of the ventricular septum. Samples were taken from the trunk and from the right and left branches of the pulmonary artery and all showed the same oxygen content which was considerably higher than that obtained on samples from

* All these four cases were greatly improved by subclavian-pulmonary anastemosis or rescetion of the infundibulum (Case 4).

the right ventricle. This finding suggested that either a patent ductus arteriosus or a high ventricular septal defect was present. In the absence of a ductus murmur the latter explanation seemed the more likely one, and at subsequent operation no evidence of a patent ductus arteriosus was found. Evidence of mixing of the blood of the two ventricles in both directions through the ventricular septal defect was given, not only by the increased oxygen content of the pulmonary artery blood, but also by the decreased saturation of the arterial blood. Though the blood flow calculations suggested a slight preponderance of arteriovenous shunt through the defect, the figure for this was well within the limits of experimental error (Dexter *et al.*, 1947). This case appeared to be one of pulmonary stenosis with a small high ventricular septal defect.

Pulmonary Stenosis with Closed Ventricular Septum

Case 5. The clinical diagnosis was pulmonary stenosis. Catheterization results showed that pulmonary stenosis was present but gave no evidence of a septal defect. The mild degree of pulmonary stenosis appeared to be largely compensated for by the increased systolic pressure of the right ventricle so that there was only a slight reduction of the pulmonary flow. The small calculated venoarterial intracardiac shunt was within the limits of experimental error, and in view of the normal arterial oxygen saturation such a shunt was unlikely.

Case 6. In this case of pulmonary stenosis with an intact ventricular septum the right ventricle was only once entered, and though the pressure in it was read no blood sample was obtained. This patient had signs of congestive failure which presumably account for the raised right atrial pressure and the enlargement of this chamber demonstrated by the catheter. The same oxygen saturation was found in samples taken from two different points in the right atrium. The right atrial sample was therefore considered to represent mixed venous blood and used for the calculation of the systemic flow. The low value of the latter, and the almost normal arterial oxygen saturation indicate that the pulmonary blood flow is much reduced and that not more than a minimal septal defect is present. Post-mortem, the pulmonary valves were severely stenosed and a very small opening to a probe was found through the valve covering the foramen ovale.

Case 7. The clinical diagnosis was of severe pulmonary stenosis, and at first angiocardiography failed to show any right to left shunt. The catheterization findings are incomplete because the patient did not stand the procedure well. The extremely low value for the oxygen saturation of the blood from the right pulmonary artery is almost certainly an artefact caused by the prolonged obstruction to the stenosed artery by the catheter, especially as a sample taken from the common pulmonary artery two minutes later showed a still lower oxygen saturation of only 15 per cent. There is no doubt that both pulmonary and systemic blood flows were very low, though accurate figures cannot be given. The lowered arterial oxygen saturation was evidence of a small venoarterial shunt. Post-mortem, severe pulmonary stenosis was found and a slit-like opening (7 by 3 mm.) in the valve covering the foramen ovale.

Case 8. The catheterization findings supported the diagnosis of pulmonary stenosis and showed up a significant venoarterial shunt. The right atrial and right ventricular samples were in good agreement and when compared with them the lowered oxygen saturation of the pulmonary blood sample suggested that the catheter had obstructed the pulmonary artery. This was also suggested by the sense of release from grip which was felt when the catheter was withdrawn from the pulmonary artery. The right ventricular sample was used, therefore, in calculating the pulmonary blood flow. A pulmonary vein draining blood 97 per cent saturated with oxygen into the right atrium was demonstrated; the right atrial sample, therefore, has probably a higher oxygen content than that of true mixed venous blood. The mean oxygen content of the vena caval blood samples would have been more accurate in calculating the systemic blood flows, but unfortunately these had not been taken. The calculated systemic blood flow is therefore likely to be higher than the actual one. This appears to be a case of marked pulmonary stenosis with a moderate venoarterial shunt, and no evidence is obtained as to whether the shunt occurs through the atrial or ventricular septum.

Eisenmenger's Syndrome

Case 9. The clinical diagnosis of Eisenmenger's complex was supported by the catheterization results. There was clear evidence of interventricular mixture of blood, but no preponderance of shunt either to the right or left. The difference in oxygen saturation of the right ventricular and pulmonary artery blood samples suggests a high septal defect and some degree of left to right shunt. Pressure tracings from this case are shown in Fig. 7.

Transposition of the Great Vessels

Case 10. A reliable diagnosis could not be made before catheterization, though transposition with a septal defect was suspected. The finding that the pulmonary artery blood was 82 per cent saturated whilst that of the systemic artery was only 72 per cent made it clear that this was a case of transposition of the great vessels. The figure for the pulmonary artery blood oxygen saturation was duplicated in samples from both the common trunk and the right branch of the pulmonary artery, and the figure for the arterial oxygen saturation was confirmed (68%) by a second arterial sample collected 5 hours after the catheterization.

FINDINGS IN 18 ILLUSTRATIVE CASES

Case No.	Reference number, initials	Sex, age	Surface area, sq. metres (1)	O_2 consumption ml./min./ sq. metre. B.M.R. % of normal (2)	Pressures (mm. Hg.) from skin of back (3)			
					Right atrium	Right ventricle	Pulmonary artery	Systemic artery
	Fallot's Tetralogy							
1.	O105 K. C.	F 15	1·59	132 +6%	10	62	10	128/90
2.	H120 G. S.	F 11	1·01	163 +6%	10	40	10	110/60
3.	O051 M. R.	F 8	0·82	194 +20%	4/−2	105/−5	15/0	80/55
4.	CB11 A. A.	F 20	1·70	115 −6%	12	37	16	108/70
	Pulmonary Stenosis with closed Ventricular Septum							
5.	P206 J. F.	M 16	1·54	132 −14%	10/0	140/21	40/21	130/80
6.	P031 M. C.	F 22	1·53	120 −5%	24	70	—	115/85
7.	H117 D. S.	F 30	1·53	118 −8%	—	100+	16	—
8.	O207 D. W.	F 26	1·48	137 +10%	11	85	11	120/75
	Eisenmenger's Complex							
9.	O261 O. D.	F 23	1·42	152 +20%	0	95/−5	95/55	130/80
	Transposition of Great Vessels							
10.	O076 E. T.	M 14	1·09	169 +6%	10	47	88	100/70
11.	OA06 K. M.	M 7	0·82	182 +3%	8	65/10	80/50	85/?
	Truncus Arteriosus							
12.	P098 H. W.	F 12	0·96	230 +54%	4/−8	117/7	—	120/78 Hamilton manometer
	Pulmonary and/or Tricuspid Atresia							
13.	O229 C. L.	F 6	0·69	222 +30%	4	—	—	160/20 (left ventricle)
14.	O021 V. F.	F 14	1·12	178 +25%	14	—	—	100/55
15.	P057 S. H.	M 19	1·32	168 +19%	11	—	—	95/60
	Patent Ductus Arteriosus							
16.	O280 L. S.	M 27	1·70	138 0	9	14	18	130/55
	Atrial Septal Defect (Lutembacher's Syndrome)							
17.	C227 J. M.	M 25	1·53	167 +12%	20	62	72	105/75
	Pulmonary Hæmangioma							
18.	D. C.	M 27	1·57	147 +7%	8	17	15	105/80

(1) From Du Bois formula.
(2) Percentage of normal calculated on Boothby and Sandiford's (1929) figures.

OF CONGENITAL HEART DISEASE

Oxygen content (volumes %) Percentage saturation							Blood flow litres/min./sq. metre		
Inferior vena cava	Superior vena cava	Right atrium	Right ventricle	Pulmonary artery	Artery	Total capacity	Pulmonary	Systemic	Shunt (4)
16·9	15·7	16·2	16·2	14·1	18·5	30·2	1·0	6·0	5·0
56%	52%	54%	54%	47%	62%	—			
20·5	18·5	23·0	20·7	20·5	24·5	34·1	1·4	3·2	1·8
60%	54%	68%	61%	60%	72%	—			
11·3	13·5	12·2	12·4	11·0	16·7	20·9	2·6	4·3	1·7
54%	65%	58%	59%	53%	80%	—			
—	14·2	13·9	14·7	16·4	21·1	23·8	1·9	1·7	−0·2
—	60%	59%	62%	69%	89%	—			
12·5	10·2	10·9	10·3	10·3	15·4	16·1	2·6	3·0	0·4
78%	63%	68%	64%	64%	96%	—			
—	—	9·0	—	—	22·0	24·3	Very small	0·85	Very small
—	—	37%	—	—	91%	—			
—	—	—	—	9·8	26·4	34·5	Very small	Very small	Small
—	—	—	—	29%	77%	—			
—	—	12·9	13·5	6·3	19·8	28·6	1·0	2·0	1·0
—	—	45%	47%	22%	69%	—			
18·8	22·5	19·8	21·6	25·6	26·8	34·7	2·1	2·2	—
54%	64%	57%	62%	74%	77%	—			
—	15·8	14·0	19·6	21·5	18·8	26·1	5·1	3·5	−1·6
—	61%	54%	75%	82%	72%	—			
15·6	14·5	15·4	20·2	20·8	16·9	24·2	8·3	12·1	3·8
65%	60%	64%	84%	86%	70%	—			
—	—	13·2	14·1	—	13·1	21·8	Not reduced	—	—
—	—	61%	65%	—	60%	—			
				(Left atrium)	(Left ventricle)				
7·8	10·8?	6·4	6	9·6	11·4	31·4	—	—	—
25%	34%?	20%	2%	30%	36%	—			
19·6	—	18·6	—	—	25·6	31·6	4·4	app. 2·5	−1·9
62%	—	59%	—	—	81%	—			
17·4	19·2	16·5	—	—	21·7	29·8	>1·4<3·5	3·2	veno-arterial
59%	65%	56%	—	—	73%	—			
—	—	12·9	14·0	15·5	18·5	20·2	3·7	2·4	−1·3
—	—	64%	70%	77%	92%	—			
—	12·1	12·2/15·7	15·6/17·3	16·2	21·5	23·5	2·7	1·8	−0·9
—	52%	52%/67%	67%/74%	69%	92%	—			
23·6	21·1	21·0	20·6	21·2	23·1	31·6	1·7 (alveoli)	7·0	5·3 (hæmangioma)
75%	66%	66%	65%	67%	73%	—			

(3) A single number indicates mean pressure (aneroid manometer); two numbers indicate systolic and diastolic pressure.

(4) A negative sign indicates an arteriovenous shunt, otherwise the shunts are venoarterial.

This transposition may have been more functional than anatomical because though the catheter could be passed easily through into the pulmonary artery it could not be passed into the aorta. Mean blood pressures only were obtained, but it was likely that systolic pressures in the right ventricle, pulmonary artery, and aorta were equal. Further evidence of considerable interventricular mixing of blood was given by the higher oxygen content of the right ventricle as compared with the superior vena cava and right atrial samples. The pulmonary blood flow was greatly increased. It was concluded that a large ventricular septal defect with transpositions of the great vessels was present.

Case 11. The clinical diagnosis lay between transposition with a septal defect and Eisenmenger's complex. The catheterization was done under avertin and pentothal anæsthesia. The results showed interventricular mixing of blood by the increase in oxygen content in passing from the right atrium to ventricle, and demonstrated the transposition by the fact that the oxygen saturation of the arterial blood was markedly lower than that obtained from the pulmonary artery. For some reason unknown the systolic pressure in the pulmonary artery appeared to be higher than that in the right ventricle. The calculated blood flows were greatly increased. The final diagnosis was of transposition of the great vessels with a ventricular septal defect.

Truncus Arteriosus

Case 12. The clinical diagnosis of a truncus arteriosus was supported by the results of catheterization. A pulmonary vein draining blood (97% saturated) into the right atrium was demonstrated, and also an atrial septal defect. The catheter passed into what appeared to be a vessel of wide diameter (? truncus) and on into a right-sided aortic arch. No pulmonary branches were demonstrated. The blood samples were of limited value because the child was anxious and cried at times, but they indicated that complete mixing of systemic and pulmonary venous bloods had occurred in the common atrium. The systemic blood flow cannot be computed because no sample of mixed venous blood was obtainable as the child finally ceased to co-operate before vena caval samples could be obtained. Assuming that the pulmonary vessels are derived from a truncus arteriosus, the pulmonary blood flow can be calculated as 3 litres a minute per square metre of body surface. The conclusions to be drawn from the investigation are that an atrial septal defect was present, and that an anomalous pulmonary vein drained into the right atrium; there was evidence in favour of a common arterial trunk and the presence of two ventricles, but the existence of a pulmonary artery cannot be ruled out.

Tricuspid Atresia and Pulmonary Atresia

Case 13. The clinical diagnosis in this case was tricuspid atresia. The child was catheterized under only local anæsthesia and remained co-operative throughout. From the right atrium the catheter entered what was at first thought to be a small right ventricle, as judged by the position of the catheter and the pressure measured. The sample of blood obtained from it, however, was only 2 per cent saturated and it seems more likely that the structure entered was the coronary sinus, which the catheter had obstructed. The catheter was withdrawn and the left atrium entered through a large atrial septal defect; from there the tip was advanced into the left ventricle (Fig. 11). For fear of injuring the endocardium the catheter was not further manipulated in the ventricle and the aorta was not entered. As all blood samples, especially the one obtained from the right ventricle, were of such low oxygen content calculation of blood flows does not appear to be justified. The conclusions drawn were that the child had an atrial septal defect through which a venoarterial shunt occurred. The pressure tracings are shown in Fig. 12.

At the end of the catheterization the child complained of nausea and vomited twice, following which she passed into coma. Respirations stopped about two minutes later when a feeble pulse could still be felt. She improved with artificial respiration and oxygen and regained consciousness about 10 minutes later. One month later she had an angiocardiogram, and a few weeks later she suddenly collapsed in bed and died. The post-mortem findings were a large atrial septal defect producing what was practically a common atrium, a small right ventricle with hypertrophied walls, narrowed tricuspid valve, and shortened chordæ tendineæ. There was a slit-like opening high in the ventricular septum and several small ones in the lower part of the septum. The aorta arose entirely from the right ventricle, from which also arose a hypoplastic pulmonary artery with under-developed but well separated cusps. A high degree of pulmonary subvalvular stenosis was present, narrowing the lumen to a little over 1 mm. in diameter. The blood supply to the lungs arose from well developed anterior and superior bronchial arteries. This case was therefore strictly neither an example of tricuspid or of pulmonary atresia, but of complete transposition of the aorta and marked pulmonary stenosis. The case is being reported fully in the Guy's Hospital Reports.

Case 14. This girl was diagnosed clinically as a case of Fallot's tetralogy with a large compensating ductus arteriosus. She was twice catheterized but on neither occasion could an exit be found from the right atrium. Post-mortem, there was a large patent foramen ovale and atresia of the pulmonary orifice and a small right ventricle. There was a well developed pulmonary artery which was supplied from the aorta via a large patent ductus arteriosus. With the knowledge of the post-mortem findings the blood flows shown in the table were calculated.

Case 15. The clinical diagnosis was tricuspid atresia. At catheterization no exit could be found from the right atrium into either the right ventricle or the left atrium. In the absence of a sure anatomical diagnosis two figures were calculated for the pulmonary blood flow, the larger assuming that the pulmonary blood supply was derived entirely from the arterial blood, and the smaller assuming that the pulmonary blood supply was derived from such mixed venous blood as was sampled in the right atrium. In either case it appears that the pulmonary blood flow was reduced.

Patent Ductus Arteriosus

Case 16. The obvious clinical diagnosis of patent ductus arteriosus was confirmed by the finding that there was a significantly higher oxygen content of the blood in both branches of the pulmonary artery than that in the right ventricle. It will be noticed that the oxygen content of the right ventricular blood is somewhat higher than that of the right atrial blood. This may be due to the right atrial sample not being a representative one, it may be questionable evidence of a ventricular septal defect, or perhaps evidence of regurgitation through the pulmonary valves; had vena caval samples been taken the answer to the first of these possibilities would have been available.

Atrial Septal Defect and Mitral Stenosis (Lutembacher's Syndrome)

Case 17. The catheterization findings confirmed the clinical diagnosis of atrial septal defect. The right atrial pressure was raised, as was also the mean right ventricular and pulmonary artery pressures. The samples of blood of various oxygen content obtained from the right atrium and ventricle gave evidence of incomplete mixing of blood therein. The slightly lowered oxygen saturation of the arterial blood suggests that there may be some admixture of venous blood from the right to the left atrium even though the overall shunt is arteriovenous. The systemic blood flow is significantly reduced and the pulmonary blood flow is a low normal value. These findings suggest that mitral stenosis is also present, making this case an example of Lutembacher's syndrome.

Pulmonary Hæmangioma

Case 18. This case was diagnosed clinically. It was thought that catheterization had diagnosed an angioma of the liver, for it was found that the oxygen content of the inferior vena caval blood was the same as that of the arterial blood. In cases of cyanotic heart disease, however, it is not very unusual to find that the oxygen content of inferior vena caval blood is nearly that of the arterial blood, but it is unusual to find them the same. Since he was known to have arteriovenous fistulæ in lips and buttocks it was thought that the inferior vena caval specimen derived from the effluent of an angioma of the liver. The cardiac output was greatly increased and it can be calculated that about 75 per cent of the right ventricular output passed through the angioma rather than through the alveolar capillaries. The diagnosis was confirmed post mortem, but the diagnosis of the hepatic angioma proved to be incorrect, though dilated sinuses suggested that a large proportion of the increased systemic circulation was passing through the liver. This case is fully described by Baker and Trounce (1949).

REFERENCES

Allanby, K. D., and Campbell, M. (1949). *Guy's Hosp. Rep.*, **98**, 18.
Baker, C., Brock, R. C., Campbell, M., and Suzman, S. (1949). *Brit. Heart J.*, **11**, 170.
——, Brinton, W. D., and Channell, J. (1950). *Guy's Hosp. Rep.* (In the press.)
——, and Trounce, J. R. (1949). *Brit. Heart. J.*, **11**, 109.
Baldwin, E. de F., Moore, L. V., and Noble, R. P. (1946). *Amer. Heart J.*, **32**, 152.
Bedford, D. E., Papp, C., and Parkinson, J. (1941). *Brit. Heart J.*, **3**, 37.
Bing, R. J., Hammond, M. M., Handelsman, J. C., Powers, S. R., Spencer, F. C., Eckenhoff, J. E., Goodale, W. T., Hafkenschiel, J. H., and Kety, S. S. (1949). *Amer. Heart J.*, **38**, 1.
——, Vandam, L. D., and Gray, F. D., Jr.(1947). *Bull. Johns Hopkins Hosp.* (*a*) **80**, 107, 121, and 323; (*b*) **81**, 192.
Blalock, A., and Taussig, H. B. (1945). *J. Amer. med. Assoc.*, **79**, 1028.
Bloomfield, R., Lawson, H., Cournand, A., Breed, E., and Richards, D., Jr. (1946). *J. clin. Invest.*, **25**, 639.
Boothby, W. M., and Sandiford, I. (1929). *Proc. 13th Internat. Physiol. Congress*, p. 32.
Brannon, E. S., Weens, H. S., and Warren, J. V. (1945). *Amer. J. med. Sci.*, **210**, 480.
Brock, R. C. (1948). *Brit. med. J.*, **1**, 1121.
Brody, H. (1942). *Arch. Path.*, **33**, 221.
Burchell, H. B., Parker, R. L., Dry, T. J., Wood, E. H., Pender, J. W., and Pugh, D. G. (1948). *Proc. Staff Mayo Clinic*, **23**, 481.
——, Taylor, B. E., Pollack, A. A., Du Shane, J. W., and Wood, E. H. (1948). *Ibid.*, **23**, 507.
Campbell, M. (1948). *Guy's Hosp. Rep.*, **97**, 1.
——, and Hills, T. H. (1950). *Brit. Heart J.*, **12**, 65.
Cournand, A. (1945). *Fed. Proc.*, **4**, 207.
——, Baldwin, J. S., Himmelstein, A. (1949). *Cardiac Catheterization in Congenital Heart Disease*, New York: Commonwealth Fund, p. 108.

Cournand, A., Motley, H. L., Himmelstein, A., Dresdale, D., and Baldwin, J. (1947). *Amer. J. Physiol.*, **150**, 267.
Dexter, L. (1947). *Radiology*, **48**, 451.
——, Haynes, F. W., Burwell, C. S., Eppinger, E. C., Seibel, R. E., and Evans, J. M. (1947). *J. clin. Invest.*, **26**, 547.
——, ——, ——, ——, Sagerson, R. P., and Evans, J. M. (1947). *Ibid.*, **26**, 554.
——, ——, ——, ——, Sosman, M. C., and Evans, J. M. (1947). *Ibid.*, **26**, 561.
Douglas, C. G., and Priestley, J. G. (1948). *Human Physiology*, Oxford: Clarendon Press.
Geiger, A. J., Anderson, H. C., Winkler, A. W., and Kaplan, H. S. (1946). *Conn. State med. J.*, **10**, 895.
Geraci, J. E., Dry. T. J., Burchell, H. B. (1948). *Proc. Staff Mayo Clinic*, **23**, 510.
Goodale, W. T., Lubin, M., Eckenhoff, J. E., Hafkenschiel, J. H., Curlacher, S. H., Landing, B. H., and Banfield, W. G. (1947). *Proc. Exper. Biol. and Med.*, **66**, 571.
Groom, D., Wood, E. H., Burchell, H. B., and Parker, R. L. (1948). *Proc. Staff Mayo Clinic*, **23**, 601.
Hamilton, E. (1934). *Amer. J. Physiol.*, **107**, 427.
Handelsman, J. C., Bing, R. J., Campbell, J. A., and Griswold, H. E. (1948). *Bull. Johns Hopkins Hosp.*, **82**, 615.
Hickham, J. B., Cargill, W. H., and Golden, A. (1948). *J. clin. Invest.*, **27**, 290.
Hills, T. H. (1948). *Brit. J. Radiol.*, **21**, 511.
——, and Stanford, R. W. (1950). *Brit. Heart J.*, **12**, 45.
Howarth, S., McMichael, J., and Sharpey-Schafer, E. P. (1947). *Brit. Heart J.*, **9**, 292.
Johnson, A. L., Wollin, D. G., and Ross, J. B. (1947). *Canad. med. Assoc. J.*, **56**, 549.
Kinney, T. D., Haynes, F. W., and Dexter, L. (1945). *J. Lab. Clin. Med.*, **30**, 1013.
Lutembacher, R. (1916). *Arch. Mal. Cœur*, **9**, 237.
Perry, E. L., Burchell, H. B., and Edwards, J. E. (1949). *Proc. Staff Mayo Clinic*, **24**, 198.
Pollack, A. A., Taylor, B. E., Odel, H. M., and Burchell, H. B. (1948). *Ibid.*, **23**, 516.
Potts, W. J., and Gibson, S. (1948). *J. Amer. med. Assoc.*, **127**, 343.
Soulie, P., Servelle, M., and Schweisguth, O. (1949). *Arch. Mal. Cœur*, **42**, 1.
Taussig, H. B. (1947). *Congenital Malformations of the Heart*, New York: Commonwealth Fund, p. 618.
——, (1948). *Amer. Heart J.*, **36**, 321.
Taylor, B. E., Geraci, J. E., Pollack, A. A., Burchell, H. B., and Wood, E. H. (1948). *Proc. Staff Mayo Clinic*, **23**, 500.
Warren, J. V., Stead, E. A., Jr., and Brannon, E. S. (1946). *Amer. J. Physiol.*, **145**, 458.
Wassermann, L. R., Dobson, R. L., and Lawrence, J. H. (1949). *J. clin. Invest.*, **28**, 60.
Wood, E. H., Geraci, J. E., and Groom, D. L. (1948). *Fed. Proc.*, **7**, 137.

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Cardiac Catheterization in the Early Post-Operative Period After Congenital Cardiac Surgery

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ABSTRACT

OBJECTIVES This study sought to demonstrate that early cardiac catheterization, whether used solely as a diagnostic modality or for the use of transcatheter interventional techniques, can be used effectively and with an acceptable risk in the post-operative period.

BACKGROUND Cardiac catheterization offers important treatment for patients with congenital heart disease. Early post-operative cardiac catheterization is often necessary to diagnose and treat residual anatomic defects. Experience with interventional catheterization to address post-operative concerns is limited.

METHODS This was a retrospective cohort study. The medical and catheterization data of pediatric patients who underwent a cardiac catheterization ≤30 days after congenital heart surgery between November 2004 and July 2013 were reviewed. Patients who underwent right heart catheterization and endomyocardial biopsy after heart transplantation were excluded.

RESULTS A total of 219 catheterizations (91 interventional procedures, 128 noninterventional catheterizations) were performed on 193 patients. Sixty-five interventions (71.43%) were dilations, either balloon angioplasty or stent implantation. There was no difference in survival to hospital discharge between those who underwent an interventional versus noninterventional catheterization ($p = 0.93$). One-year post-operative survival was comparable between those who underwent an intervention (66%) versus diagnostic (71%) catheterization ($p = 0.58$). There was no difference in the incidence of major or minor complications between the interventional and diagnostic catheterization cohorts ($p = 0.21$).

CONCLUSIONS Cardiac catheterization, including transcatheter interventions, can be performed safely in the immediate post-operative period after congenital heart surgery. (J Am Coll Cardiol Intv 2014;7:1437–43)
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Cardiac catheterization is often uniquely valuable in the evaluation and treatment of patients with congenital heart disease. Although the safety of catheterization in the non-acute setting has been described (1-4), early post-operative cardiac catheterization (EPOCC) is often regarded as high risk, particularly when patients are unstable or when interventions are anticipated. There is significant institutional variability with regard to access and timely referral for EPOCC. There is limited reported experience with cardiac catheterization in the early post-operative period (5-7).

At our institution, patients are often referred for cardiac catheterization in the early post-operative period to determine the significance of a residual cardiac lesion noted by noninvasive means (e.g.,

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ABBREVIATIONS AND ACRONYMS

ECMO = extracorporeal membrane oxygenation

EPOCC = early post-operative cardiac catheterization

IQR = interquartile range

echocardiography) or to assess physiology and/or anatomy in the struggling post-operative patient. We reviewed our institutional experience with perioperative cardiac catheterization in this patient group. The purpose of this study is to describe the safety and overall outcomes of cardiac catheterization procedures performed within 30 days after congenital heart surgery. We hypothesized that early cardiac catheterization, whether used solely as a diagnostic modality or as a percutaneous intervention, can be used effectively and with an acceptable risk in the post-operative period.

METHODS

STUDY PATIENTS. This is a single-center, retrospective cohort study. Medical and catheterization data of all pediatric patients who underwent a cardiac catheterization ≤30 days after congenital heart surgery at Children's Healthcare of Atlanta between November 2004 and July 2013 were reviewed. Patients were included if they underwent either a diagnostic or interventional cardiac catheterization ≤30 days after surgical repair/palliation for congenital heart disease. Patients who underwent right heart catheterization and endomyocardial biopsy as routine surveillance after orthotopic heart transplantation were excluded. This study was approved by the institutional review board.

TABLE 1 Patient Characteristics

	Total (N = 193)	Interventional (n = 65)	Diagnostic (n = 128)	p Value
Patient characteristics				
Age, yrs	0.32 (0.01–18.48)	0.31 (0.01–17.14)	0.35 (0.01–18.48)	0.49
Weight, kg	5.20 (3.40–8.50)	4.90 (2.30–51.31)	5.50 (2.20–98.50)	0.45
Time from surgery, days	6 (0–30)	8 (0–29)	5 (1–30)	0.01
Mechanical ventilator support	131	47	84	0.35
Inotropic support	129	39	90	0.16
ECMO	22	8	14	0.77
Genetic syndrome	45	11	34	0.14
Primary diagnosis				
Single ventricle	96 (50)	45 (69)	51 (40)	<0.01
Conotruncal anomalies (TOF, DORV, TA, PA-VSD, TGA)	55 (28)	15 (23)	40 (31)	0.24
AVSD	10 (5)	1 (2)	9 (7)	0.11
Other	31 (16)	3 (5)	28 (22)	<0.01

Values are median (range), n, or n (%).

AVSD = atrioventricular septal defect; DORV = double-outlet right ventricle; ECMO = extracorporeal membrane oxygenation; PA-VSD = pulmonary atresia–ventricular septal defect; TA = truncus arteriosus; TGA = transposition of the great arteries; TOF = tetralogy of Fallot.

CATHETERIZATION PROCEDURE. Demographic data collected included weight at catheterization (in kilograms), age at catheterization (years), and primary cardiac diagnosis. We also reported the initial surgical procedure performed, the interval from surgery to EPOCC (days), the indication(s) for EPOCC (cyanosis, low cardiac output, or other), the diagnosis of a genetic syndrome, the need for mechanical ventilation before EPOCC, the need for inotropic support, extracorporeal membrane oxygenation (ECMO) use at time of catheterization, in-hospital mortality, and 1-year survival post-surgery. Catheterization data collected included the procedure performed, the intervention involving a surgical anastomotic site, procedural mortality, the need for blood transfusion during the catheterization, and procedural complications (minor/major). Major complications included death, stroke, cardiopulmonary arrest, and the need for unplanned emergent surgery/procedure/ECMO support as a result of complication.

STATISTICAL ANALYSIS. Continuous variables were reported as median and interquartile range (IQR). The data were initially analyzed with a univariate followed by a multivariate regression analysis when applicable. The primary outcome measure was procedural complication. Covariates and factors were assessed using either a Wilcoxon rank sum test or a chi-square test, when applicable. Secondary endpoints included hospital discharge survival and 1-year survival. Kaplan-Meier log-rank univariate analysis was performed for time-dependent outcomes, and multivariable analysis was performed using Cox regression with SPSS Version 21.0 software (IBM, Armonk, New York).

RESULTS

During the study period, there were a total of 7,755 surgical cases at our institution. A total of 219 early post-operative catheterizations (91 interventional procedures, 128 noninterventional catheterizations) were performed on 193 of these patients. At the time of EPOCC, the median age was 0.32 years (IQR: 0.05 to 0.95 years), the median weight was 5.2 kg (IQR: 3.4 to 8.5 kg), and the median interval from surgery was 6 days (IQR: 3 to 12 days). A total of 132 patients were on mechanical ventilatory support, and 129 patients were receiving inotropic support. Twenty-two patients were on ECMO at the time of catheterization, whereas 45 patients were known to have a genetic disorder. Patient characteristics and indications for cardiac catheterization are summarized in Tables 1 and 2.

TABLE 2 Indications for Catheterization (N = 193)

	Interventional	Diagnostic	p Value
Cyanosis	28	26	<0.01
Low cardiac output	4	31	<0.01
Concern for residual defect	20	42	0.78
Effusion	2	6	0.64
Unable to wean ventilator support	5	9	0.85
Unable to wean CPB	3	9	0.54
Other	3	5	0.80

Values are n.
CPB = cardiopulmonary bypass.

A total of 65 patients underwent 91 interventional procedures, and 128 patients underwent diagnostic catheterization. In patients in whom an intervention was performed, catheterization occurred at a median of 8 days post-operatively compared with a median of 5 days post-operatively for patients who underwent a diagnostic evaluation ($p = 0.01$). Otherwise, the interventional and diagnostic EPOCC groups were similar (Table 1).

In total, 91 interventions were performed in 65 patients (Table 3). Sixty-five interventions (71.43%) were dilations, either balloon angioplasty or stent implantation. The interventional EPOCC group was more likely to have single-ventricle heart disease ($p < 0.01$) and to present for EPOCC due to cyanosis, whereas the indication of low cardiac output was associated with diagnostic catheterization ($p < 0.01$) (Table 2). There were 65 stent/angioplasty procedures and 14 occlusion procedures (Figures 1 to 3). Details of the range of interventions are presented in Table 3. A total of 45 (49.5%) of the interventional procedures were interventions at a fresh anastomotic site.

A total of 18 complications occurred among the entire EPOCC cohort; there were 7 major and 11 minor complications (Table 4). There was no difference in the incidence of major or minor complications between the interventional and diagnostic catheterization cohorts ($p = 0.21$).

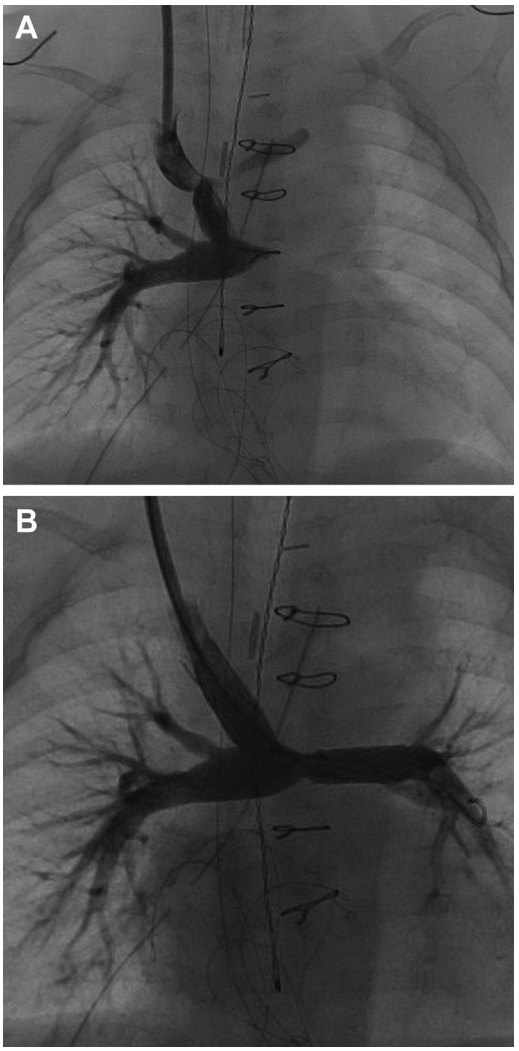

FIGURE 1 Left Pulmonary Artery Stenosis

(A) Hours after completion of a superior cavopulmonary connection, this patient was found to have complete left pulmonary artery occlusion and superior vena caval stenosis. **(B)** After recanalization and stenting of the left pulmonary artery and stenting of the superior vena cava, the patient improved rapidly.

TABLE 3 Interventional Procedure Types (N = 91)

	Location	n
Stent implantation, n = 28	Pulmonary artery	15
	Systemic vein	3
	BTS/RV-PA conduit	6
	Carotid/innominate artery	3
	Fontan circuit	1
Balloon angioplasty, n = 37	Pulmonary artery	13
	Aorta	6
	Systemic vein	15
	BTS	3
Occlusion, n = 14	AP collateral	7
	VV collateral	7
Other, n = 12	Thrombectomy	9
	Atrial septostomy	3

AP = aortopulmonary; BTS = Blalock-Taussig shunt; RV-PA = right ventricle pulmonary artery; VV = venovenous.

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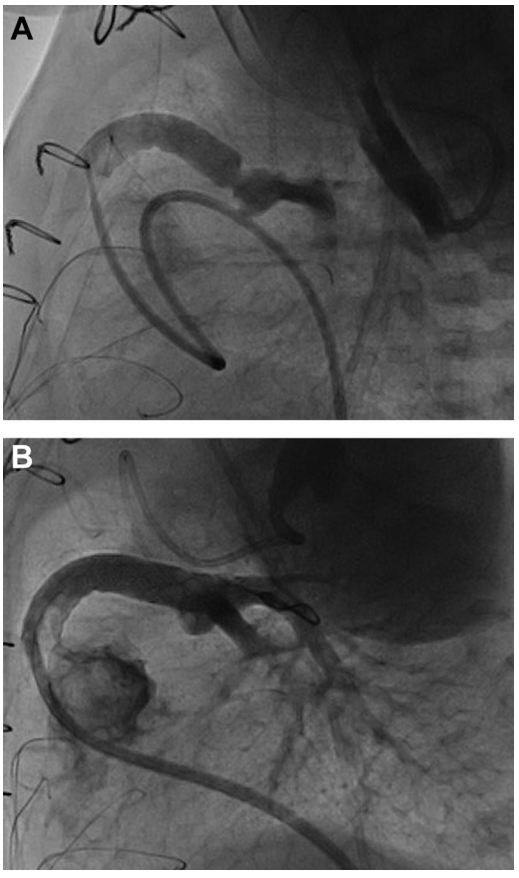

FIGURE 2 Distal Shunt Stenosis

Lateral projection demonstrating discrete distal right ventricle-to-pulmonary artery shunt stenosis before **(A)** and after **(B)** stent placement.

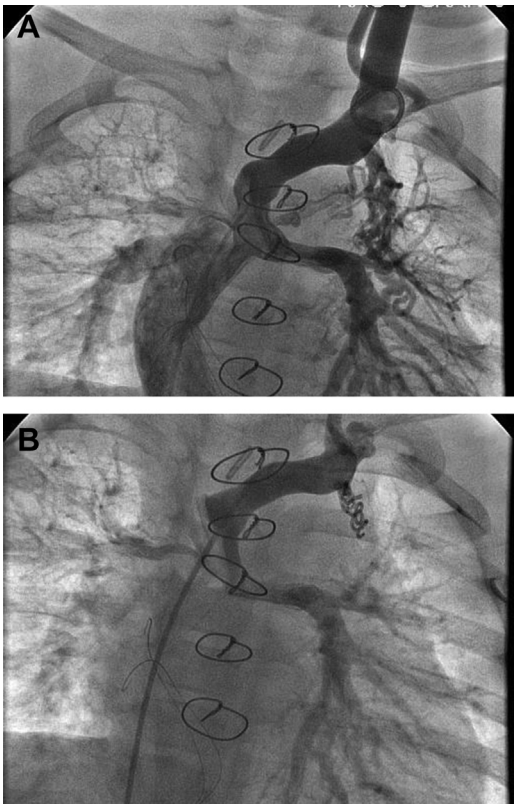

FIGURE 3 Venovenous Collateral

Anteroposterior projection demonstrating a venovenous collateral from the innominate vein to the left upper pulmonary vein before **(A)** and after **(B)** coil occlusion.

There were 7 major complications: 3 during interventional EPOCC and 4 in diagnostic EPOCC. One patient had pulmonary artery avulsion after angioplasty with a balloon-to-vessel diameter ratio of 6:1, and 1 patient had arterial dissection requiring ECMO rescue. Diagnostic EPOCC in 3 patients was associated with cardiac arrest; 1 of these patients then required ECMO. No single risk factor was associated with EPOCC-associated complications.

EPOCC was followed by return to the operating room to address important residual lesions in 43% of patients. In the interventional EPOCC group, 32 patients (49%) returned to the operating room within 10 days of the catheterization; in 17 patients, findings during catheterization prompted reoperation. In the diagnostic EPOCC group, 51 patients (40%) were brought back to the operating room within 10 days of catheterization. Of these, 33 reoperations can be attributed to findings during catheterization (Table 5).

Although procedural mortality was very low, survival to discharge and 1-year survival were disappointing in the entire EPOCC group. There was no difference in survival to hospital discharge between the interventional and diagnostic EPOCC groups ($p = 0.93$). In addition, 1-year post-operative survival was comparable in those who underwent an intervention (66%) versus diagnostic (71%) catheterization ($p = 0.58$) (Figure 4A). Not surprisingly, single-ventricle heart disease patients had a lower 1-year survival (Figure 4B).

For the entire cohort, multivariate regression analysis demonstrated that younger age at the time of surgery ($p = 0.05$), ECMO support at the time of EPOCC ($p = <0.01$), and single-ventricle heart disease ($p = 0.02$) were associated with a higher 1-year mortality rate.

DISCUSSION

After surgical repair of congenital heart disease, most patients follow a predictable post-operative course toward recovery. Many patients, unfortunately, do not follow the typical, expected course. Residual unaddressed cardiac lesions, post-surgical anatomic stenosis, and myocardial injury from prolonged cardiopulmonary bypass may account for the delay in recovery after cardiac surgery (8). In these situations, an early post-operative cardiac catheterization can delineate the physiology and the anatomy, prompting effective therapy that might otherwise have been delayed. Our findings justify this approach because a substantial number of patients underwent reoperation on the basis of findings during cardiac catheterization. Of course, the decision to take unstable patients to the catheterization laboratory involves weighing the potential risks and benefits of an invasive procedure. These infants and children pose challenges in transport to the catheterization laboratory, in ventilator and hemodynamic management during the procedure, as well as in performance of an often technically demanding procedure. As others have noted, dedicated anesthesia, surgical, and interventional teams are required to undertake such challenging procedures (7,9,10).

There are limited data on the safety and utility of cardiac catheterization in the immediate post-operative period after surgical repair of congenital heart disease (5–7,11). The most comprehensive review to date was published by Zahn et al. (7) in 2004. In that study, children catheterized within 6 weeks of cardiac surgery were reviewed. The authors noted that in the 26 patients (42% of the cohort) who underwent interventions across suture lines, no vascular disruptions were noted. Rosales et al. (6) reported their experience with angioplasty and stenting in the early post-operative period. The authors reported that angioplasty was inherently riskier than stenting; in particular, balloon diameter-to-stenosis ratios >2.5:1 were associated with vascular disruptions and major complications including death. Interestingly, the single death in our cohort was encountered after balloon angioplasty of a severely hypoplastic left pulmonary artery; the balloon-to-stenosis ratio in this patient was 6:1.

Our report is on the largest cohort of early post-operative catheterizations in children undergoing cardiac surgery. Our study involved patients who are younger and underwent catheterization closer to surgery than previously published data (5–7,11); this likely represents the trend over the past decade to undertake increasingly complex surgical repairs in increasingly smaller and more fragile patients. Our entire population underwent catheterization within 4 weeks after surgery, with two-thirds undergoing catheterization within 12 days of surgery, at a median age of 3.8 months.

Periprocedural complications are more commonly encountered in hemodynamically unstable patients (12). There is a commonly accepted notion that one should wait ~6 weeks after surgery before performing an intervention (10). Yet there are no published data indicating unusual suture fragility in the early post-operative period. Zahn et al. (7) astutely note an

TABLE 4 Catheterization Outcomes

	Rates of Events During Catheterization		
	Interventional Procedures (n = 91)	Diagnostic Procedures (n = 128)	p Value
Blood transfusion	22 (24)	22 (17)	0.01
Intervention involving surgical anastomotic site	45 (48)	–	–
In-hospital death	14/65 (22)	27/128 (21)	0.93
1-yr survival rate, %	66	71	0.58
Cath lab complications			
Procedural death	1	0	–
ECMO cannulation in the cath lab	1	1	0.67
Cardiopulmonary resuscitation	0	2	–
Cardiac rhythm disturbance*	1	8	0.16
Device/stent migration, retrieved percutaneously	2	0	–
Vascular tear†‡	2	0	–
Entrapment of venous catheter in ECMO cannula	0	1	–

Values are n (%), n, or n/N (%). *Spontaneous resolution or required direct current cardioversion or rapid atrial pacing to convert to normal sinus rhythm. †Umbilical artery, left pulmonary artery. ‡The vascular tear of the left pulmonary artery was the only procedural mortality.
ECMO = extracorporeal membrane oxygenation.

TABLE 5 Reoperation Characteristics

Reoperation	Total	Interventional	Diagnostic
Branch pulmonary arterioplasty	11	6	5
Systemic venoplasty	1	0	1
Open thrombectomy	3	2	1
Residual VSD closure	2	1	1
SCPC takedown, BTS placement	7	2	5
Fontan revision	2	1	1
Semilunar/atrioventricular valve repair/replacement	3	1	2
Systemic-to-PA shunt revision	9	3	6
Unifocalization of AP collaterals	3	1	2
Pulmonary vein repair	3	0	3
Coronary artery revision	4	0	4
Coarctation of the aorta repair	1	0	1
Atrial septectomy	1	0	1

Values are n.
AP = aortopulmonary; SCPC = superior cavopulmonary connection; VSD = ventricular septal defect; other abbreviations as in Tables 1 and 3.

inherent distinction between the placement of a single running suture line and a series of interrupted sutures. Indeed, at our center, vascular anastomoses are typically performed with running Prolene suture, which appears to accommodate larger balloon-to-vessel ratios. Our study provides further validation of the utility, feasibility, and safety of transcutaneous intervention and diagnostic evaluation in this high-risk patient population.

It is inherently challenging to demonstrate the benefit and utility of a hemodynamic/noninterventional cardiac catheterization in the early post-operative period. There is no reasonable control group with whom to compare the cohort who presented to the laboratory. However, we demonstrate acceptable safety in these cases. Given the cohort's intrinsic vulnerability, this safety is indeed notable.

Theoretically, performing an interventional procedure in the immediate post-operative period should be higher risk than performing a diagnostic catheterization in the same time period; however, we have shown similar survival rates among the 2 groups. In our patient cohort, overall prognosis was disappointing because 21% died in-hospital and 31% died within 1 year of surgery. There was no difference in survival whether the patient underwent a diagnostic or interventional catheterization. The high 1-year mortality rate likely reflects the generally poor prognosis that the patient faces who is so unwell as to need an early post-operative cardiac catheterization.

STUDY LIMITATIONS. This was a retrospective cohort study with the usual biases of such investigations. The timing of catheterization was not standardized; rather, it depended on the differing management strategies of both the cardiothoracic surgeon and cardiac intensivist. In addition, time to extubation and discontinuation of vasoactive infusions were not included in the analysis due to an inherent lack of control over differing management strategies.

CONCLUSIONS

Cardiac catheterization, including transcatheter intervention across newly created suture lines, can be performed with an acceptable risk and detects clinically significant residual defects in the immediate post-operative period after congenital heart surgery. Caution must be used whenever balloon dilation at suture lines is anticipated.

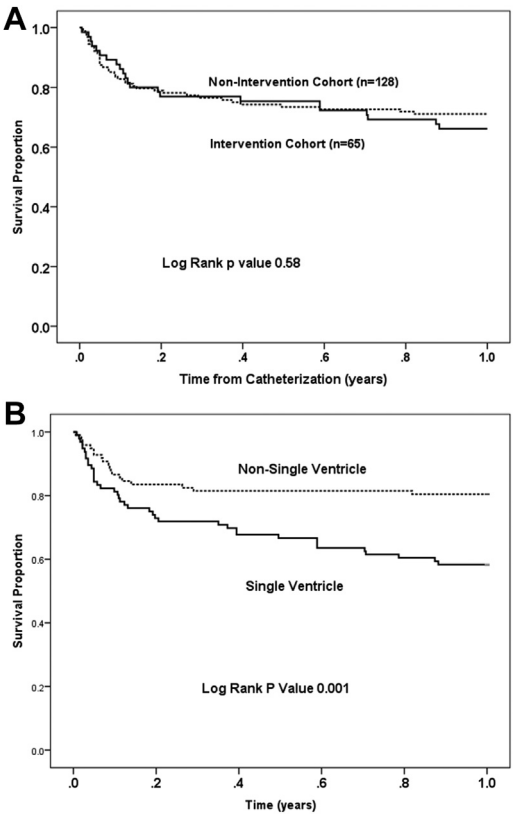

FIGURE 4 One-Year Survival

(A) Kaplan-Meier survival curves demonstrating no survival difference between those who underwent an intervention and those who underwent a diagnostic catheterization. **(B)** Patients with single-ventricle heart disease had a poor 1-year survival rate.

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REFERENCES

1. Vitiello R, McCrindle BW, Nykanen D, Freedom RM, Benson LN. Complications associated with pediatric cardiac catheterization. J Am Coll Cardiol 1998;32:1433–40.

2. Baerlocher L, Kretschmar O, Harpes P, Arbenz U, Berger F, Knirsch W. Stent implantation and balloon angioplasty for treatment of branch pulmonary artery stenosis in children. Clin Res Cardiol 2008;97:310–7.

3. Kan JS, Marvin WJ Jr., Bass JL, Muster AJ, Murphy J. Balloon angioplasty-branch pulmonary artery stenosis: results from the Valvuloplasty and Angioplasty of Congenital Anomalies Registry. Am J Cardiol 1990;65:798–801.

4. Sutton NJ, Greenberg MA, Menegus MA, Lui G, Pass RH. Caring for the adult with congenital heart disease in an adult catheterization laboratory by pediatric interventionalists-safety and efficacy. Congenit Heart Dis 2013;8:111–6.

5. Asoh K, Hickey E, Dorostkar PC, et al. Outcomes of emergent cardiac catheterization following

pediatric cardiac surgery. Catheter Cardiovasc Interv 2009;73:933–40.

6. Rosales AM, Lock JE, Perry SB, Geggel RL. Interventional catheterization management of perioperative peripheral pulmonary stenosis: balloon angioplasty or endovascular stenting. Catheter Cardiovasc Interv 2002;56:272–7.

7. Zahn EM, Dobrolet NC, Nykanen DG, Ojito J, Hannan RL, Burke RP. Interventional catheterization performed in the early postoperative period after congenital heart surgery in children. J Am Coll Cardiol 2004;43:1264–9.

8. Pagowska-Klimek I, Pychynska-Pokorska M, Krajewski W, Moll JJ. Predictors of long intensive care unit stay following cardiac surgery in children. Eur J Cardiothorac Surg 2011;40:179–84.

9. Booth KL, Roth SJ, Perry SB, del Nido PJ, Wessel DL, Laussen PC. Cardiac catheterization of patients supported by extracorporeal membrane oxygenation. J Am Coll Cardiol 2002;40:1681–6.

10. Nykanen DG, Zahn EM. Transcatheter techniques in the management of perioperative vascular obstruction. Catheter Cardiovasc Interv 2005;66:573–9.

11. Bhole V, Wright JG, De Giovanni JV, et al. Transcatheter interventions in the early post-operative period after the Fontan procedure. Catheter Cardiovasc Interv 2011;77:92–8.

12. Backes CH, Cua C, Kreutzer J, et al. Low weight as an independent risk factor for adverse events during cardiac catheterization of infants. Catheter Cardiovasc Interv 2013;82:786–94.

KEY WORDS **cardiac catheterization, congenital cardiac surgery, congenital heart disease**

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What is the Clinical Utility of Routine Cardiac Catheterization Before a Fontan Operation?

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Abstract

Patients with single-ventricle circulation presenting for Fontan completion routinely undergo cardiac catheterization despite ongoing debate concerning its additive value. Increasing interest in noninvasive preoperative evaluation alone led the authors to analyze the utility of routine pre-Fontan catheterization and to determine whether a subset of patients could avoid this invasive procedure. Patients younger than 5 years referred for pre-Fontan evaluation were retrospectively reviewed. Medical records and catheter angiograms were examined, and catheterizations were categorized as "additive" based on predetermined criteria. Associations between precatheterization variables, catheterization findings, and short-term postoperative outcomes were evaluated. Cardiac catheterization was clinically nonadditive for 89 of 175 patients undergoing pre-Fontan evaluation (51%). There were no robust precatheterization predictors of a nonadditive catheterization. Echocardiography did not fully demonstrate the relevant anatomy of 115 patients (66%), most frequently due to inadequate visualization of the pulmonary arteries, and 22 patients had additive catheterizations due to new diagnostic findings alone. Interventions at catheterization were frequent and deemed "important" for 64 patients (37%). Catheterization hemodynamic data were not associated with early postoperative outcomes. Minor catheterization complications occurred for 51 patients (29%) and major complications for 4 patients (2%). Although at least 50% of the patients presenting for Fontan completion may be able to avoid routine catheterization safely, an echocardiography-based imaging strategy alone is insufficient to allow proper identification of those who could be evaluated noninvasively. A more comprehensive imaging strategy not based solely on echocardiography should be considered.

Keywords

Cardiac catheterization; CHD; Echocardiography; Fontan; Imaging; Univentricular heart

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Patients with a functionally univentricular heart typically undergo a series of palliative operations that culminate in a modified Fontan procedure. Before Fontan, echocardiography and cardiac catheterization are routinely performed to assess anatomic and hemodynamic suitability for Fontan completion. This is standard practice at many centers [8]. However, catheterization may be associated with morbidity for high-risk patients [2, 4, 5, 28, 30], and there is mounting evidence that ionizing radiation exposure in childhood is associated with an increased risk of cancer [19].

Published information is limited regarding the utility of pre-Fontan catheterization compared with noninvasive imaging for high-risk patients, and in the current era, few patients are excluded from Fontan completion based on catheterization data [8, 23]. As a result, there has been recent interest in reexamining the role of routine pre-Fontan catheterization in an attempt to identify a group that could safely avoid this procedure [24, 25].

We conducted a retrospective review of patients undergoing pre-Fontan evaluation at our institution to analyze the role of routine preoperative catheterization, including the utility of hemodynamic data as well as the frequency and nature of new diagnostic findings and catheter-based interventions. We also sought to identify precatheterization predictors of a nonadditive catheterization that could be used to identify patients for whom catheterization would provide no additional benefit beyond clinical evaluation and noninvasive imaging alone.

Methods

Subjects

After obtaining approval from the Department of Cardiology Scientific Review Committee and the Children's Hospital Committee on Clinical Investigations, we reviewed the medical records of patients younger than 5 years undergoing catheterization at our institution from January 2001 through December 2005. Patients listed as undergoing pre-Fontan evaluation and those who may have been Fontan candidates based on anatomy and prior procedures were included in the review.

To minimize bias related to institutional practice variability, only patients undergoing both pre-Fontan echocardiography and catheterization at our institution were included. Patients whose echocardiogram preceded catheterization by more than 6 months were excluded. Demographic, anatomic, and prior surgical data were obtained from the medical record.

Echocardiography

Data from the pre-Fontan echocardiogram were abstracted from the final report. For patients with multiple echocardiograms, the study in closest temporal proximity to the pre-Fontan catheterization was selected. Echocardiograms were considered complete if they visualized all the following: superior vena cava in patients with a Glenn circulation, pulmonary veins, atrial septum, atrioventricular valves, pulmonary outflow in patients with antegrade pulmonary blood flow, mediastinal pulmonary arteries, systemic outflow, ascending aorta and aortic isthmus in patients at risk for arch obstruction (e.g., prior Norwood procedure or left-sided obstructive lesions), and ventricular function.

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Catheterization

Hemodynamic and interventional data from the pre-Fontan catheterization were recorded. Due to practice variability in the catheterization laboratory and the discretionary nature of many transcatheter interventions, we convened a panel of experts not initially involved in the study (a senior interventional catheterizer, a cardiac surgeon, and a noninvasive cardiologist within our department) to develop definitions of a clinically “important” intervention during pre-Fontan catheterization (Table 1).

Using these criteria, all available angiograms and hemodynamic data were reviewed by a single cardiologist, and each intervention was categorized as “important” or “discretionary.” Any catheterization that showed new diagnostic information affecting perioperative management or during which an “important” intervention was performed was considered clinically additive. For example, a catheterization that showed pulmonary artery stenosis not seen by echocardiography in a patient who subsequently went on to have pulmonary artery plasty at surgery was considered clinically additive. Similarly, catheterizations that included a pulmonary artery balloon angioplasty meeting the definition of an “important” intervention (Table 1) were considered additive.

Statistical Analysis

Continuous data are presented as mean ± standard deviation or as median and range. Patient characteristics and echocardiographic information were compared for additive versus nonadditive catheterizations, new diagnostic findings, and “important” transcatheter interventions using the Wilcoxon rank sum test for continuous variables and Fisher’s exact test for categorical variables. Variables significant at the 0.20 level in univariate analysis were considered for inclusion in multivariable logistic regression models. Variables significant at the 0.05 level were retained in the final models. Odds ratios (OR) and 95% confidence intervals (CI) were calculated. The Spearman rank correlation coefficient was used to examine relationships between short-term post-Fontan outcomes and catheterization hemodynamic variables.

Results

Subjects

Of the 175 patients who met the inclusion criteria, 105 (60%) were male. Six patients were excluded from the review: five because the interval between echocardiography and catheterization exceeded 6 months and one due to missing hemodynamic records. The median age at catheterization was 30 months (range, 4–49 months). The mean weight was 12 ± 2.3 kg, and the mean height were and 87 ± 8 cm. The mean hemoglobin level was 16.3 ± 1.5 gm/dl, and the mean systemic oxygen saturation was 84 ± 5%. The most common diagnosis was hypoplastic left heart syndrome (n = 69, 39%). Other common diagnoses included tricuspid atresia (n = 28), double-outlet right ventricle (n = 18), and unbalanced atrioventricular canal defect (n = 17). Heterotaxy syndrome was present in 24 patients (14%).

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Most patients had undergone a prior bidirectional Glenn operation (*n* = 159, 91%), 22 (13%) of which were bilateral. Three patients (2%) had undergone a Kawashima operation, and 6 (3%) had a pulmonary artery band alone.

Echocardiography

The echocardiographic findings are summarized in Table 2. Two-thirds of echocardiograms were performed with the patient under sedation, but only 34% were considered complete. The most common reason for an incomplete echocardiogram was inadequate visualization of the Glenn pathway and pulmonary arteries (57%). The median time from echocardiogram to catheterization was 1 day (range, 0–157 days).

Catheterization

The catheterization results are summarized in Table 3. The results showed that 12 patients (7%) had pulmonary arterial pathway obstruction, 5 patients (3%) had arch obstruction that required intervention, and 4 patients (2%) had pulmonary vein stenosis. The mean fluoroscopy time was 61 ± 38 min. New diagnostic findings resulted from 48 procedures (27%). Interventions were performed for 112 patients (64%) and determined to be "important" for 64 patients (37%) (Table 4). Thus, 86 patients in the entire cohort (49%) had clinically additive catheterizations: 38 based on important interventions alone, 22 based on new findings alone, and 26 based on both.

Complications of Cardiac Catheterization

As summarized in Table 5, 4 patients (2%) had major catheterization complications, and 51 patients (29%) had minor complications. One cardiac arrest occurred for a patient with hypoplastic left heart syndrome undergoing catheterization for progressive tricuspid regurgitation and new-onset complete heart block. Early in the procedure, before any interventions, the patient experienced worsening hypoxemia, bradycardia, and subsequent cardiac arrest, which was treated with cardiopulmonary resuscitation and mechanical circulatory support. On day 2 after catheterization, the patient underwent tricuspid valvuloplasty and pacemaker placement but remained in critical condition and died on postoperative day 13.

Exclusion from Fontan Completion or Its Delay

All but 13 patients (7%) underwent Fontan completion as planned. Of these 13, two were excluded from Fontan because of newly diagnosed pulmonary vein stenosis. One patient had Fontan surgery postponed because of an unexplained elevated ventricular end-diastolic pressure (17 mmHg). One patient had prominent systemic-to-pulmonary arterial collateral flow with elevated pulmonary artery pressure (20 mmHg) and therefore underwent coil embolization of multiple collateral arteries with a plan to reassess with catheterization in the future. Two patients underwent tricuspid valvuloplasty without Fontan completion. One of these patients was found at catheterization to have left pulmonary artery occlusion and underwent placement of an aorta-to-left pulmonary artery shunt only. Four patients underwent conversion to a biventricular circulation and therefore did not complete a Fontan procedure. The remaining two patients were favorable Fontan candidates, but the first

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patient was lost to follow-up evaluation, and the second patient with good hemodynamics and lack of symptoms had Fontan surgery postponed.

Predictors of Nonadditive Catheterization

Preoperative demographics and clinical characteristics were not predictive of an additive or nonadditive catheterization. In both uni- and multivariate analysis, the only precatheterization predictor of a nonadditive catheterization was the presence of a restrictive atrial septal defect on echocardiography (OR, 2.6; 95% CI, 1.2–5.9; $p = 0.02$). Furthermore, the only significant predictor of new findings at catheterization was incomplete echocardiographic visualization of the pulmonary pathway (OR, 2.2; 95% CI, 1.0–5.0; $p = 0.03$), and the most common new finding at catheterization was pulmonary artery stenosis (30 patients). Univariate analysis did not identify any independent predictors of important interventions at cardiac catheterization.

Short-Term Postoperative Outcomes

Table 6 summarizes the short-term postoperative outcomes. Of the 162 patients who underwent Fontan completion, the majority (92%) had an intracardiac lateral tunnel Fontan, and nearly all (98%) were fenestrated. There was no short-term (<30 days) postoperative mortality and no Fontan failures requiring a takedown of the Fontan circulation or heart transplant. Three patients (2%) required postoperative mechanical support, and 18 patients (11%) underwent reintervention, defined as repeat operative procedure such as pacemaker implantation or interventional catheterization, within 30 days of surgery.

Of the 18 patients requiring reintervention, 14 underwent postoperative catheterization: 7 patients for dilation or stenting of their Fontan fenestration, 4 patients for other interventions such as coiling of collaterals, and 3 patients for hemodynamic assessments alone. Four patients required placement of a permanent pacemaker, and two patients underwent chest exploration or mediastinal cleanout for bleeding and infection. Some patients had more than one postoperative intervention.

The median of intensive care unit (ICU) stay was 4 days (range, 2–106 days), and the median hospital stay was 10 days (range, 6–180 days). The median duration of mechanical ventilation was 2 days (range, 1–68 days), and the median duration of chest tube drainage was 7 days (range, 3–132 days). Catheterization hemodynamic data were not significantly associated with any of the short-term post-Fontan outcomes assessed, including duration of chest tube drainage, mechanical ventilation, and ICU or hospital stay (data not presented). Clinically additive catheterizations were weakly associated with exclusion from Fontan (10% vs. 3%; $p = 0.08$) but not with length of postoperative hospital stay or reintervention within 30 days.

Discussion

Recently, there has been interest in reexamining the role of routine catheterization before single-ventricle palliative procedures. A retrospective study from our institution suggested that in a subset of patients, routine cardiac catheterization before Glenn operation rarely results in new findings or interventions [4]. A subsequent prospective trial demonstrated that

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cardiac magnetic resonance imaging (MRI) can be used effectively instead of routine catheterization for pre-Glenn evaluation, with fewer complications, lower cost, and similar perioperative and short-term outcomes [5].

Two retrospective studies have also evaluated the role of routine catheterization before Fontan completion. The first study, by Ro et al. [25], indicated that cardiac catheterization might be avoided for a subset of patients undergoing pre-Fontan evaluation. However, a large number of Fontan candidates were excluded from their study, and relatively few pre-Fontan transcatheter interventions were performed at their institution (6% of patients). Thus, the generalizability of their findings regarding the frequency of clinically additive catheterizations to other centers is unclear.

The second study, by Prakash et al. [24], evaluated whether history, echocardiographic data, or angiography alone would provide sufficient preoperative information to predict both candidacy for Fontan completion and postoperative adverse events. They found that their algorithm correctly identified all patients subsequently deemed inoperable, and although the sensitivity and specificity of the algorithm at predicting postoperative outcome was only 51% and 78%, these were not improved by addition of hemodynamic markers from catheterization. However, catheter interventions in their cohort were common (48% of patients), but these were not incorporated into their analyses. Consequently, the actual utility of catheterizations in their study group may be uncertain.

In the large, unselected group of patients presenting to our institution, in which transcatheter interventions are common, we still found that preoperative catheterization was clinically nonadditive for approximately half of the patients. Although transcatheter interventions were common among our patients, a large number of these interventions were considered discretionary by our predetermined criteria. Furthermore, hemodynamic information obtained at catheterization did not predict short-term postoperative outcomes.

Catheterization complications, mostly minor, were also common in this patient population. Appropriate stratification of patients into those who are and those who are not likely to benefit from catheterization could therefore allow a large number of patients to avoid the risks of catheterization, including exposure to ionizing radiation and procedural complications.

For many years, one of the primary indications for pre-Fontan catheterization has been the ascertainment of hemodynamic data [1]. Measurements of ventricular end-diastolic pressure [6], pulmonary artery pressure [18], and pulmonary vascular resistance [15] have been used to identify and exclude patients at risk for a poor post-Fontan outcome. A prior study from our institution found that for patients undergoing a Fontan operation from 1987 through 1991, preoperative pulmonary vascular resistance was associated with early Fontan failure [26]. However, with more contemporary cohorts both in our study and that by Prakash et al. [24], no significant correlation between preoperative hemodynamic data and the short-term post-Fontan outcome variables evaluated was found. Furthermore, only two patients in our current cohort had Fontan surgery postponed on the basis of hemodynamic findings alone: one patient with an elevated end-diastolic pressure of unknown etiology that improved with

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a few weeks of medical therapy and another patient with an elevated end-diastolic pressure and multiple systemic-to-pulmonary collateral vessels who underwent coil occlusion of these vessels then returned for repeat catheterization followed by Fontan completion at a later date. These differences likely reflect evolution in practice and surgical technique over time. Patients in the previous cohort from our institution were older at the time of Fontan (mean age, 3.9 vs. 2.7 years), had fewer prior bidirectional Glenn procedures (13% vs. 93%), and had fewer fenestrated Fontan procedures (63% vs. 98%). Our data suggest that catheterization for the purpose of hemodynamic assessment alone may be avoided for a majority of patients presenting for Fontan completion in the current era.

Another commonly cited indication for pre-Fontan catheterization is the optimization of preoperative hemodynamics and anatomy via transcatheter interventions. In fact, interventions such as arch angioplasty and coil embolization of collateral vessels were common in our cohort (64% of patients), with more than one-third of our patients having “important” interventions according to our predefined criteria. This rate of interventions is considerably higher than in the study by Ro et al. [25] but similar to that reported by Prakash et al. [24]. Our data reflect an institutional bias toward aggressive transcatheter treatment of collateral vessels, pulmonary artery stenosis, and aortic arch obstruction.

For some interventions such as relief of aortic arch obstruction, the clinical benefit is widely accepted [7, 9]. For others, such as coil embolization of systemic-to-pulmonary collaterals, however, data are contradictory or lacking, and no consensus exists in the literature [3, 16, 17, 20, 21]. Until prospective data evaluating the clinical benefit of such interventions are available, however, identifying patients who may benefit from such procedures preoperatively will continue to be an integral part of the pre-Fontan assessment.

Identifying this subgroup of patients, however, continues to be a challenge. In contrast to previous reports, we did not attempt to predefine a low-risk group but rather examined all patients presenting for Fontan to identify predictors of a nonadditive catheterization and were unable to find any such robust predictors. This may have been due, in part, to the fact that we did not exclude patients who could be categorized as requiring catheterization based on history and electrocardiography alone. This included, for example, patients with a history of tachyarrhythmias who required electrophysiologic testing and possible intervention before Fontan. Similarly, patients being considered for higher-risk surgeries, such as a two-ventricle repair, would not be regarded as “routine” candidates for single-ventricle palliation, and for such patients, catheterization may help in stratification to a bi- or univentricular circulation.

Furthermore, our difficulty in finding predictors of a nonadditive catheterization may have been further impaired by the frequent inability of echocardiography to demonstrate the relevant anatomy of this patient population. Adequate noninvasive imaging should help in discriminating between those who should and those who should not undergo catheterization. Patients with significant aortic arch obstruction on noninvasive imaging, for example, could be identified as potentially requiring transcatheter balloon angioplasty. Similarly, those with significant tricuspid regurgitation or ventricular dysfunction may be in the subset of “high-risk” patients for whom hemodynamic assessment at catheterization may allow better

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perioperative planning and management. With echocardiography frequently failing to provide sufficient anatomic information, however, many patients had clinically additive catheterizations on the basis of new anatomic findings not visualized by echocardiography. Indeed, nearly all the new diagnostic findings at catheterization were anatomic, most frequently pulmonary artery stenosis, which echocardiography often was unable to assess. Even among patients with “complete” echocardiograms, catheterization often identified pulmonary artery stenosis not seen by ultrasound so that echocardiographic data were a poor predictor of additive catheterizations.

More comprehensive preoperative imaging may allow better stratification than can be achieved using echocardiography alone by providing better anatomic assessment, thus helping to recognize patients at “high risk” and identifying those who may benefit from transcatheter interventions. Although not evaluated in this study, other studies have shown that cardiac MRI accurately and adequately visualizes anatomic details including mediastinal vessels such as the aortic arch, branch pulmonary arteries, and large systemic-to-pulmonary collateral vessels in patients with congenital heart disease [10–13, 22, 27, 29]. Its preoperative use could, therefore, show additional anatomic abnormalities missed by echocardiography and significantly reduce the need for anatomic assessment by catheterization. It also may identify the patients who may benefit from preoperative transcatheter interventions such as those with significant proximal pulmonary arterial obstruction or large collateral vessels. However, the use of cardiac MRI is not yet a part of the standard preoperative assessment at our institution, and the published data comparing cardiac MRI to cardiac catheterization in this patient population are limited.

One report by Harris et al. [14] retrospectively evaluated whether cardiac MRI assessment of pulmonary arteries could predict postoperative outcomes and found that branch pulmonary artery size on pre-Fontan cardiac MRI was inversely correlated with post-Fontan length of hospital stay. However, half of their patients also underwent cardiac catheterization, but very little data regarding the catheterizations were provided. Moreover, comparisons between those who did and those who did not undergo catheterization were not done. Furthermore, their sample size precluded multivariable analyses accounting for potential confounders that may also be associated with length of hospital stay.

Despite the limited data, however, some centers have already begun to use a preoperative strategy that replaces routine cardiac catheterization with thorough noninvasive assessment using echocardiography and cardiac MRI. The clinical utility and cost effectiveness of this strategy should be evaluated by a prospective clinical trial, especially because robust predictors of nonadditive catheterization are lacking.

Study Limitations

This study was prone to all the limitations inherent in retrospective investigations. However, as a large retrospective review, it provides the background data and highlights the need for a prospective trial.

An additional limitation was the exclusion of patients who did not have both echocardiogram and catheterization at our institution. In so doing, we may have excluded

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patients who had a reassuring outside echocardiogram that was not repeated here before catheterization, thereby omitting a number of “low-risk” patients and falsely elevating the relative frequency of additive catheterizations. However, we also eliminated any potential between-center variability in echocardiographic and catheterization techniques.

A further limitation was the use of an expert panel rather than published data to define “important” transcatheter interventions. Until data regarding the importance of these interventions are available, however, expert opinion is the only available standard. By convening a panel that crossed disciplines within our program, we created a set of criteria that would be acceptable to many cardiologists and surgeons.

Finally, as a single-center report from our institution that relies heavily on transcatheter treatment of anatomic abnormalities as well as routine fenestration of the Fontan pathway, our results may not be strictly applicable to other centers who prefer alternative management strategies.

Conclusions

In this large retrospective study from a single institution, the pre-Fontan catheterization was not clinically additive for approximately half of the patients. Hemodynamic data were not associated with short-term postoperative outcomes. However, echocardiography often provided incomplete anatomic information, and transcatheter interventions were common and frequently not predicted by the echocardiographic findings. Thus, although at least 50% of patients presenting for Fontan completion may be able to avoid routine catheterization safely, an echocardiography-based imaging strategy alone is insufficient to allow proper identification of those who could be evaluated noninvasively. A prospective study is needed to assess whether careful patient selection and a more comprehensive imaging strategy will allow targeted referral of more appropriate patients for pre-Fontan catheterization and help in evaluating the efficacy of preoperative transcatheter interventions.

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References

1. Bartmus DA, Driscoll DJ, Offord KP, Humes RA, Mair DD, Schaff HV, Puga FJ, Danielson GK. The modified Fontan operation for children less than 4 years old. J Am Coll Cardiol. 1990; 15:429–435. [PubMed: 2299084]
2. Booth P, Redington AN, Shinebourne EA, Rigby ML. Early complications of interventional balloon catheterisation in infants and children. Br Heart J. 1991; 65:109–112. [PubMed: 1867944]
3. Bradley SM, McCall MM, Sistino JJ, Radtke WA. Aortopulmonary collateral flow in the Fontan patient: does it matter? Ann Thorac Surg. 2001; 72:408–415. [PubMed: 11515875]
4. Brown DW, Gauvreau K, Moran AM, Jenkins KJ, Perry SB, del Nido PJ, Colan SD. Clinical outcomes and utility of cardiac catheterization prior to superior cavopulmonary anastomosis. J Thorac Cardiovasc Surg. 2003; 126:272–281. [PubMed: 12878965]
5. Brown DW, Gauvreau K, Powell AJ, Lang P, Colan SD, Del Nido PJ, Odegard KC, Geva T. Cardiac magnetic resonance versus routine cardiac catheterization before bidirectional Glenn

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anastomosis in infants with functional single ventricle: a prospective randomized trial. Circulation. 2007; 116:2718–2725. [PubMed: 18025538]

6. Cazzaniga M, Fernandez Pineda L, Villagra F, Perez De Leon J, Gomez R, Sanchez P, Diazbalda J. Single-stage Fontan procedure: early and late outcome in 124 patients. Rev Esp Cardiol. 2002; 55:391–412. [PubMed: 11975905]
7. Chessa M, Dindar A, Vettukattil JJ, Stumper O, Wright JG, Silove ED, De Giovanni J. Balloon angioplasty in infants with aortic obstruction after the modified stage I Norwood procedure. Am Heart J. 2000; 140:227–231. [PubMed: 10925335]
8. Fogel MA. Is routine cardiac catheterization necessary in the management of patients with single ventricles across staged Fontan reconstruction? No! Pediatr Cardiol. 2005; 26:154–158. [PubMed: 15868320]
9. Fraisse A, Colan SD, Jonas RA, Gauvreau K, Geva T. Accuracy of echocardiography for detection of aortic arch obstruction after stage I Norwood procedure. Am Heart J. 1998; 135:230–236. [PubMed: 9489969]
10. Geva T, Greil GF, Marshall AC, Landzberg M, Powell AJ. Gadolinium-enhanced 3-dimensional magnetic resonance angiography of pulmonary blood supply in patients with complex pulmonary stenosis or atresia: comparison with x-ray angiography. Circulation. 2002; 106:473–478. [PubMed: 12135948]
11. Goo HW, Yang DH, Park IS, Ko JK, Kim YH, Seo DM, Yun TJ, Park JJ. Time-resolved three-dimensional contrast-enhanced magnetic resonance angiography in patients who have undergone a Fontan operation or bidirectional cavopulmonary connection: initial experience. J Magn Reson Imaging. 2007; 25:727–736. [PubMed: 17335039]
12. Greil GF, Powell AJ, Gildein HP, Geva T. Gadolinium-enhanced three-dimensional magnetic resonance angiography of pulmonary and systemic venous anomalies. J Am Coll Cardiol. 2002; 39:335–341. [PubMed: 11788228]
13. Grosse-Wortmann L, Al-Otay A, Yoo SJ. Aortopulmonary collaterals after bidirectional cavopulmonary connection or Fontan completion: quantification with MRI. Circ Cardiovasc Imaging. 2009; 2:219–225. [PubMed: 19808596]
14. Harris MA, Cosulich MT, Gillespie MJ, Whitehead KK, Liu TI, Weinberg PM, Fogel MA. Pre-Fontan cardiac magnetic resonance predicts post-Fontan length of stay and avoids ionizing radiation. J Thorac Cardiovasc Surg. 2009; 138:941–947. [PubMed: 19651416]
15. Hofbeck M, Singer H, Scharf J, Rupprecht T, Ries M, Buheitel G, Blum U, Mahmoud O, Emde JV. Total cavopulmonary anastomosis: risk factors and results in patients under 4 years of age. Z Kardiol. 1994; 83:615–622. [PubMed: 7528457]
16. Ichikawa H, Yagihara T, Kishimoto H, Isobe F, Yamamoto F, Nishigaki K, Matsuki O, Fujita T. Extent of aortopulmonary collateral blood flow as a risk factor for Fontan operations. Ann Thorac Surg. 1995; 59:433–437. [PubMed: 7847962]
17. Kanter KR, Vincent RN. Management of aortopulmonary collateral arteries in Fontan patients: occlusion improves clinical outcome. Semin Thorac Cardiovasc Surg Pediatric Card Surg Annu. 2002; 5:48–54.
18. Kaulitz R, Ziemer G, Luhmer I, Kallfelz HC. Modified Fontan operation in functionally univentricular hearts: preoperative risk factors and intermediate results. J Thorac Cardiovasc Surg. 1996; 112:658–664. [PubMed: 8800153]
19. Kleinerman RA. Cancer risks following diagnostic and therapeutic radiation exposure in children. Pediatr Radiol. 2006; 36(Suppl 14):121–125. [PubMed: 16862418]
20. Lim DS, Graziano JN, Rocchini AP, Lloyd TR. Transcatheter occlusion of aortopulmonary shunts during single-ventricle surgical palliation. Catheter Cardiovasc Interv. 2005; 65:427–433. [PubMed: 15926186]
21. McElhinney DB, Reddy VM, Tworetzky W, Petrossian E, Hanley FL, Moore P. Incidence and implications of systemic to pulmonary collaterals after bidirectional cavopulmonary anastomosis. Ann Thorac Surg. 2000; 69:1222–1228. [PubMed: 10800823]
22. Muthurangu V, Taylor AM, Hegde SR, Johnson R, Tulloh R, Simpson JM, Qureshi S, Rosenthal E, Baker E, Anderson D, Razavi R. Cardiac magnetic resonance imaging after stage I Norwood

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operation for hypoplastic left heart syndrome. Circulation. 2005; 112:3256–3263. [PubMed: 16301358]

23. Nakanishi T. Cardiac catheterization is necessary before bidirectional Glenn and Fontan procedures in single-ventricle physiology. Pediatr Cardiol. 2005; 26:159–161. [PubMed: 15868324]
24. Prakash A, Khan MA, Hardy R, Torres AJ, Chen JM, Gersony WM. A new diagnostic algorithm for assessment of patients with single ventricle before a Fontan operation. J Thorac Cardiovasc Surg. 2009; 138:917–923. [PubMed: 19660367]
25. Ro PS, Rychik J, Cohen MS, Mahle WT, Rome JJ. Diagnostic assessment before Fontan operation in patients with bidirectional cavopulmonary anastomosis: are noninvasive methods sufficient? J Am Coll Cardiol. 2004; 44:184–187. [PubMed: 15234431]
26. Stamm C, Friehs I, Mayer JE, Zurakowski D, Triedman JK, Moran AM, Walsh EP, Lock JE, Jonas RA, Del Nido PJ. Long-term results of the lateral tunnel Fontan operation. J Thorac Cardiovasc Surg. 2001; 121:28–41. [PubMed: 11135157]
27. Valsangiacomo Büchel ER, DiBernardo S, Bauersfeld U, Berger F. Contrast-enhanced magnetic resonance angiography of the great arteries in patients with congenital heart disease: an accurate tool for planning catheter-guided interventions. Int J Cardiovasc Imaging. 2005; 21:313–322. [PubMed: 16015447]
28. Vitiello R, McCrindle BW, Nykanen D, Freedom RM, Benson LN. Complications associated with pediatric cardiac catheterization. J Am Coll Cardiol. 1998; 32:1433–1440. [PubMed: 9809959]
29. Whitehead KK, Gillespie MJ, Harris MA, Fogel MA, Rome JJ. Noninvasive quantification of systemic-to-pulmonary collateral flow: a major source of inefficiency in patients with superior cavopulmonary connections. Circ Cardiovasc Imaging. 2009; 2:405–411. [PubMed: 19808629]
30. Zeevi B, Berant M, Fogelman R, Galit BM, Blieden LC. Acute complications in the current era of therapeutic cardiac catheterization for congenital heart disease. Cardiol Young. 1999; 9:266–272. [PubMed: 10386695]

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Table 1

Criteria used to categorize interventions as important by expert panel consensus

Intervention type	Criteria for nondiscretionary interventions[a]
Hemodynamic[b] testing	Necessary
Electrophysiology studies	Necessary
Pulmonary vein angioplasty	Necessary
Aortic arch angioplasty	Significant obstruction (peak gradient ≥15 mmHg or ≥50% luminal narrowing), even with normal hemodynamics and function
	Or
	Mild obstruction (peak gradient = 10–14 mmHg or 30–50% luminal narrowing) and evidence of hemodynamic compromise (≥moderate systemic ventricular dysfunction, filling pressures ≥14 mmHg, or calculated cardiac index ≤2.5 l/min/m^2)
Pulmonary artery balloon angioplasty	Significant pulmonary artery obstruction (≥50% angiographic obstruction or gradient ≥2 mmHg) in an arterial segment not normally accessible to surgical plasty at Fontan (e.g., peripheral pulmonary vessels)
Venovenous collateral coiling	A systemic-to-systemic venous collateral measuring >2 mm in patients not going on to either Fontan or biventricular repair surgery
	Or
	A systemic-to-pulmonary venous collateral (or other effective right-to-left shunting collateral) measuring >2 mm
Systemic-to-pulmonary collateral coiling	Systemic-to-pulmonary arterial collaterals to a lobar lung segment supplied by a patent pulmonary artery that does not receive antegrade flow on pulmonary arterial angiography
	Or
	Systemic-to-pulmonary arterial collaterals in the setting of ventricular end-diastolic pressure >14 mmHg with no other anatomic or functional cause for elevated end-diastolic pressure
Other interventions	Evidence of significant hemodynamic effect of the lesion, coupled with poor accessibility to the surgeon and no likelihood of improved accessibility after the Fontan operation

[a] Interventions not meeting these thresholds were considered discretionary

[b] Includes vasodilator testing (oxygen, inhaled nitric oxide) and test occlusion of atrial septal defects

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Table 2

Echocardiographic findings (n = 175)

	***n* (%)**
Complete echocardiogram	60 (34)
Incomplete visualization of the branch pulmonary arteries	100 (57)
Echocardiograms with patient under sedation	118 (67)
Branch pulmonary artery or Glenn obstruction	27 (15)
≥Moderate systemic atrioventricular valve regurgitation	27 (15)
≥Moderate systemic ventricular dysfunction	12 (7)
≥Moderate aortic arch obstruction	5 (3)
Restrictive or absent atrial septal defect	4 (2)
Pulmonary vein stenosis	4 (2)

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Table 3

Results of catheterization (n = 175)

Hemodynamic data	
Superior vena cava saturation	63 ± 7%
Cardiac index	3.5 ± 1.0 l/min/m^2
Common atrial pressure	9 ± 3 mmHg
Systemic ventricular end-diastolic pressure	10 ± 3 mmHg
Mean pulmonary artery pressure	13 ± 4 mmHg
Pulmonary resistance	1.9 ± 0.8 WU
New diagnostic findings affecting management[a]: n (%)	
Total	48 (27)
Glenn pathway or pulmonary artery stenosis	30 (17)
Persistent left superior vena cava	10 (6)
Pulmonary venous anomaly	4 (2)
Aortic arch obstruction	2 (1)
Hemodynamic abnormalities[b]	2 (1)
Other[c]	4 (2)
Interventions performed: n (%)	
Any intervention	112 (64)
At least one “important” intervention	64 (37)

[a] Some patients had more than one new finding at catheterization

[b] Unexplained elevated end-diastolic pressure of 17 mmHg (n = 1), elevated pulmonary artery pressure of 20 mmHg in a patient with significant bilateral systemic-to-pulmonary collaterals (n = 1)

[c] Relationship between ventricular septal defect and pulmonary artery (n = 1), subaortic stenosis (n = 1), large leak in hemi-Fontan patch (n = 1), right ventricular aneurysm (n = 1)

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Table 4

Interventions at catheterization

Intervention type	Discretionary *n* (%)	Important *n* (%)	Total *n* (% of patients)
Hemodynamic testing	–	–	–
Electrophysiology studies	–	9	9 (5)
Pulmonary vein angioplasty	–	2	2 (1)
Aortic arch angioplasty	2	6	8 (5)
Pulmonary artery angioplasty	9	3	12 (7)
Venovenous collateral coiling	10	18	28 (16)
Systemic-to-pulmonary collateral coiling	51	34	85 (49)
Other interventions	6	1[a]	7 (4)
Any interventions: *n* (% of patients)	49 (28%)[b]	64 (37%)[c]	112 (64)

[a] Creation of a ventricular septal defect in a patient with a severely hypertensive left ventricle not amenable to surgical treatment

[b] Catheterizations where all interventions were deemed discretionary

[c] Catheterizations where at least one intervention was deemed important. Some catheterizations had more than one important intervention

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Table 5

Complications of catheterization

	n **(%)**
Minor complications[a]	51 (29)
Acidosis (pH <7.25)	20 (11)
Transient access-site complications[b]	19 (11)
Blood product transfusion	11 (6)
Intensive care unit admission	8 (5)
Arrhythmia >30 s or requiring therapy	6 (3)
Unplanned intubation	5 (3)
Initiation of vasopressor medications	2 (1)
Laryngospasm	2 (1)
Stridor	2 (1)
Pneumonia	2 (1)
Major complications	4 (2)
Pneumothorax/hemothorax requiring chest tube	3 (2)
Cardiac arrest[c]	1 (1)

[a] Some patients had more than one minor complication

[b] Self-resolved access-site hematomas and transient loss of distal pulse

[c] See text for details

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Table 6

Fontan surgical outcomes (n = 162)

	***n* (%)**
Type of Fontan procedure	
Intracardiac	149 (92)
Extracardiac	13 (8)
Fenestrated Fontan procedures	158 (98)
Additional procedures at time of Fontan[a]	73 (45)
Pulmonary artery plasty	24 (15)
Atrioventricular valve plasty	19 (12)
Main pulmonary artery division	14 (9)
Atrial septal defect enlargement	10 (6)
Other[b]	21 (13)
Short-term (<30 days) postoperative outcomes	
Mortality	0
Fontan failure[c]	0
Need for mechanical circulatory support	3 (2)
Need for reintervention	18 (11)
Catheterization	14 (9)
Pacemaker implantation	5 (3)
Mediastinal exploration	2 (1)

[a] Some patients had more than one additional procedure

[b] Including electrophysiology procedures such as pacemaker implantation (n = 7), right ventricular plication (n = 3), pulmonary vein surgery (n = 3), aortic arch plasty (n = 2), and other miscellaneous procedures (n = 8)

[c] Defined as the need for Fontan takedown or transplantation

Capture of Complexity of Specialty Care in Pediatric Cardiology by Work RVU Measures

WHAT'S KNOWN ON THIS SUBJECT: Few reports have explored the measurement validity of the relative value unit (RVU) system, particularly in pediatrics. The RVU system, although broadly applied in health care settings, was developed for the adult population and thus may possess unique inadequacies in pediatrics.

WHAT THIS STUDY ADDS: We found deficiencies in the ability of the RVU system to capture features of case mix complexity and differences related to age. Additional investigation may be warranted to determine the validity of RVU as a measurement tool in pediatrics.

abstract

OBJECTIVE: We sought to determine the relationship between relative value units (RVUs) and intended measures of work in catheterization for congenital heart disease.

METHODS: RVU was determined by matching RVU values to Current Procedural Terminology codes generated for cases performed at a single institution. Differences in median case duration, radiation exposure, adverse events, and RVU values by risk category and cases were assessed. Interventional case types were ranked from lowest to highest median RVU value, and correlations with case duration, radiation dose, and a cases-predicted probability of an adverse event were quantified with the Spearman rank correlation coefficient.

RESULTS: Between January 2008 and December 2010, 3557 of 4011 cases were identified with an RVU and risk category designation, of which 2982 were assigned a case type. Median RVU values, radiation dose, and case duration increased with procedure risk category. Although all diagnostic cases had similar RVU values (median 10), adverse event rates ranged from 6% to 21% by age group ($P < .001$). Median RVU values ranged from 9 to 54 with the lowest in diagnostic and biopsy cases and increasing with isolated and then multiple interventions. Among interventional cases, no correlation existed between ranked RVU value and case duration, radiation dose, or adverse event probability ($P = .13$, $P = .62$, and $P = .43$, respectively).

CONCLUSIONS: Time, skill, and stress inherent to performing catheterization procedures for congenital heart disease are not captured by measurement of RVU alone. *Pediatrics* 2013;131:258–267

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KEY WORDS

RVU, congenital heart disease, catheterization, outcomes

ABBREVIATIONS

AE—adverse event
ASD—atrial septal defect
CHARM—Congenital Heart Disease Adjustment for Risk Method
CPT—Current Procedural Terminology
PDA—patent ductus arteriosus
RUC—Relative Value Update Committee
RVU—relative value unit

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In the 1980s, reform of the traditional physician payment system was prioritized by the US government, physicians, insurers, and patients. An alternative system developed at the Harvard School of Public Health, based on resource-input costs, was proposed, enacted into federal law (Omnibus Budget Reconciliation Act 1989), and subsequently implemented in 1992 by the Health Care Financing Administration, which changed the Medicare Fee Schedule to a system based on the concept of the relative value of work.[1,2]

Absent any previous attempts to quantify physician work except for the California relative value scale, investigators began by attempting to determine physician work associated with specific services. The specific services were identified, of convenience, by Current Procedural Terminology (CPT)-4. Physicians were surveyed as to relative work for CPT-defined services taking into account 4 components: time spent, skill required (technical and cognitive), and stress incurred. Of the 7000 CPT-coded services at the time, ~400 were studied and results were extrapolated to the remainder. The results of the physician estimates of relative amounts of work, relative value units (RVUs), were found to be reasonable and consistent.

It was understood that this scale was provisional and subject to change; thus, by congressional mandate, the RVU system and scale are reassessed every 5 years. In addition, the Relative Value Update Committee (RUC) meets 3 or 4 times each year to consider requests to revalue procedures and assign values to new procedures.[3,4] Soon after the development of the RVU system, most payers adopted the fee schedule established by the Health Care Financing Administration.[5] Some health care institutions use the scale to determine the value of physician work and, in some cases, to determine reimbursement relative to other health care providers.[6–8]

TABLE 1 Example Cases, Corresponding CPT Codes, and RVU Values

Case	CPT	RVU	Definition
Biopsy case after heart transplant	93505	4.37	Endomyocardial biopsy
	93530	4.22	Right heart catheterization for congenital anomalies
Biopsy case after heart transplant with coronary angiography	93505	4.37	Endomyocardial biopsy
	93530	4.22	Right heart catheterization for congenital anomalies.
	93545	0.4	Injection for coronary angiography
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography
Diagnostic case–1-y-old preoperative assessment	93531	8.34	Combined right/retro left heart catheterization for congenital anomalies
	93542	0.29	Injection procedure for right ventricular or right atrial
	93544	0.25	Injection procedure for aortography.
	93555	0.81	Radiologic angiography for ventricular and/or atrial
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography
Diagnostic case–50 y after tetralogy of Fallot repair with left ventricle dysfunction	75710	1.14	Angiography, unilateral extremities
	75710	1.14	Angiography, unilateral extremities
	93531	8.34	Combined right/retro left heart catheterization for congenital anomalies
	93542	0.29	Injection procedure for right ventricular or right atrial
	93544	0.25	Injection procedure for aortography
	93555	0.81	Radiologic angiography for ventricular and/or atrial
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography
Isolated interventional case–ASD closure	93580	17.97	Percutaneous closure of septal defect with implant
isolated interventional case–aortic valvuloplasty	92986	22.85	Percutaneous balloon valvoplasty aortic
	93510	4.32	Left heart catheterization retro
	93543	0.29	Injection procedure for left ventricular or left atrial angiography
	93544	0.25	Injection procedure for aortography
	93555	0.81	Radiologic angiography for ventricular and/or atrial
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography
Isolated interventional case–pulmonary valvuloplasty	92990	18.27	Percutaneous balloon valvoplasty pulmonary artery
	93531	8.34	Combined right/retro left heart catheterization for congenital anomalies
	93541	0.29	Injection procedure for pulmonary angiography
	93542	0.29	Injection procedure for right ventricular or right atrial
	93544	0.25	Injection procedure for aortography
	93545	0.4	Injection for coronary angiography
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography
Multiple interventions–3 y old single ventricle after Fontan	37204	18.11	Trans-catheter occlusion of vascular malformation
	75710	1.14	Angiography, unilateral extremities
	75827	1.14	Venography superior vena cava
	75894	1.31	Trans-catheter radiologic and supervision of occlusion of vascular malformation

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TABLE 1 Continued

Case	CPT	RVU	Definition
	92997	11.98	Percutaneous balloon angioplasty of pulmonary artery
	93541	0.29	Injection procedure for pulmonary angiography
	93542	0.29	Injection procedure for right ventricular or right atrial
	93544	0.25	Injection procedure for aortography
	93556	0.25	Injection procedure for aortography
	93580	17.97	Percutaneous closure of septal defect with implant
Multiple interventions–49 y old single ventricle patient with failing Fontan	37205	8.27	Trans-catheter placement intravascular stent
	75960	0.82	Radiologic intravascular stent placement
	92997	11.98	Percutaneous balloon angioplasty of pulmonary artery
	93530	4.22	Right heart catheterization for congenital anomalies
	93541	0.29	Injection procedure for pulmonary angiography
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography
Multiple interventions–3 mo patient with single ventricle and pulmonary vein stenosis	35476	6.03	Venous balloon angioplasty (dilation)
	75827	1.14	Venography superior vena cava
	75978	0.54	Radiologic imaging of venous angioplasty
	92997	11.98	Percutaneous balloon angioplasty of pulmonary artery
	93539	0.4	Injection selected arterial conduits
	93541	0.29	Injection procedure for pulmonary angiography
	93542	0.29	Injection procedure for right ventricular or right atrial
	93543	0.29	Injection procedure for left ventricular or left atrial angiography
	93544	0.25	Injection procedure for aortography
	93555	0.81	Radiologic angiography for ventricular and/or atrial
	93556	0.83	Imaging for pulmonary aortagraphy, coronary and bypass grafts angiography

The potential inaccuracy of applying adult-based RVUs to pediatric practice was immediately recognized by pediatric specialties and professional organizations. In the early 1990s, 81 congenital heart operations were assigned CPT codes and corresponding RVUs. These RVUs were found to be reasonable relative measures of physician work in a validation study by Jenkins et al.[9] However, in these same patients, catheterization procedures involving an increasingly diverse set of therapeutic interventions have not systematically been assigned RVUs.

Since the inception of the RVU scale, few studies have questioned the relationships between the assigned RVU and the time, skill, and stress, which the RVU values are intended to capture. We suspected that the CPT-based RVU assignment method did not accurately reflect the unique physician work component among catheterization procedures for congenital heart disease. To test this proposition, we used available proxies for physician time, skill, and stress. Time was relatively straightforward to quantify and we simply chose case times. For skill, we considered the amount of radiation required as a surrogate for the amount of information obtained and processed during the procedure, and for technical skill, we used the number of interventions. Stress is clearly less quantifiable, and therefore we assumed that stress was higher in cases with a known higher incidence of adverse events (AEs). We considered that in the relatively young field of pediatric catheterization, where many of the procedures have only become common practice in the period since the inception of the RVU system, the CPT-based RVU system might be uniquely inadequate to measure the intended components of relative value.

METHODS

Database

The database maintained in the Children's Hospital Boston cardiac catheterization laboratory for reporting and quality assessment was queried for this study. This is a prospectively collected database that includes patient and procedural characteristics as well as a record of AEs.[10] Patient characteristics collected included age, gender, diagnosis, and presence of a genetic or noncardiac comorbidity. Type of case, admission type, method of airway management, types of interventions, duration of case (defined as time sheaths were inserted until removed), fluoroscopy dose-area product (μGy · m^2), and AEs were reported in this cohort. AEs were classified according to the International Pediatric Congenital Cardiac Code catheterization complication nomenclature 5 scale severity ranking[11] in which severity level 3, 4, and 5 classified events are high severity and potentially life-threatening events.

RVU

In the catheterization database, all angiograms, interventions, and type of diagnostic procedure performed are recorded and linked to CPT codes. Angiograms are assigned the most appropriate CPT codes by site. Types of

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interventions and sites are chosen at the time the catheterization procedure according to an intervention list similar to the nomenclature developed by the International Pediatric Congenital Cardiac Code, published in 2011.[12] In some cases, specific CPT codes exist for highly specific interventions such as atrial septal defect (ASD) closure, Fontan fenestration closure, and patent ductus arteriosus (PDA) closure. In other cases such as angioplasty and stent placement, interventions may be performed in very dissimilar patients in a variety of vascular sites but have common CPT codes. All cases were assigned an acquired or congenital diagnostic procedure code for right and/or left catheterization as appropriate.

RVU values available from the 2010 National Physician CMS Fee Schedule Relative Value File were matched to corresponding CPT codes (copyright 2009 by the American Medical Association). We calculated the RVU value for cases in the CHB catheterization database by matching the RVU value to the CPT codes generated for the case. Examples of cases, designated CPT codes, and corresponding RVU values are provided in Table 1. The database was queried for diagnostic, interventional, or biopsy cases performed from January 1, 2008, to December 31, 2010. Six cases with an RVU value of 0 and 329 cases with a CPT code of 93799 or 92992, which do not have an assigned RVU value, were excluded from the cohort of 4011 for a sample of 3676 cases.

Risk Category

Risk categories were originally created as a way of grouping a relatively large number of diverse and sometimes infrequently encountered procedures into categories with similar risk of AEs (Table 2).[10,13] Categories were developed by using expert judgment and empirical methods in a derivation cohort and validated in a prospective cohort in the Congenital Cardiac Catheterization Project on Outcomes database. A case is assigned to 1 category based on the characteristics of the case; for diagnostic procedures the cases are stratified by age group. If 1 or more interventions are performed, the case is assigned to the highest category. The categories have a strong association with the occurrence of clinically important AEs; therefore, although this association has not been tested, we considered them a surrogate for physician stress associated with performing a procedure. Of the 3676 cases meeting inclusion criteria, 119 could not

TABLE 2 Risk Categories

Diagnostic Case	Risk Category 1	Risk Category 2	Risk Category 3	Risk Category 4
	Age ≥1 y	Age ≥1 mo <1 y	Age <1 mo	
Valvuloplasty		Pulmonary valve ≥1 mo	Aortic valve ≥1 mo Pulmonary valve <1 mo Tricuspid valve	Mitral valve Aortic valve <1 mo
Device or coil closure	Venous collateral LSVC	PDA ASD or PFO Fontan fenestration Systemic-to-pulmonary artery collaterals	Systemic surgical shunt Baffle leak Coronary fistula	VSD Perivalvar leak
Balloon angioplasty		RVOT Aorta dilation <8 ATM	Pulmonary artery <4 vessels Pulmonary artery ≥4 vessels all <8 ATM Aorta >8 ATM or CB Systemic artery (not aorta) Systemic surgical shunt Systemic-to-pulmonary collaterals Systemic vein	Pulmonary artery ≥4 vessels Pulmonary vein
Stent placement		Systemic vein	RVOT Aorta Systemic artery (not aorta)	Ventricular septum Pulmonary artery Pulmonary vein Systemic surgical shunt Systemic pulmonary collateral
Stent redilation		RVOT Atrial septum Aorta Systemic artery (not aorta) Systemic vein	Pulmonary artery Pulmonary vein	Ventricular septum
Other	Myocardial biopsy	Snare foreign body Trans-septal puncture	Atrial septostomy Recanalization of jailed vessel in stent Recanalization of occluded vessel	Atrial septum dilation and stent Any catheterization <4 d after surgery Atretic valve perforation

ATM, atmospheres; CB, cutting balloon; LSVC, left superior vena cava; PFO, patent foramen ovale; RVOT, right ventricular outflow tract.

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TABLE 3 Group Designation and Case Types

Group	Case Type (long definition)	Case Type (short definition)
0	RV biopsy elective post transplant (isolated)	RV biopsy
	Diagnostic catheterization	Diag cath
1	Proximal right or left angioplasty and or stent only (exclude RVOT intervention)	Proximal right or left PA
	RVOT dilation and or stent (no PA angioplasty)	RVOT only
	Aorta dilation and or stent	Aorta
	Any pulmonary vein dilation	Pulmonary vein
	Pulmonary valvotomy (isolated)	Pulmonary valve
	Aortic valvotomy (isolated)	Aortic valve
	ASD or PFO closure (isolated)	ASD/PFO closure
	PDA device or coil closure	PDA closure
	Fenestration device closure (isolated)	Fenestration closure
2	Two or more proximal or distal right or left angioplasty and or stent (excluded RVOT intervention)	≥Pulmonary arteries
	RVOT dilation and or stent and proximal right or left angioplasty and or stent	RVOT + proximal PA
	RVOT dilation and or stent and two or more proximal or distal right or left angioplasty and or stent (excluded RVOT intervention)	RVOT ≥pulmonary arteries
	Pulmonary valvotomy and another intervention	Pulmonary valve+
	Aortic valvotomy and another intervention	Aortic valve+
	ASD or PFO closure and another intervention	ASD/PFO+
	Fenestration device closure and another intervention	Fenestration+

PA, pulmonary artery; RV, right ventricular; RVOT, right ventricular outflow tract.

TABLE 4 Patient and Procedure Characteristics (N = 3557)

Patient Characteristics	No. (%)
Age	
<1 mo	203 (6)
1 mo to <1 y	612 (17)
1–17 y	2122 (60)
≥18 y	620 (17)
Gender male	1899 (53)
Diagnosis[a]	
Complex defect with 2 ventricles	1399 (39)
Complex defect with 1 ventricle	606 (17)
Isolated defects	603 (17)
No structural heart disease[b]	873 (25)
Pulmonary hypertension	73 (2)
Genetic syndrome	477 (13)
Noncardiac comorbidity	1256 (35)
Procedural characteristics	
Procedure type	
Interventional	1953 (55)
Diagnostic	880 (25)
Biopsy	724 (20)
Admission type	
Elective	2849 (80)
Nonelective or emergent	708 (20)
Spontaneous respiration	1271 (36)
Risk category	
1	1354 (38)
2	901 (25)
3	822 (23)
4	480 (13)
Case duration[c]	76 [45, 114] (10, 761)
Any AE	514 (14)
Any high severity AE (level 3–5)	187 (5)

[a] Missing in 3.
[b] For example, myopathy or status post heart transplantation.
[c] Time from sheath insertion to removal.

be assigned a risk category, so the final sample size for analysis was 3557.

Case Groups

Cases were also grouped for this study according to technical skill required and number of interventions. Diagnostic catheterization and myocardial biopsy without additional interventions were designated group 0. Group 1 included interventional procedures with a single intervention, and group 2, interventional procedures with more than 1 intervention. Among the 3557 cases in the Children's Hospital Boston data set (2008–2010) with RVU values and designated risk category, 2982 case types (84%) could be assigned to 1 of these groups. The analysis by case type is limited to this subcohort (Table 3). Examples of case types performed infrequently and not captured in the subcohort (n = 575) include isolated distal pulmonary artery interventions, angioplasty or stenting in vessels or shunts other than the aorta, aorta stent redilation, intracardiac angioplasty or stenting, isolated coil occlusions, and mitral valvuloplasty.

Statistical Analysis

Cohort characteristics were summarized by frequency and percentage for categorical variables and by median and interquartile range for continuous variables. Comparisons of median case duration, radiation exposure, AE rates, and RVU across procedure risk categories were performed by using the Kruskal-Wallis test. RVU values were summarized for 18 case types and by the 3 groups and reported as mean, SD, median, minimum, maximum, and interquartile range.

AE rates, case duration, radiation exposure, and RVU values were also calculated and compared among diagnostic catheterization cases stratified by age group (neonates <1 month, infants 1 month to 1 year, children >1 year, and adults >18 years).

The 16 interventional case types were ranked from lowest to highest median RVU value, and the relationship between case ranking by median RVU value and the following characteristics were explored: median duration of case, median radiation dose, and median predicted probability of an AE. The predicted probability of an AE was calculated for each case using the Congenital Heart Disease Adjustment for Risk Method (CHARM) risk adjustment model, which is based on the assigned risk category, indicators of hemodynamic vulnerability, and age <1 year.[14] Associations between ranked interventional case types and each measure were quantified by using the Spearman rank correlation coefficient.

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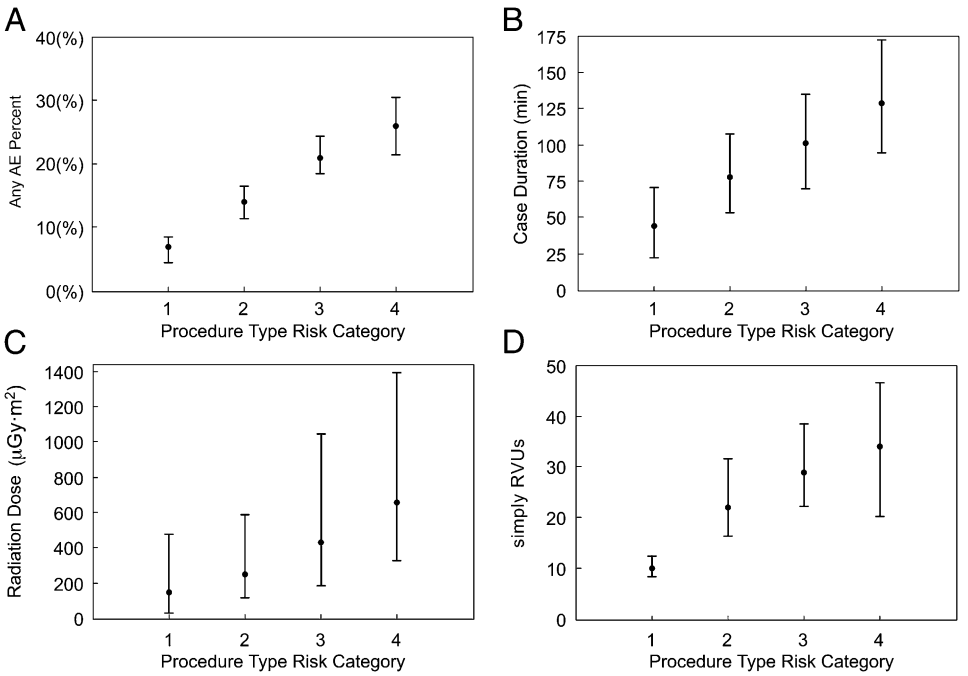

FIGURE 1

Proportion and 95% confidence interval for any AE (A) and median (interquartile range) for case duration (B), radiation dose (C), and RVU (D) by risk category; for all comparisons, $P < .001$.

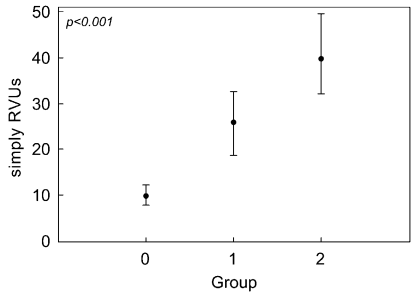

FIGURE 2

Median (interquartile range) RVU value for case groups 0, 1, and 2 as detailed in Table 3.

RESULTS

Patient and procedure characteristics for this population are summarized in Table 4. Most of the population had complex congenital heart disease, with either 2 ventricles (39%) or single ventricle physiology (17%). Most cases were scheduled electively (80%). The largest proportion of cases were classified as interventional (55%). Among the remaining, 25% were classified as diagnostic, which may have involved hemodynamic and/or angiographic assessment, and 20% as myocardial biopsy after heart transplantation. There was a wide range in case duration. At least 1 AE of any severity was recorded in 14% of cases, and high severity level 3, 4, or 5 events occurred in 5% of cases.

Risk Category

The largest proportion of cases were ranked in the lowest risk category (n = 1354 [38%]) and were composed mostly of diagnostic cases in patients >1 year of age, as well as those undergoing myocardial biopsy. The remaining cases were diagnostic cases in patients <1 year of age and cases involving single or multiple interventions in decreasing frequency by risk category (risk category 2 = 25%, 3 = 23%, and 4 = 13%). Procedure time, radiation dose, AE rates, and median RVU value increased by risk category (all $P < .001$) (Fig 1).

Case Group

The associated median RVU value for case group 0 (diagnostic catheterization and myocardial biopsy), 1 (interventional catheterization, single intervention), and 2 (interventional catheterization with >1 intervention) is shown in Fig 2. Median RVU increased according to groups with broader interquartile ranges among more complex and heterogeneous groups 2 and 3 (Table 5). Isolated interventions, such as closure of an ASD, PDA, or fenestration and aortic or pulmonary valvuloplasty, had similar median RVU values to one another compared with those involving multiple interventions ($P < .001$ for the 3-group comparison).

Diagnostic Cases

Diagnostic procedures composed 25% of the cohort in 885 patients over a wide age range from infants to adults (Table 6). Radiation dose per unit of time increases as a function of body surface area; thus, older patients had higher radiation doses during similar length procedures. But although case duration was similar among age groups, there were significant differences in AE rates, the surrogate used for stress in this study ($P < .001$). Despite this difference in risk associated with the procedure, all the diagnostic cases were assigned similar RVU values (Table 6, Fig 3).

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Interventional Cases

The largest proportion of patients (55%) in this cohort underwent interventional procedures with varied case types and associated RVU values. Interventional cases were ordered from lowest to highest median RVU value, and procedure characteristics are summarized (Table 7). Among these different types of procedures, no correlation existed between ranked RVU value and median procedure time, radiation dose, or the predicted probability of an AE as calculated for each case type using the CHARM method (Fig 4).

DISCUSSION

The relative value of physician work is determined through consensus methods by considering the time associated with the encounter, the amount of related stress, and the amount of required technical and cognitive skill.[3] In this study, we found that in the field of pediatric cardiac catheterization, RVU values did not capture intended elements of RVU (time, skill, and stress) among interventional cases or discriminate among important differences by patient age. Thus, the established RVU system does not reflect all the intended elements of work for patients undergoing catheterization for congenital heart disease. We propose that either new RVUs are generated or additional metrics be considered when measuring the complexity of work in this pediatric specialty care service.

After widespread adoption of the RVU scale, and to address inadequacies of the RVU system, the Society for Thoracic Surgeons recommended to the AMA CPT Editorial Panel several new codes to more correctly describe congenital heart surgery procedures. Once these were adopted for CPT, the Society for Thoracic Surgeons conducted surveys to establish work values for the entire group of congenital heart surgery codes and presented these recommended work values to the RUC. These codes were then given value by using standard methods based on consensus and relative value compared with other established procedures; later the utility of these codes was supported by work showing correlation with mortality, length of stay, and charges in congenital heart surgery.[9]

In catheterization for congenital heart disease, CPT codes (93530–93533) and associated RVU values for basic diagnostic cases without intervention have been established and were reviewed and revised by the RUC in 2010. Codes have also been established for a few common predictable and well-circumscribed procedures for placement in interatrial communications, including ASD, PFO, and Fontan fenestrations (CPT 93580). Nevertheless, due to the complexity and diversity of procedures performed in congenital cardiac catheterization and the sparse number of codes specific to the treatment of congenital heart disease, values for many of the interventional procedure codes have been extrapolated from codes developed for procedures performed in adults by cardiologists and interventional radiologists. For example, CPT codes 92997 and 92998 (transcutaneous pulmonary artery balloon angioplasty) are used for both angioplasty and stent redilation at multiple sites, including proximal pulmonary arteries, distal pulmonary arteries, aortopulmonary collaterals, and conduits. Despite a common procedural code, there is considerable variation among these interventions and potentially the expected complexity by site.

TABLE 5 RVU Values by Group (N = 2982)

Group	Case Type	N	RVU		
			Mean ± SD	Min–Max	Median [IQR]
0	RV biopsy	696	10 ± 2	6–18	9 [9,10]
	Diagnostic catheterization	880	10 ± 4	1–59	11 [9,12]
1	Proximal right or left PA	172	38 ± 28	14–202	28 [22,44]
	RVOT only	126	30 ± 12	16–111	29 [23,36]
	Aorta	127	28 ± 16	14–117	21 [19,30]
	Pulmonary vein	83	28 ± 27	14–164	19 [17,24]
	Pulmonary valve	100	27 ± 2	24–33	28 [25,29]
	Aortic valve	85	33 ± 2	29–37	33 [33,34]
	ASD/PFO closure	154	20 ± 5	18–41	18 [18,19]
	PDA closure	89	30 ± 4	22–50	29 [29,30]
	Fenestration closure	16	22 ± 2	20–26	22 [21,23]
2	≥2 Pulmonary arteries	309	43 ± 15	18–108	40 [33,50]
	RVOT + proximal PA	46	35 ± 10	23–81	32 [29,38]
	RVOT ≥2 pulmonary arteries	50	45 ± 12	30–108	44 [38,50]
	Pulmonary valve +	8	50 ± 18	38–92	44 [40,49]
	Aortic valve +	5	52 ± 5	46–57	54 [48,55]
	ASD/PFO +	6	57 ± 35	27–124	42 [40,64]
	Fenestration +	30	46 ± 19	23–121	40 [33,49]

IQR, interquartile range; PA, pulmonary artery; PFO, patent foramen ovale; RV, right ventricular; RVOT, right ventricular outflow tract.

TABLE 6 Diagnostic Case Characteristics by Age

Age Group	No. (%)	AE,%	Case Duration		Dose (μGy · m^2)		RVU Median [IQR]
			Mean ± SD	Median [IQR]	Mean ± SD	Median [IQR]	
<1 mo	92 (10)	21%	62 ± 31	57 [38, 86]	120 ± 83	101 [63, 160]	11 [9, 12]
1 mo to <1 y	175 (20)	11%	79 ± 63	71 [49, 90]	450 ± 125	126 [75, 173]	11 [9, 12]
1–17 y	451 (51)	6%	69 ± 34	63 [44, 87]	355 ± 488	190 [100, 412]	11 [9, 12]
> 18 y	167 (19)	12%	77 ± 38	73 [53, 103]	1528 ± 1434	1185 [461, 2114]	11 [9, 12]

IQR, interquartile range.

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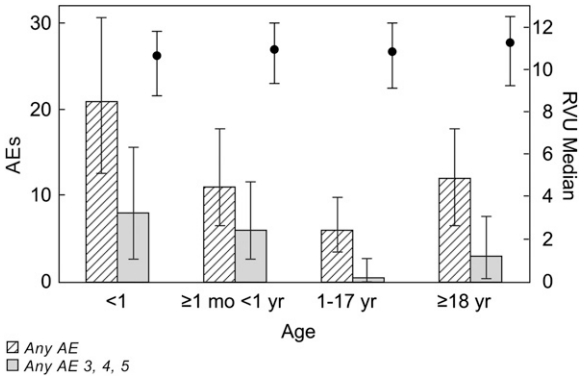

FIGURE 3
Median (interquartile range) RVU value and AE rates with 95% confidence interval shown for neonates (<1 month), infants (≥ 1 month, <1 year), older children (≥1 and <17 years), and adults (≥18 years) for diagnostic catheterization cases.

TABLE 7 Interventional Case With Characteristics Sorted by Median RVU

Case Type	Median RVU	Case Duration Median [IQR]	Dose (μGy · m^2) Median [IQR]	Predicted Probability of Any AE	Predicted Probability of High AE
ASD/PFO	18	64 [51, 84]	577 [292, 1148]	0.12 [0.12, 0.12]	0.04 [0.04, 0.04]
Pulmonary vein	19	140 [116, 172]	466 [340, 689]	0.27 [0.25, 0.29]	0.11 [0.10, 0.13]
Aorta	21	80 [67, 118]	446 [152, 1659]	0.18 [0.17, 0.22]	0.08 [0.06, 0.10]
Fenestration	22	117 [99, 128]	329 [242, 564]	0.12 [0.12, 0.12]	0.04 [0.04, 0.04]
Pulmonary valve	28	61 [45, 89]	103 [67, 251]	0.17 [0.13, 0.25]	0.06 [0.05, 0.12]
Proximal right or left PA	28	114 [88, 142]	496 [306, 1060]	0.22 [0.18, 0.25]	0.09 [0.08, 0.11]
RVOT no PA	29	110 [91, 136]	796 [284, 1833]	0.18 [0.13, 0.20]	0.08 [0.05, 0.09]
PDA closure	29	61 [46, 78]	167 [111, 300]	0.12 [0.12, 0.13]	0.04 [0.04, 0.05]
RVOT + Prox	32	122 [89, 158]	914 [304, 2746]	0.18 [0.18, 0.23]	0.08 [0.08, 0.10]
Aortic valve	33	79 [63, 105]	243 [137, 461]	0.22 [0.18, 0.25]	0.09 [0.08, 0.12]
≥2 Prox R/L	40	132 [100, 168]	722 [433, 1473]	0.25 [0.21, 0.27]	0.10 [0.09, 0.11]
Fenestration +	40	127 [98, 172]	572 [360, 897]	0.12 [0.12, 0.16]	0.04 [0.04, 0.05]
ASD/PFO +	42	97 [61, 189]	778 [394, 1250]	0.16 [0.15, 0.18]	0.06 [0.05, 0.08]
RVOT + ≥2 prox	44	149 [117, 172]	853 [436, 2183]	0.23 [0.20, 0.26]	0.10 [0.08, 0.11]
Pulmonary valve +	44	101 [90, 181]	329 [255, 555]	0.17 [0.13, 0.22]	0.06 [0.04, 0.09]
Aortic valve +	54	173 [108, 182]	356 [302, 665]	0.27 [0.22, 0.29]	0.11 [0.09, 0.13]

IQR, interquartile range; PA, pulmonary artery; PFO, patent foramen ovale; RVOT, right ventricular outflow tract.

This variability in intervention types and patient populations may partially explain why assigned RVU values did not correlate with case duration, radiation dose, and anticipated AE occurrence (Fig 4). As an example, pulmonary vein dilation cases, designated in risk category 4, include some of the most ill and vulnerable patients encountered in the field and require one of the most technically challenging procedures performed in congenital cardiac catheterization. However, ASD closure (risk category 2), which is a single isolated, short, and often predictable intervention in a relatively healthy patient population, has a similar RVU value. Despite these important shortcomings, some aspect of risk was captured by the RVU designations, which showed a median increase according to the 4 risk category designations (Fig 1).

A distinction in the complexity and work of performing a diagnostic procedure for congenital heart disease has been recognized and a relatively higher RVU applied compared with populations without congenital heart disease. In this study, we also considered potential age-related differences in the risk associated with performing diagnostic procedures and found statistically significant differences in AE occurrence according to age despite equivalent RVU designations. Thus, in pediatric catheterization and perhaps other pediatric disciplines, age adjustment may need to be considered in assigning the relative value of work.

Recently, the American College of Surgeons published a new risk adjustment model for the National Surgical Quality Improvement Program. This model considered new risk categories and found additional independent explanatory value beyond just RVU for procedural measures of stress, skill, and procedural complexity.[15] This finding lends additional credence to the consideration of factors other than or in addition to RVU when comparing and evaluating physician work output and outcomes in pediatric and congenital catheterization. In this analysis, we have demonstrated how RVU does not capture all the intended elements; however, additional work is necessary to determine measures that better evaluate and measure the procedural time commitment, complexity, and stress associated with performing procedures in congenital cardiac catheterization.

The measures used in this study were from a sample of convenience and not variables specifically developed to capture the components of RVU. There are no published billing standards in catheterization for congenital heart diseases. Because this analysis is limited to the experience at a single center, it does not allow for variation in the interpretation and valuation of a subset of interventional procedures for which there are no specific CPT codes. Although the risk categories and CHARM risk model were developed and validated in a multicenter dataset, the opportunity to test the categories and models in other data sets remains to be achieved. In addition, in this analysis we make the assumption that a higher anticipated AE occurrence is associated with physician stress,

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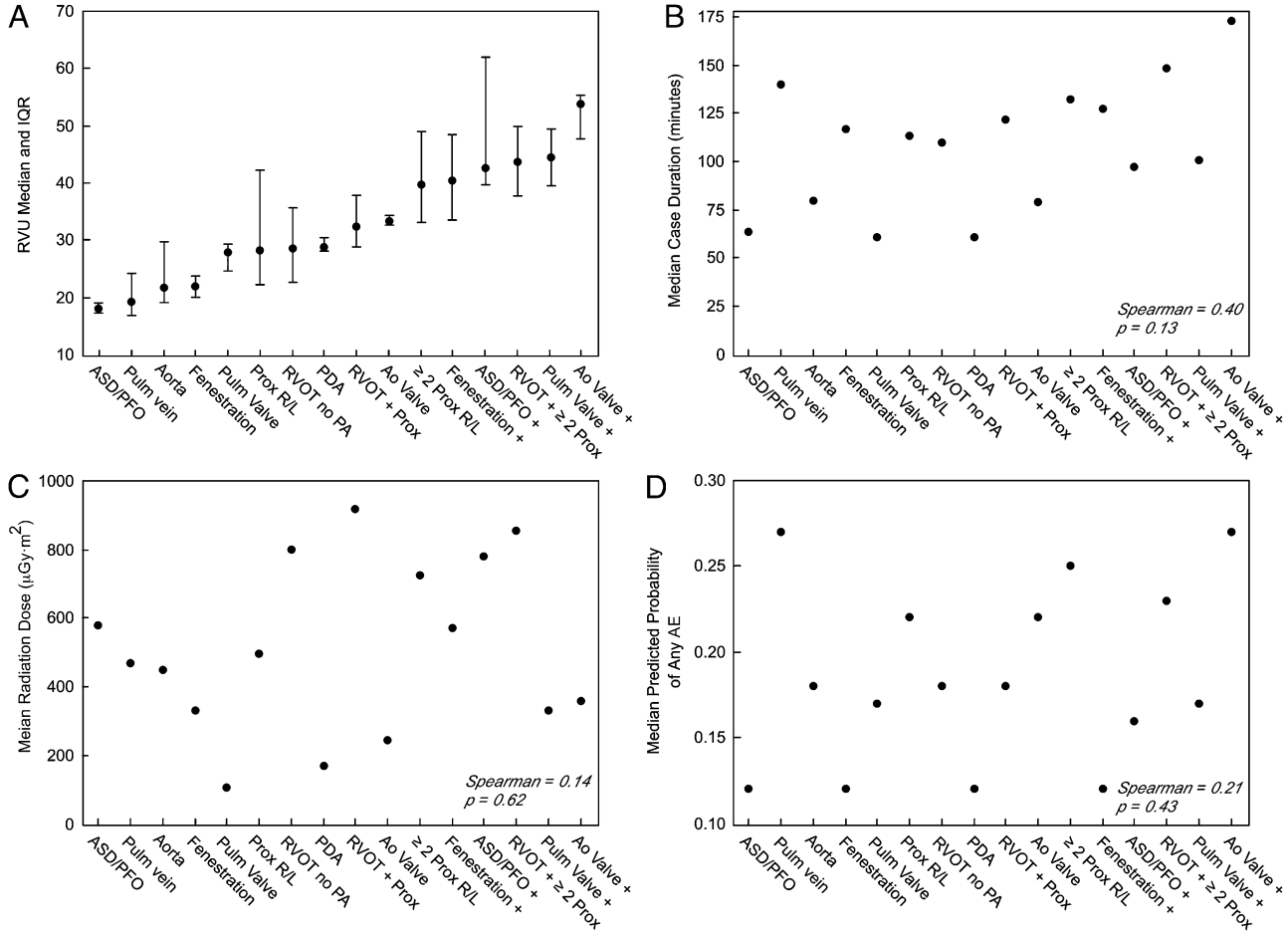

FIGURE 4

Interventional case types ranked from lowest to highest median RVU value (A). The relationship between (B) median case duration, (C) median radiation dose, and (D) probability of an AE according to case types ordered from lowest to highest ranked median RVU value. Ao, aorta; IQR, interquartile range; PA, pulmonary artery; PFO, patent foramen ovale; Prox R/L, proximal right or left pulmonary artery; Pulm, pulmonary, RVOT, right ventricular outflow tract.

whereas other personal or systems factors may be important.

CONCLUSIONS

RVUs are intended to assign value to the physical, technical, and cognitive skills possessed by a physician, as well as emotional stress endured while performing a service. In this analysis of catheterization procedures for congenital heart disease, we have demonstrated some of the weaknesses of the RVU system in capturing the complexity or risk involved with performing a diversity of procedure types in a population with a wide age range undergoing catheterization at a pediatric institution. It is therefore important to consider additional factors such as age and validated measures of case mix complexity. In addition, an expanded set of CPT codes for types of interventional cases to describe cardiac catheterization procedures in different age groups could be created and then valued through the RUC valuation process. Additional analyses are warranted to explore the explanatory value of RVU in other pediatric populations and validate measures that are intended to capture elements of work unique to these populations.

REFERENCES

1. Hsiao WC, Braun P, Yntema D, Becker ER. Estimating physicians' work for a resource-based relative-value scale. *N Engl J Med*. 1988;319(13):835–841
2. Becker ER, Dunn D, Braun P, Hsiao WC. Refinement and expansion of the harvard resource-based relative value scale: the second phase. *Am J Public Health*. 1990;80(7):799–803
3. Kahan JP, Morton SC, Farris HH, Kominski GF, Donovan AJ. Panel processes for revising relative values of physician work. A pilot study. *Med Care*. 1994;32(11):1069–1085
4. Zwolak RM, Trout HH III. Vascular surgery and the Resource-based Relative Value Scale five-year review. *J Vasc Surg*. 1997;25(6):1077–1086

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5. Blue Cross and Blue Shield of Massachusetts I: changes in reimbursement policy and reporting structure. Blue Cross and Blue Shield; 1995
6. Glass KP, Anderson JR. Relative value units and productivity: part 2 of 4. *J Med Pract Manage*. 2002;17(6):285–290
7. Griffin TC, Hutter JJ, Johnson KK, Moscow JA. A survey of clinical productivity and current procedural terminology (CPT) coding patterns of pediatric hematologist/oncologists. *Pediatr Blood Cancer*. 2004;43(2):140–147
8. Taylor GA. Impact of clinical volume on scholarly activity in an academic children's hospital: trends, implications, and possible solutions. *Pediatr Radiol*. 2001;31(11):786–789
9. Jenkins KJ, Gauvreau K, Newburger JW, Kyn LB, Iezzoni LI, Mayer JE. Validation of relative value scale for congenital heart operations. *Ann Thorac Surg*. 1998;66(3):860–869
10. Bergersen L, Gauvreau K, Jenkins KJ, Lock JE. Adverse event rates in congenital cardiac catheterization: a new understanding of risks. *Congenit Heart Dis*. 2008;3(2):90–105
11. Bergersen L, Giroud J, Jacobs J, et al. Report from the International Society for Nomenclature of Paediatric and Congenital Heart Disease: cardiovascular catheterization for congenital and paediatric cardiac disease (part 2–nomenclature of complications). *Cardiol Young*. 2011;21:252–259
12. Bergersen L, Everett A, Giroud J, et al. Report from the International Society for Nomenclature of Paediatric and Congenital Heart Disease (part 1–procedural nomenclature). *Cardiol Young*. 2011;21:260–265
13. Bergersen L, Gauvreau K, Marshall A, et al. Procedure-type risk categories for pediatric and congenital cardiac catheterization. *Circ Cardiovasc Interv*. 2011;4(2):188–194
14. Bergersen L, Gauvreau K, Foerster SR, et al. Catheterization for congenital heart disease adjustment for risk method (CHARM). *JACC Cardiovasc Interv*. 2011;4(9):1037–1046
15. Raval MV, Cohen ME, Ingraham AM, et al. Improving American College of Surgeons National Surgical Quality Improvement Program risk adjustment: incorporation of a novel procedure risk score. *J Am Coll Surg*. 2010;211(6):715–723

TO DINE OR NOT TO DINE: *We have a small farm with numerous sheep. Despite our best efforts, too many of our ewes deliver lambs in the middle of the winter, which means we often have to help the mothers care for them. My children wind up naming the lambs and calling for them when we bring them grain in the summer. Although they are farm animals, and not pets, what to do with them as they get older is a hot family issue. I like to eat lamb, but my wife and most of the kids find the idea abhorrent – although they seem happy enough to eat all kinds of purchased meat. Amazingly, a similar dilemma has burst onto the national stage. As reported in* The New York Times *(U.S.; October 28, 2012), a small environmental college in rural Vermont is at the center of a national debate. Green Mountain College, which supports and promotes sustainable farming, has for years had two oxen named Bill and Lou. Students learned to drive them, and they pulled carts around the college farm and into town. However, Lou is in failing health with a bad leg injury and can no longer work. Bill, also elderly, is unlikely to work if not teamed with Lou. The college could euthanize the animals, allow them to die of their illnesses or old age, or slaughter them. After surveying the students, the college opted to slaughter the animals and serve them as food in the college dining hall. The decision prompted outrage by local and national animal groups, which argue that slaughtering the animals is tantamount to animal cruelty. Thousands of petitions and complaints flooded the college's Facebook page. The school, with strong support from the student population, responded that the purpose of the college farm is to produce food in a humane and sustainable way. The farm is not designed to be an animal shelter. While I support Green Mountain College's decision, I suspect I will be overruled at home and will spend my winter mornings dragging hay out to Houdini, Lambchops, and the rest of our sheep.*

Noted by WVR, MD

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Capture of Complexity of Specialty Care in Pediatric Cardiology by Work RVU Measures

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Pediatrics 2013;131;258
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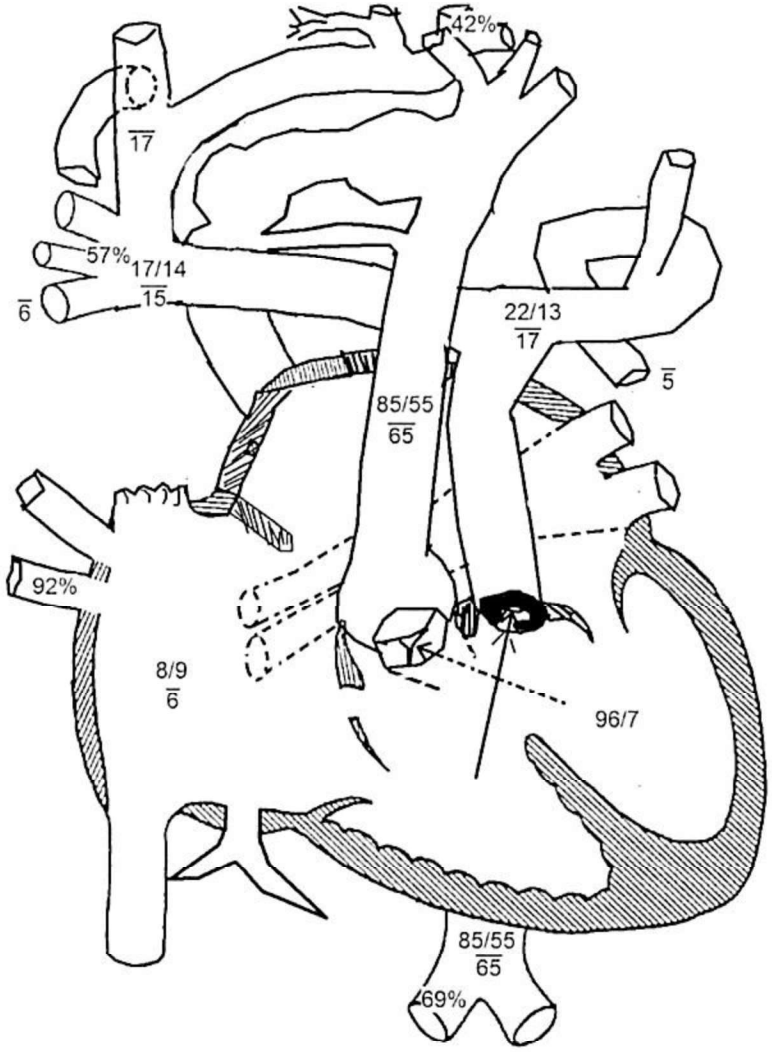

Arrows indicate catheter course.

[redacted]

Birth Date: 07/08/2003
Cath Date: 08/27/2018
Cath #: 18P-60
Age at cath: 15 years
Gender: Female

Attending: [redacted]
Referring: [redacted]
Technician: [redacted]
X-Ray Tech:
Assistant Physician:

Height: 131.0 cm Weight: 25.0 kg
BSA = 0.97 m2

Fluoro: 66.00 min Contrast: 92.00 mL
Radiation Dose: 339.50 mGy
Vein: Right jugular 6fr, R
Artery: Right femoral 4fr

Set 1

Qp = 1.73 L/min (1.79 L/min/m2)
Qs = 4.04 L/min (4.17 L/min/m2)
Rp = 5.48 units (5.32 units x m2)
Rs = 14.60 units (14.16 units x m2)
Qp/Qs = 0.43 : 1 | Rp/Rs = 0.38
Qep = 1.44 L/min (1.49 L/min/m2)

Heart Rate: 80 bpm
VO2: 170 ml/min/m2
Hemoglobin: 20.0 gm/dL

Inspired O2: 21%
pH:
pCO2:
pO2:
HCO3:

Thermo CO:

%O2	Site	Sys/A	Dias/V	Mean
57	SVC			17
	RA	8	9	6
	RV			
	PA			
	RPA	17	14	15
58	LPA	22	13	17

Right		Left
6	Wedge Mean	5

%O2	Site	Sys/A	Dias/V	Mean
	LA			
	LV	96.0	7	
	aAO	85	55	65
65.0	dAO	85	55	65

RLPV: O2%: 92

LIJ: O2%: 42

[redacted]

[redacted]

[redacted]

Cath Date: 08/27/2018 Cath #: 18P-60

[redacted]

[redacted]

Cardiac Catheterization Report

Patient Name: [redacted] **DOB:** 7/8/2003 **MRN:** [redacted] **DOP:** 8/28/2018
Performing Physician: [redacted] **Referring Physician:** [redacted]

HISTORY:

[redacted] is a 15 year old girl with reported history of somewhat unbalanced AVSD and congenital hypoplastic aortic arch. She was said to have had an initial aortic jump graft placement with PA banding in infancy, followed by eventual removal of the PA bands and jump graft, arch reconstruction, and bi-directional Glenn palliation. This was all performed in Arkansas and she was then apparently lost to follow up for some long period of time. She has had 2 prior cardiac catheterizations; one in Arkansas, and a more recent one in Alabama. Overall, she has been felt to not be an operative candidate for Fontan completion, 2 ventricle repair, or transplantation due to her cardiac anatomy and hemodynamics which are all complicated by her sever scoliosis. She is referred to the cardiac catheterization lab for further evaluation of anatomy and hemodynamics and possible intervention if needed.

PROCEDURES PERFORMED:

1. [93531] Congenital right and retrograde left heart catheterization.
2. [37241] Embolization venous
3. CARDIAC ANGIOGRAPHY:
   - A. [+93567] Supra valvular aortogram
   - B. [75825] Inferior vena cava
   - C. [75774, x5] Left lower wedge, right upper wedge, right lower wedge, right lower pulmonary vein, left neck cervical spinal vein
   - D. [75820] Left innominate vein
   - E. [75827] Superior vena cava
   - F. [+93568] Pulmonary artery

PATIENT INFORMATION

Height:	131 cm	Weight:	25 kg	BSA:	0.97 m2

PROCEDURE:

Total intra-procedure time:	4 hours 25 minutes	Total fluoroscopy time:	66 minutes
Total contrast:	92 ml	Total mGy:	339.5

CARDIAC CATHETERIZATION PROCEDURE:

Written informed consent was obtained prior to the procedure, explaining the risks, benefits, and alternatives. The patient was brought to the cardiac catheterization laboratory, Intubated, and placed under general anesthesia. The catheterization sites were prepared and draped in the usual sterile fashion. Using a modified Seldinger technique, and under continuous ultrasound guidance,, a 6 French

[redacted]

sheath was inserted in the right internal jugular vein. A 4 French sheath was then placed in the right femoral vein, and a 4 French sheath in the right femoral artery. The patient was Heparinized and maintained to an ACT > 200 for the remainder of the case.

A 4 French Pigtail catheter was inserted in the RFA and advanced into the proximal descending aorta, however would not advance further around the aortic arch with catheter or wire. An angiogram was performed to the pigtail in order to further delineate the aortic arch anatomy due to the severe scoliosis. 4 French glide catheter was then used with the Wooly wire access ascending aorta further into the left ventricle, where the glide was then exchanged over the wire for the pigtail catheter. This was then used to perform a retrograde left heart pullback, in standard fashion. A 4 French glide catheter was then reinserted through the femoral venous sheath along with the Wooly wire and used to perform hand-injection angiogram of the inferior vena cava. Catheter and wire were then used in an attempt to selectively cannulate pulmonary veins from the left sided atrium, however unsuccessfully. The glide catheter was removed and a 6 French wedge catheter inserted through the right internal jugular venous sheath and used to evaluate the Glenn anatomy, including the right and left pulmonary arteries, and perform selective wedge angiograms a in various segments to help delineate the pulmonary veins in levo phase. Now that the veins were identified the glide catheter was reinserted through the right femoral venous sheath and used to selectively sample the right lower pulmonary vein which proved to be entering the right sided atrium, as were the remainder of the pulmonary veins.

A JR 1.5 catheter and Wooly wire were then used from the right to access left innominate vein. The JR catheter was used to perform hand-injection angiogram within the innominate vein as well as further up the left internal jugular. Catheter and wire were then manipulated to selectively cannulate an additional large venous structure that was entering the innominate vein rightward of the left internal jugular vein, and perform additional angiograms in this position. The JR catheter was then used to secure wire position in the venous collateral with an 0.014 Iron Man wire. A 4 French Flexor sheath was then passed through the 6 French sheath in the neck and advanced into position within the inniminate vein, at the base of the internal jugular. 1 6mm Tyshak balloon was advanced over the wire, positioned within the distal stump of the large vessel and used to gently occlude the vessel, while at the same time monitoring Glenn pressures and systemic arterial pressure. We waited for a full 30 minutes in an attempt to determine if the Glenn was being decompressed by these vessels. During this time a PA angiogram was performed through the right neck. After 30 minutes, the pressures in the Glenn were actually a mean of 2 mmHg lower, systemic arterial pressure slightly improved, and the patient saturations a few points better. With these findings, we decided to possibly occlude the collateral vessels to help with oxygenation. The balloon was removed and as I was attempting to gain better position with the wire, it was noted to pass much more superior (and posterior) than it had previously. Further angiography identified a large vein, as large as the left IJ, to be coursing from the posterior fossa, high in the cranium, and draining down into this spinal plexus of vessels. With that, finding, I decided not to occlude the main stump off the left innominate as that would only force all the blood through all those vessels, down to the IVC, further desaturating the patient and taking a substantial amount of flow away from the Glenn. In retrospect, I suspected this was why the Glenn pressure actually decreased with test occlusion. I then tried to selectively cannulate the numerous spinal plexus vessels that were draining this large vessel posterior to the spine. I was able to successfully cannulate one of the larger branches and deliver a single 0.035-7-5 coil. The remainder of the "branches" would not allow for any of a variety of 0.014 wires to enter, so this was further abandoned. The "vessels" did not behave like true vessels, rather as a collection of extremely small venules that coalesced together.

Attempts were then made to cannulate the large Azygous vein seen decompressing the Glenn, however, as the takeoff was quite high from the neck, this was not possible as the sheath was coming

out of the skin before allowing to be high enough to enter the vessel. Also, throughout the case, was not tolerating much manipulation of the sheath or even touching the right side of the neck without severe vagal reflex, causing her heart rates to drop as low as into the 20-30 bpm range and dropping pressures. I suspect this may have something to do with the severe scoliosis and excessive vagal stimulation.

Finally, I went back to the arterial side and used the pigtail to perform LV and AO angiograms.

The procedure was complete. All catheters and sheaths were removed and hemostasis achieved by direct pressure.

HEMODYNAMICS:

Please see the diagram for more detail. Pertinent findings are a Qp:Qs of only 0.43. Rp is elevated at 5.3 woods units x m2, as is the trans-pulmonary gradient of 11 mmHg, which is a more appropriate measure of pulmonary vascular resistance in patients with passive circulation. The cardiac index is normal at 4.1 L/min/m2. Mixed venous saturations were mostly in the mid 40s in most locations with a step up in the pulmonary arteries to the mid 50s. ***The systemic arterial saturations were consistently in the mid 60s% and always seemed to be about 10% lower than whatever the pulseoximeter was reading.*** The atrial pressure had an A-wave of 8 mmHg, with a dominant V wave pattern of 9-10 mmHg and a mean pressue of 6 mmHg. The ventricular pressure was 96 mmHg with an EDP of only 7 mmHg. The pressure in the aortic root is 85/55 mmHg with the 10 mmHg gradient being from the sub-valvar region rather than the valve itself. Despite the severely tortuous appearance of the arch, there was no gradient to the descending aorta, also at 85/55 mmHg. The mean pressure in the SVC is 17 mmHg with a slight gradient into the RPA at a mean of 15 mmHg. Whereas the RPA tracing was a normal, phasic, venous pattern, the LPA had a purely pulsatile tracing with a pressure of 22/13 mmHg and a mean of 17 mmHg. Wedge pressures were 6 and 5 mmHg on the right and left, respectively. Pulmonary venous saturation obtained directly from the right sided veins was only 92% ad with a pAO2 of only 62.

- WIth test occlusion of the large left sided venous colalteral network, the mean SVC pressure dropped from 17 to 15 mmHg, the systemic arterial saturations improved slightly, though equivocal, and the systemic pressures went up by about 10 mmHg.

ANGIOGRAPHY: (not necessarily in order imaged)

1. **Inferior vena cava:** Straight PA and Lateral. Performed through the Glide catheter by hand injection. Showed the IVC to be left of the spine in the abdomen and would likely cross to the right as it enters the floor of the right atrium if it were not for the severe scoliosis which keeps the IVC to the left of the severe rightward curvature. There are no hepatic vessels that join the IVC. Although this angiogram does not demonstrate their position, they were selectively cannulated with wire and catheter entering the floor of the atrium slightly leftward of the IVC entrance.

2-4. **Left lower, right upper and lower pulmonary wedge angiograms:** Overall the wedge angiograms do NOT demonstrate any pruning of the vasculature and have a fairly normal pulmonary capillary blush. Of note, on the left lower injection, the catheter course from the RIJ courses to the proximal LPA. At this point the left upper lobe is immediately at the terminal end of the straight portion of the vessel on the PA projection, after which, the vessel takes a 270 degree loop cranial, posterior, then caudal to course to the lower lobe. This is likely secondary to the extreme torsion of the scoliosis

pulling the left lung and vessel rightward. **On levophase, all of the pulmonary veins are noted to be widely patent and enter the right sided atrium.**

5. **Right upper pulmonary vein:** Hand injection into the RUPV, demonstrating the course as the catheter was manipulated from the IVC straight up and dorectly rightward into the pulmonary vein.

6-8. **Left innominate vein:** Hand injection through the JR catheter into the proximal left innominate vein. Demonstrates the left internal jugular as well as another large vessel immediately adjacent to the right of it which is draining posteriorly to the spinal vessels via numerous smaller branches. There is no apparent stenosis of the left innominate vein, its connection to the SVC, or the Glenn anastomosis. The antegrade flow across the pulmonary valve prevents any contrast from coursing to the left pulmonary circulation.

- Additional hand injections were performed within the LIJ as well as the adjacent vessel in attempt to clearly determine the drainage pattern from the brain. The final angiogram, immediately following the balloon test occlusion clearly shows this large vessel which originates from somewhere in the posterior fossa and draining down into the innominate vein as not being the internal jugular. The additional vessels which drain to the spine appear to somewhat steal from the drainage of this vessel into the innominate vein whereas the LIJ itself appears to drain into the innominate without any major collaterals.

9. **Superior vena cava:** Performed through the 6 French sheath in the RIJ, during balloon occlusion of the left sided venous collateral system. Shows the Glenn to be widely patent. COnfluent and adequate sized pulmonary arteries. All of the contrast once again courses only to the right pulmonary circulation and none to the left lung. There is clear evidence of the right sided azygous system to remain patent and decompressing the Glenn. The vessel is very large and draining below the diaphragm, then back to the heart.

10. **Left ventricle: Straight PA, Lat 20 cran / 60 LAO, 25 ml @ 17 ml/second at 900psi, 0.4 rise.** This angiogram was performed through the 4 French pigtail catheter placed in the left ventricle. The side by side relationship of the two outflow tracts and aortic and pulmonary valves can be seen on the LAO projection (clip 27 for RV-PA and clip 31 for LV-AO). There is a significant amount of contrast flow across the native pulmonary valve into the pulsatile Glenn circulation. This angiogram also demonstrates the mild subvalvular AS from the dynamic LVOT as compared to the larger diameter valve. The tortuosity of the aorta is seen and described subsequently.

11. **Aortogram: PA 0/0, Lateral biplane 0/90, 25 ml @ 17 ml/s, no rise 900 psi.** This angiogram was performed through the 4 French Pigtail catheter positioned in the aortic root. It demonstrated a very abnormal right sided aorta. There are two aneurysmal areas of the transverse aorta, best appreciated on the frontal projection. **The jump graft is seen on both projections clearly and continues to remain patent and non divided. This is seen causing significant anterior torsion of the proximal descending aorta which is seen as a kinking of the aorta on the lateral projection.** The coronary arteries are seen and appear to originate normally. The right coronary artery is best appreciated on the lateral projection and has at least two large marginal branches. The left coronary artery is seen on both projections and branches normally into the LAD and circumflex arteries.

COMPLICATIONS: Intermittent severe bradycardia with slow ectopic atrial escape as well as ventricular ectopy with manipulations of the sheath in the RIJ. This also occurred simply during holding pressure for hemostasis after the case end. No significant hemodynamic compromise. Although the blood pressure would drop, we simply let up pressure periodically before she would need resuscitation and she would fairly quickly return to sinus rhythm

DIAGNOSES:

1. Heterotaxy with reportedly asplenia
2. Somewhat unbalanced, type C, AVSD currently remains palliated with a pulsatile Glenn
3. Normally related great arteries though side by side angiographically
4. Independent hepatic venous drainage from IVC to the rightward atrium
5. Total anomalous return of the pulmonary venous return to the rightward atrium
6. S/p initial aortic jump graft placement with PA bands and subsequent band takedown, reportedly graft removal, and arch reconstruction, with BDG
7. **Patent and intact jump graft causing anterior deviation and distortion of the distal transverse and proximal descending aorta.** No aortic arch gradient in setting of persistently patent graft.
8. MIld sub valvar aortic stenosis
9. Large network of veno venous collaterals from junction of left IJ to left innominate vein. There is also presence of a large vein draining to this "collateral" connection which originates from the back of the head.
10. Persistently patent and large azygous vein decompressing the Glenn corculation. No stenosis of the Glenn or pulmonary arteries.
11. Persistent antegrade flow across the native pulmonary valve with abundant antegrade flow angiographically.
12. Severe scoliosis. Right edge of spine essentially makes contact with right lateral chest wall.
13. Pulmonary venous desaturation, likely secondary to pulmonary hypoplasia

Assessment/Plan:

Very unfortunate findings in this child today. Evaluating all the information, I do NOT believe her to have a significant amount of pulmonary vascular disease, rather, her elevated trans-pulmonary gradient and borderline PA pressures are believed to be due to the severe scoliosis and pulmonary hypoplasia. She is one of the best examples of bad Glenn physiology I have seen in a long time. The only way to have any estimation of what the true PA pressures is would be for simultaneous test occlusion of 1) the large azygous (which may not be possible as it appears that it may not be a direct connection, rather collaterals that come from higher in the neck and have reconnected), 2) the left sided venous collaterals, and 3) occlusion of the pulmonary valve. All of this would still not be a true reflection of the Glenn as the left sided venous collateral network actually has venous flow from above which needs to be part of the Glenn circulation. All of this would have to be performed through the neck with 3 catheters and today, she did not tolerate even 1 sheath with 1 catheter.

I believe her scoliosis has a large part to play in her hemodynamics as well as her very sensitive vagal reflex in her neck. I would think it would be beneficial to repair her spine initially, though would advise extreme caution in attempting this due to the persistent jump graft which is kinking the aorta. Her cardiovascular structures have had 14 years to slowly adjust to the extreme curvature. Straightening of the spine and forcing cardiovascular structures leftward may cause further kinking of the jump graft insertion site and possibly even intraoperative total obstruction. It is difficult to make a guess on if there would be any aortic gradient if the jump graft were initially divided as it is currently continuing to contribute to antegrade flow. This could possibly be offset by improved curvature of the aorta with release of the tension caused by it, but is only a guess.

[redacted]

Check for updates

REVIEW

Recent advances in cardiac catheterization for congenital heart disease [version 1; referees: 2 approved]

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Abstract

The field of pediatric and adult congenital cardiac catheterization has evolved rapidly in recent years. This review will focus on some of the newer endovascular technological and management strategies now being applied in the pediatric interventional laboratory. Emerging imaging techniques such as three-dimensional (3D) rotational angiography, multi-modal image fusion, 3D printing, and holographic imaging have the potential to enhance our understanding of complex congenital heart lesions for diagnostic or interventional purposes. While fluoroscopy and standard angiography remain procedural cornerstones, improved equipment design has allowed for effective radiation exposure reduction strategies. Innovations in device design and implantation techniques have enabled the application of percutaneous therapies in a wider range of patients, especially those with prohibitive surgical risk. For example, there is growing experience in transcatheter duct occlusion in symptomatic low-weight or premature infants and stent implantation into the right ventricular outflow tract or arterial duct in cyanotic neonates with duct-dependent pulmonary circulations. The application of percutaneous pulmonary valve implantation has been extended to a broader patient population with dysfunctional 'native' right ventricular outflow tracts and has spurred the development of novel techniques and devices to solve associated anatomic challenges. Finally, hybrid strategies, combining cardiosurgical and interventional approaches, have enhanced our capabilities to provide care for those with the most complex of lesions while optimizing efficacy and safety.

Open Peer Review

Referee Status: ✓ ✓

	Invited Referees 1	2
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Author roles: Kang SL: Conceptualization, Validation, Writing – Original Draft Preparation, Writing – Review & Editing; **Benson L**: Conceptualization, Supervision, Validation, Writing – Original Draft Preparation, Writing – Review & Editing

Competing interests: Lee Benson is a proctor for Medtronic (the manufacturer of the Melody™ valve). Sok-Leng Kang has no competing interests to declare.

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Introduction

Over the last three decades, the pediatric cardiac catheterization laboratory has undergone a transformation from primarily a diagnostic tool to a modality for therapy. While this is an ongoing process, a variety of signature advances have taken place, altering management strategies. In the next few pages, we hope to highlight a few of those advances, which have improved the outcomes of children born with congenital lesions of the heart.

Advances in imaging

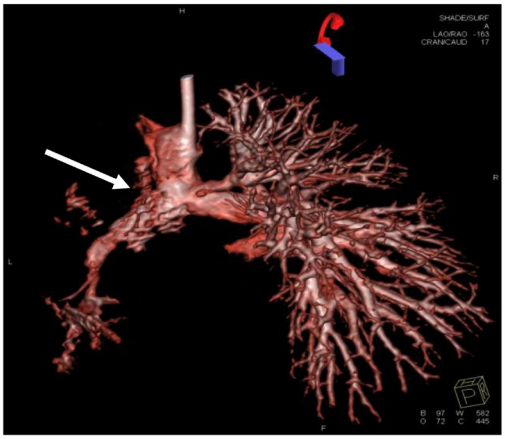
Three-dimensional rotational angiography and fusion imaging techniques

Three-dimensional rotational angiography (3DRA) is an emerging imaging modality that provides tableside, real-time acquisition of 3D volume rendered and cross-sectional images to aid the visualization of complex cardiac anatomy and navigation during diagnostic or interventional procedures[1–4]. Image acquisition is performed by rotation through an arc around the patient of the C-arm of the angiography system, equipped with flat-detector computer tomography (CT)[1,4]. The volume set is used to reconstruct the 3D structures of interest. These images can then be overlaid onto live fluoroscopy for road mapping during therapeutic procedures[2,4]. The so-registered 3D space can also be integrated with 3D datasets from magnetic resonance imaging (MRI) or CT studies.

Diagnostically, the advantage of 3DRA is its ability to profile the complexities of the cardiac anatomy from multiple projections, enhancing the appreciation of the spatial vascular relationships. To this end, several recent studies have reported the additive yield of using 3DRA compared to standard 2D biplane angiography[2,3,5]. For example, in children with cavopulmonary connections, 3DRA can facilitate an understanding of the mechanisms underlying pulmonary artery (PA) stenosis and identify additional discrete proximal lesions at the anastomosis site[5]. Additionally, the relationship of the trachea and bronchi to surrounding cardiovascular structures allows the assessment of airway anomalies and vascular compression frequently encountered in this population with significant implications for clinical management (Figure 1)[6,7].

In the interventional setting, 3DRA is useful for planning and guiding stenting for aortic coarctation and complex PA anatomies, percutaneous pulmonary valve implantation, interventions in the Fontan circulation, or after an atrial switch repair[8–12]. Image fusion from disparate modalities and image overlay during fluoroscopic procedures can provide continuous visualization of the target lesion in any angulation and guidance for catheters, wires, and device placement, enhancing procedural efficiency[1]. As such, shortened procedural time reduces radiation exposure not only to the child but also to laboratory personnel and total contrast dose[13,14]. Current challenges, however, include the inability to gate for cardiac and respiratory motion and the potential for misalignment of multi-modality image registration and distortion of anatomy by rigid interventional equipment. Innovations to address these concerns, including non-rigid registration techniques to compensate for translational motion, and the "triple overlay" technique, allow co-registration of pre-procedural CT or MR angiography and intra-procedural 3DRA and transesophageal echocardiography with live fluoroscopy[2,11].

Panel A



Panel B

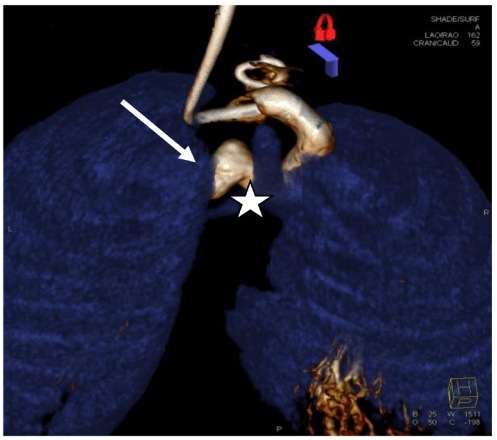


Figure 1. Rotational angiograms. Panel A: a three-dimensional (3D)-rotational angiogram in a child with severe left pulmonary artery stenosis related to the retained ductal stent (arrow). The injection was in the bidirectional cavopulmonary connection. Panel B: this reconstruction from a 3D-rotational angiogram shows the relationships between vascular structures; in this case, left bronchial stenosis (star) is due to vascular compression (arrow) following previous arch reconstruction.

Three-dimensional printing, holography, and stereoscopic imaging for the interventional laboratory

Over the last two decades, catheter-directed interventions for congenital heart lesions have taken on a significant role in patient management. Indeed, many transcatheter interventions have become the standard of care for a number of abnormalities of heart valves, cardiac chambers, and proximal vessels[15]. In this regard, children with complex congenital heart lesions, especially after complex operations, represent a challenge owing to their wide variation in complex morphology. One limiting factor in understanding and planning a percutaneous intervention is the limits of available 3D imaging modalities (MRI and CT) using

images viewed on 2D screens. As such, these 2D representations make it inherently more difficult to appreciate the 3D relationships of cardiac structures unique to a particular intervention. Three-dimensional printing (also known as rapid prototyping, stereolithography, or additive manufacturing), while not a new technology, has only recently been used to fabricate physical models from 3D computerized imaging datasets[16]. While the first medical applications were to produce surgical implants for oral and maxillofacial surgery and prosthetics for orthopedic surgery, the ability to generate a 3D model of complex cardiac anatomy has made this a tool for education, procedural planning, and device testing in both structural and congenital heart disease interventions (Figure 2)[17,18]. The use of these constructed models representing true anatomical relationships has been a promising adjunct in planning a number of interventional procedures allowing for virtual device implantation[19–27]. However, expertise is required to generate these 3D models and the investment in resources is required to establish a 3D printing lab. As such, this technology has been limited thus far to teaching hospitals and research centers. In addition to the creation of physical models to view 3D anatomy, several augmented viewing modalities, using holography or stereoscopic imaging, are being evaluated.

Radiation safety

Radiation safety awareness and techniques to reduce radiation exposure are essential for all procedures but have a special role in children with complex congenital cardiac lesions who often require long, and at times multiple, procedures during their lifetimes[28]. A recent systematic review noted that radiation dose during pediatric cardiac catheterization remains varied and potentially substantial despite a downward trend in recent years[29]. The observed decline in exposure estimates is attributed to improvement in physician awareness of dose optimization in tandem with technological advances[29–31]. However, the variation in radiation exposure amongst centers suggests that further initiatives towards minimizing radiation dose in children to "as low as reasonably achievable" (the ALARA principle) and standardization of practice are warranted[29]. Comparisons between centers also highlight the inadequacy of fluoroscopy time alone as a metric of radiation dose estimate because of differences in programmed fluoroscopy modes, pulse rates, and cine acquisition frame rates[32,33]. Instead, recognition and comparison of actual radiation energy exposure such as dose area product and air kerma in relation to procedure types are more appropriate.

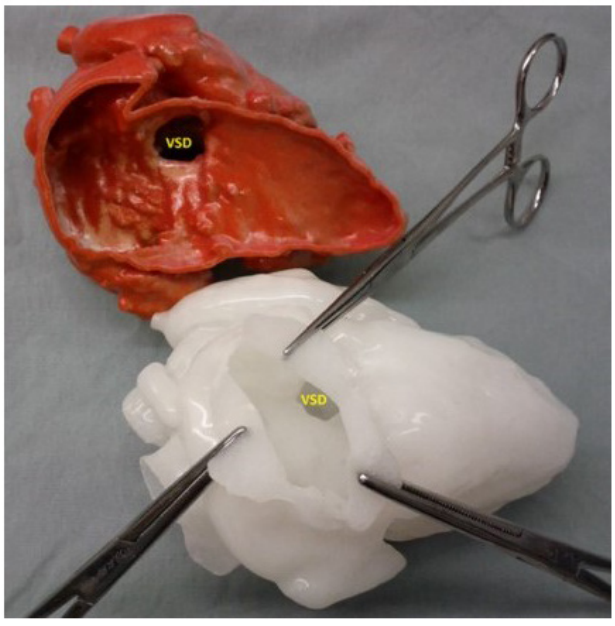


Figure 2. Three-dimensional modeling. The upper image is a three-dimensional model obtained from a magnetic resonance angiogram with the free wall of the right ventricle cut away revealing the location of the ventricular septal defect (VSD); the lower model, made from a soft pliable material, shows the appearance of the VSD as seen through a virtual incision in the right atrium, as would be seen by the surgeon.

Several technical developments have impacted positively on the reduction of radiation exposure, notably the transition to flat panel detector (FPD) technology, which converts X-ray photon energy to digital signals more efficiently than image intensifiers[30,34–36]. Innovation in FPD including increased pixel bit depth and usage of crystalline silicon rather than amorphous silicon combined with novel flat emitter X-ray tubes offers further reduction in radiation dose owing to better digitalization and lower detector noise[37]. Additionally, alternative imaging techniques, such as transesophageal and/or intracardiac echocardiography or fusion of MRI/CT imaging with fluoroscopy, have been successfully used to reduce radiation exposure in various interventional procedures[32,33].

Specific applications

Patent ductus arteriosus in preterm and low-birth-weight infants

A persistent patent ductus arteriosus (PDA) in the preterm newborn is often associated with important comorbidities (ventilator dependence, congestive heart failure, and failure to thrive) and increased mortality[38,39]. Definitive treatment strategies in this group remain debated, as both medical and surgical therapies have attendant risks[40,41]. Percutaneous ductal closure in these small newborns is generally limited by delivery sheath size, procedure-related hemodynamic instability, and the anchoring and retrievability characteristics of current devices[42]. Although manufacturer recommendations for the most commonly used Amplatzer ductal occluders are a weight of 6 kg or more, there is no consensus on the minimum weight limit in practice.

Recently, there has been a growing body of evidence supporting the feasibility and efficacy of percutaneous PDA closure in the premature or small infant under 6 kg. The procedural success rates range from 88 to 94% in those with a median weight of between 2.5 and 6 kg[43–47]. Technical feasibility has also been demonstrated in extremely preterm (under 28 weeks) or very preterm (28 to under 32 weeks) infants under 2.5 kg, with the smallest noted in the literature weighing 755 g, having an uncomplicated closure with a 4 mm Amplatzer vascular plug II device[44,48–52]. The adverse event rate was higher in the under 4 kg group, which was not unexpected given that premature infants

are medically fragile[45,53–55], in keeping with the known inverse event rate related to patient weight at the time of catheterization[56]. The increased risk of embolization is also noteworthy in low-weight and premature infants; hence, the retrievability of the occluder and duct morphology needs careful consideration[46,47]. There were no deaths attributable to the procedure reported in these studies.

Access-related complications, in particular acute arterial injury leading to vascular compromise of the extremity, is a significant concern when catheterizing these low-weight infants[57,58]. Some centers have avoided arterial access by adopting a transvenous-only approach guided by fluoroscopy and echocardiography[33]. The risk of device-induced obstruction to the descending aorta or left PA (LPA) was low in these studies, and the majority tended to resolve over time with growth of the vessels[43–45,52]. However, the severity of LPA stenosis may be underestimated because of outflow diversion to the right lung. Studies using scintigraphic perfusion imaging have shown evidence of decreased perfusion of the left lung after PDA occlusion, but the long-term clinical impact is unknown[59,60]. More recently, the introduction of a new microvascular plug (MVP™, Medtronic Inc.) for PDA closure in the extremely premature infant has shown promising results[61,62]. Advantages of the device include delivery through a microcatheter (<3 F), a flexible delivery cable, and diskless device design which minimizes the risk of device protrusion to the aorta or LPA.

The role of right ventricular flow tract stenting in symptomatic neonates with Fallot's tetralogy

Primary repair in infants with tetralogy of Fallot (TOF) with good-sized confluent central PAs is the standard of care with excellent outcomes. However, the ideal management strategy for the symptomatic (cyanotic) neonate with TOF and one or more adverse risk factors, such as prematurity, low birth weight, unfavorable PA anatomy, or pulmonary atresia or non-cardiac co-morbidities, remains debated[63,64]. Conventional palliation with the Blalock–Taussig (BT) shunt in this high-risk group can result in complications such as shunt stenosis or occlusion, distortion and differential growth of the PAs, and pulmonary overcirculation[65–67]. Balloon dilation of the pulmonary valve alone has inconsistent benefit owing to frequently associated muscular obstruction in the infundibulum. Stent implantation to enlarge the right ventricular outflow tract (RVOT) is now increasingly used as a bridging procedure to palliate the cyanosis and promote PA growth (Figure 3).

Several small studies have documented favorable outcomes of RVOT stents in isolation since 2008, focusing on technical aspects and acute outcomes[65,67–72]. More recently, Sandoval and colleagues provided comparative data on 180 infants with TOF who underwent RVOT stenting, early primary repair, or standard repair over 3 months of age[63]. While the RVOT stented group had worse PA anatomy and clinical factors compared to the early intervention group, final clinical outcomes were comparable to

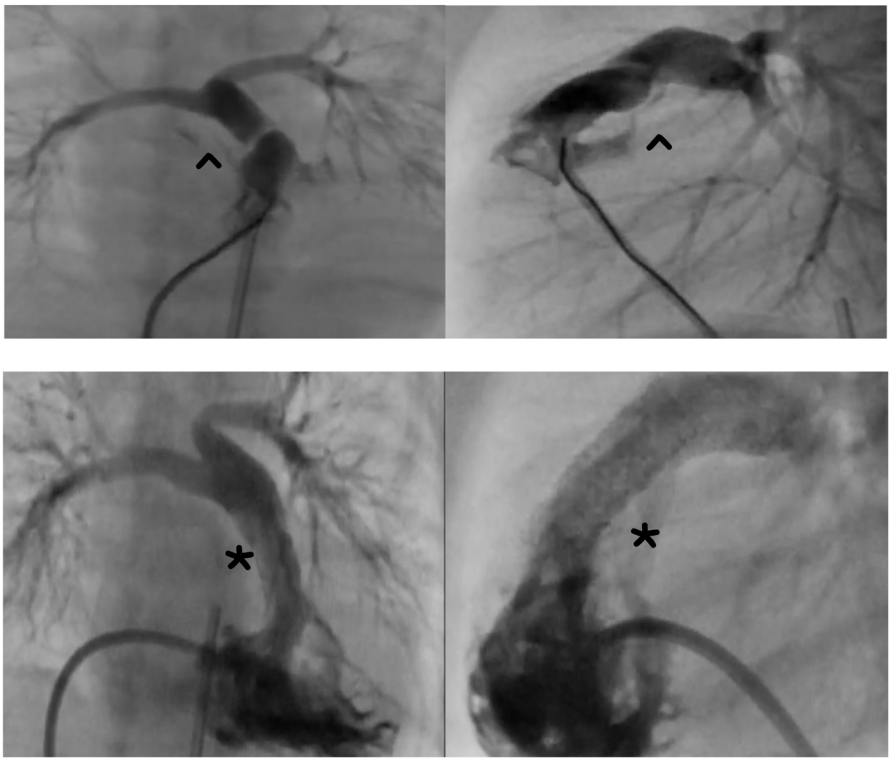


Figure 3. Hypoplastic pulmonary arteries and outflow stent. Upper panels from right ventricular angiograms show the obstructive right ventricular outflow tract (^) in a newborn with Fallot's tetralogy. The lower panels show stent implantation (*) to enlarge the outflow and improve pulmonary blood flow, relieving the cyanosis.

infants who underwent standard repair. RVOT stenting resulted in relief of cyanosis and PA growth, allowing time for somatic growth and resolution of non-cardiac comorbidities until definitive repair[63,71]. Quandt and colleagues compared outcomes of RVOT stenting and BT shunts, reporting better PA growth and hence shorter duration of palliation before complete repair after stenting. The RVOT stent group also had a shorter intensive care unit (ICU) and hospital stay, whilst mortality until surgical repair was similar in both groups[73,74].

Several disadvantages of RVOT stenting exist, notably the technical complexity and risk of inadvertent perforation of the RVOT in low-weight infants with membranous pulmonary valve (PV) atresia, who undergo radiofrequency perforation to open the RVOT prior to stenting[63]. A hybrid perventricular route may offer a more controlled approach to PV perforation and RVOT stent placement while avoiding cardiopulmonary bypass and femoral vessel complications and has been reported in a few case series, including a neonate as small as 1.3 kg[75,76]. There is a high re-intervention rate for additional stent implantation (if the initial implant did not cover the full extent of the outflow tract) and PA dilation, although in this subset of infants the PAs are hypoplastic and require repeat procedures to encourage growth[72].

Previous retrospective comparisons of early primary repair versus a staged repair with a BT shunt in symptomatic neonatal TOF showed equivalent mortality and outcomes, although shunted patients had a greater likelihood of avoiding a transannular patch at the time of repair[66]. However, there are currently no published data comparing the outcomes of early primary repair, BT shunt, and RVOT stent. Ultimately, the preferred palliative option, whether surgical or percutaneous, is likely to depend on local expertise, patient factors, and clinical condition at the time of intervention.

The role of ductal stenting in the duct-dependent pulmonary circulation

While ductal stenting (DS) has been applied for well over two decades, the procedure has gained a wider acceptance as a palliative option for the cyanotic infant with a duct-dependent pulmonary circulation deemed unsuitable for primary repair (Figure 4)[77,78]. The technique has been applied in various lesions, either leading to a biventricular repair or destined for univentricular palliation[77,79,80]. Apart from avoidance of surgery and shunt-related adverse events, maintaining duct patency has been shown to promote significant and uniform PA growth compared to a BT shunt alone[77,81,82]. The effective patency of the stented duct or PA growth potential was not significantly different between cases with a single source (ductal) of pulmonary blood flow or those with multiple sources of pulmonary blood flow[77,81]. In a few retrospective reports, DS has performed favorably and offered early survival advantage with improved hemodynamic stability compared to a BT shunt but with an increased likelihood of re-intervention prior to next-stage surgery[78–80,83].

One major disadvantage of DS is progressive neointimal proliferation and consequent endoluminal narrowing with an unpredictable timecourse[82]. The adequacy of palliation provided by DS, however, depends on the clinical setting. When DS is performed after RVOT intervention for critical PS or PA, short-term patency is usually adequate. In other conditions, such as univentricular palliation prior to a Glenn procedure or biventricular repair of complex anatomy, a longer lifespan of the stented duct from 6 to 12 months is desirable to allow somatic growth[82]. The impact of drug-eluting stents used in adult coronary artery disease has been investigated in this setting. Sirolimus-eluting stents implanted in the porcine arterial duct had higher patency rates compared with bare-metal stents with anti-proliferative action on ductal smooth muscle[84]. Early trials of drug-eluting stents in neonates showed no clinically significant

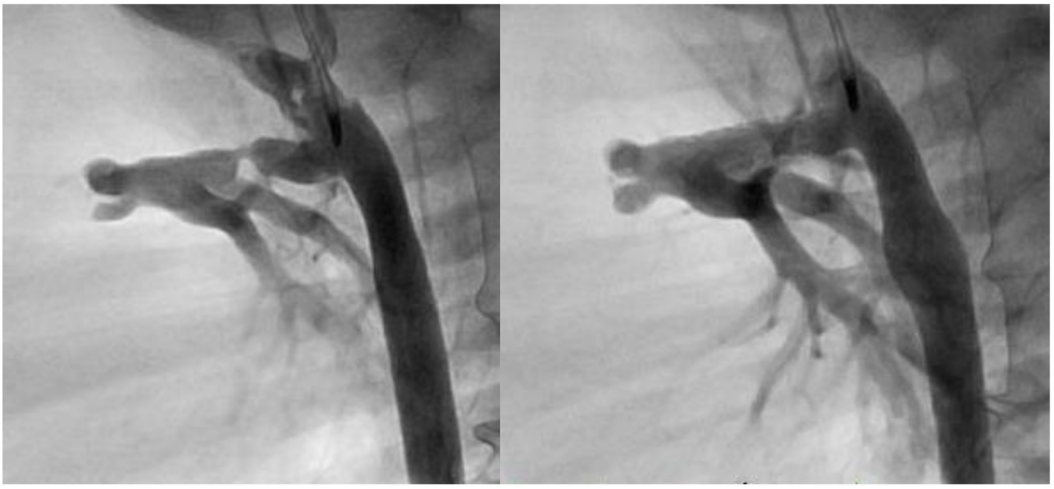


Figure 4. Ductal stent. The left panel details a stenotic arterial duct as it connects with the main pulmonary artery in a child with ductal-dependent pulmonary circulation. The right panel shows the appearance of the duct after the placement of a ductal stent to support the pulmonary blood flow.

adverse outcomes; however, their clinical efficacy has yet to be evaluated[85].

Percutaneous pulmonary valve implantation in the right ventricle to pulmonary artery conduit and native outflow tract

Percutaneous pulmonary valve implantation (PPVI) is a recognized alternative to surgical pulmonary valve replacement in selected patients with dysfunctional synthetic right ventricle-to-PA (RV-PA) conduits, bioprosthetic pulmonary valves, or homografts. Currently available percutaneous pulmonary valves include the Melody™ valve (Medtronic, Minneapolis, MN), which has a maximum outer diameter of 24 mm, and the Edwards Sapien™ valve system (Edwards Lifesciences Corp), with outer diameters of up to 29 mm.

Multiple studies have reported excellent procedural success and clinical efficacy of the Melody™ valve with thus far up to 7 years of follow up[86–89]. Published experience on the Sapien™ valve in the pulmonary position is comparatively less, although there are robust data supporting its use in the aortic position in high-risk or elderly patients with acquired aortic stenosis[90,91]. Early results of the COMPASSION (COngenital Multicenter Trial of Pulmonic VAlve Regurgitation Studying the SAPIEN Interventional THV) trial reported a good safety and efficacy profile, and several small studies have demonstrated comparable results to the Melody™ valve in the medium term[92–95]. With both the Melody™ and the Sapien™ valve, primary valve failure was rare and overall complication rates were low (0–5%) with reported mortality rates of up to 2%[86–89,92–95]. Coronary compression due to expansion of the implant occurred in less than 1% of cases and was significantly associated with an abnormal coronary artery course. Pre-implantation coronary artery compression testing is mandatory to avoid this potentially catastrophic complication[51,96]. Stent fractures which occurred with the Melody™ valve in the early experience have been addressed with routine RVOT pre-device implant stenting. The incidence of infective endocarditis after PPVI is estimated at approximately 3% per year with the Melody™ valve, whilst a lower incidence with the Sapien™ valve is suggested[97].

More recently, the application of both Melody™ and Sapien™ valves in the so-called "native" RVOT have been described in case reports and case series[98–101]. "Native" refers to the non-operated RVOT or one having a previous balloon pulmonary valvuloplasty/valvectomy for pulmonary stenosis or previous transannular patch repair for correction of TOF, which constitutes the vast majority of patients with a dysfunctional RVOT. The potentially distensible tissue in the contractile "native'" RVOT and the absence of a pre-existing "scaffold" such as in a conduit or bioprosthetic valve presents potential problems with implant valve stability, a paravalvular leak, or framework fracture. To overcome such issues, several techniques of pre-stenting the RVOT have been developed to create a "landing zone" for the selected transcatheter valve[11]. Implantation of the Melody™ valve in the branch PAs has also been described[102].

For the dilated "native" RVOT often encountered after a transannular patch repair for TOF, hybrid approaches of RVOT plication through a limited sternotomy or thoracotomy and subsequent percutaneous or perventricular delivery of the Melody™ valve have been explored[103–105]. Paralleling the limited application of these first-generation PPVIs in the "native" RVOT is the development of self-expanding percutaneous valves such as the Harmony™ valve (Medtronic Inc, Minneapolis, USA), the Venus P™ valve (Medtech, Shenzhen, China), and a rendezvous Alterra™ stent (Edwards Lifesciences) as a landing zone for a Sapien™ valve[106–111]. The flared ends of these systems are designed to provide stability in the large pulsatile outflows, whilst the self-expanding nitinol frames adapt to various outflow anatomies (Figure 5). Other concepts in development (in animal studies) include implantation of expandable conduits in the RVOT that can be dilated sequentially with growth or replaced with a percutaneous valve[112–114].

Transcatheter tricuspid and mitral valve replacement

The rapidly expanding transcatheter heart valve technology has been applied to the treatment of atrioventricular valve dysfunction with a growing experience in the tricuspid valve position. Implantation of percutaneous valves into degenerated bioprostheses (valve-in-valve, VIV) or into annuloplasty rings (valve-in-ring, VIR) is an attractive alternative to surgery in the high-risk and often-debilitated patient with acquired or congenital cardiac disease[115–118]. A large multicenter experience of tricuspid VIV implantation has recently been published, using both the Melody™ and the Sapien™ valves with favorable outcomes at more than a year follow up[117]. The majority of patients were relatively young (median age 40 years), and over half had tricuspid valve disease associated with congenital heart disease including Ebstein's anomaly, intrinsic tricuspid valve (TV) abnormalities, or TV injury related to previous surgery or catheter intervention. There was an excellent procedural success of 99%, with significant improvements in the degree of regurgitation or stenosis and symptomatic improvement. The 30-day mortality was 3.3%, and estimated freedom from tricuspid re-intervention at 1 year was 83%. The extension of the tricuspid VIV concept to VIR is considerably more challenging owing to larger diameters and geometric variability of surgically placed rings. Although this approach is technically feasible and clinically effective in reducing tricuspid regurgitation, paravalvular regurgitation has been common[119,120].

Transcatheter mitral valve replacement remains in its early clinical stages[121]. Mitral VIV implantation is more difficult to accomplish owing to difficulty in coaxial alignment of the percutaneous valve within the existing valve. The majority of implantations are performed using a direct transapical approach with the larger diameter Sapien™ valves[122–124]. A transvenous, transseptal technique utilizing an apical rail to facilitate the delivery of Melody™ valve into the dysfunctional mitral prosthesis has also been described[118]. To date, the results of mitral VIV implantations within a high-pressure hemodynamic environment have shown

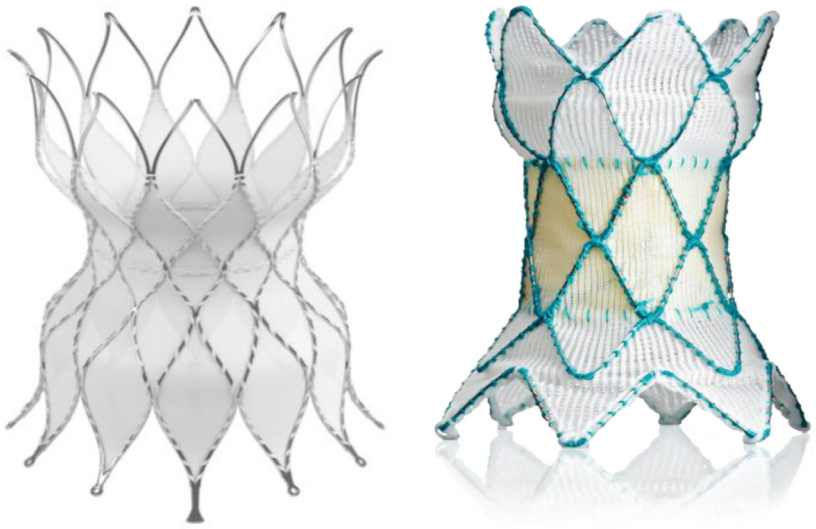


Figure 5. Percutaneous pulmonary valves for the large outflow tract. The left panel is a picture of the Edwards Alterra™ stent, designed to be placed in the right ventricular outflow tract in patients after transannular patch repair for Fallot's tetralogy. The nitinol stent hosing (seen in the photo) provides a landing zone for a 29 mm Sapien™ valve. The right panel is a photo of Medtronic's Harmony™ valve. This valve stent design has porcine pericardial valve leaflets sewn into the nitinol framework.

good valve performance with low transvalvular gradients and low rates of paravalvular regurgitation in the short term[122–125]. Applying the Sapien™ valve to surgically implanted ring (VIR) is even less appealing because of incomplete sealing of the variable and D-shaped annuloplasty rings and the risk of causing left ventricular outflow tract obstruction. Recent successful case reports of the Melody™ VIR technique, however, offer significant promise[126,127]. Compared to Sapien™ valves, the Melody™ valve has a longer stent that is covered throughout its length, which provides good sealing at the subvalvar level[128]. Transcatheter valve-in-native-ring for calcified native mitral stenosis has also been reported in high-risk adult patients[129–131].

In infants and children with severe mitral stenosis or regurgitation associated with congenital heart disease, the Melody™ valve as a surgical implant has shown promising results after failed attempts at primary mitral valve repair[132,133]. The Melody™ valve has the potential for future expansions with child growth and is a viable option in the lack of appropriately sized mitral valve prostheses in these small children; however, further study is required to determine longer-term durability and safety.

Conclusion

Recent years have seen the rapid development of imaging and device technologies as well as percutaneous interventions in a variety of congenital cardiac lesions, with an increased application of percutaneous therapies to a broad range of patients. It is important, however, to remember that long-term outcomes for many such novel interventions are lacking, and rigorous prospective studies and data surveillance are required to determine safety and efficacy profiles before these become standard of care. Future innovations and growing experience in this field, in addition to increased collaboration between surgeons and interventionists, will undoubtedly continue to expand transcatheter options in the management of congenital heart disease, further improving the quality of life for the child and adult with congenital heart disease. This short review touches on some of the highlights that have been developed over the last decade. A number of percutaneous procedures (not mentioned) have become standard of care in many centers, and with continued diligence we can anticipate the continued application of such therapies.

Competing interests

Lee Benson is a proctor for Medtronic (the manufacturer of the Melody™ valve). Sok-Leng Kang has no competing interests to declare.

Grant information

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References

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1. F Glöckler M, Halbfaß J, Koch A, *et al.*: **Multimodality 3D-roadmap for cardiovascular interventions in congenital heart disease--a single-center, retrospective analysis of 78 cases.** *Catheter Cardiovasc Interv.* 2013; **82**(3): 436–42.
PubMed Abstract | Publisher Full Text | F1000 Recommendation
2. Fagan TE, Truong UT, Jone PN, *et al.*: **Multimodality 3-dimensional image integration for congenital cardiac catheterization.** *Methodist Debakey Cardiovasc J.* 2014; **10**(2): 68–76.
PubMed Abstract | Free Full Text
3. Glatz AC, Zhu X, Gillespie MJ, *et al.*: **Use of angiographic CT imaging in the cardiac catheterization laboratory for congenital heart disease.** *JACC Cardiovasc Imaging.* 2010; **3**(11): 1149–57.
PubMed Abstract | Publisher Full Text
4. Pedra CA, Fleishman C, Pedra SF, *et al.*: **New imaging modalities in the catheterization laboratory.** *Curr Opin Cardiol.* 2011; **26**(2): 86–93.
PubMed Abstract | Publisher Full Text
5. Berman DP, Khan DM, Gutierrez Y, *et al.*: **The use of three-dimensional rotational angiography to assess the pulmonary circulation following cavo-pulmonary connection in patients with single ventricle.** *Catheter Cardiovasc Interv.* 2012; **80**(6): 922–30.
PubMed Abstract | Publisher Full Text
6. Borik S, Volodina S, Chaturvedi R, *et al.*: **Three-dimensional rotational angiography in the assessment of vascular and airway compression in children after a cavopulmonary anastomosis.** *Pediatr Cardiol.* 2015; **36**(5): 1083–9.
PubMed Abstract | Publisher Full Text
7. Truong UT, Fagan TE, Deterding R, *et al.*: **Use of rotational angiography in assessing relationship of the airway to vasculature during cardiac catheterization.** *Catheter Cardiovasc Interv.* 2015; **86**(6): 1068–77.
PubMed Abstract | Publisher Full Text
8. Noble S, Miró J, Yong G, *et al.*: **Rapid pacing rotational angiography with three-dimensional reconstruction: use and benefits in structural heart disease interventions.** *EuroIntervention.* 2009; **5**(2): 244–9.
PubMed Abstract | Publisher Full Text
9. Fagan T, Kay J, Carroll J, *et al.*: **3-D guidance of complex pulmonary artery stent placement using reconstructed rotational angiography with live overlay.** *Catheter Cardiovasc Interv.* 2012; **79**(3): 414–21.
PubMed Abstract | Publisher Full Text
10. Stenger A, Dittrich S, Glöckler M: **Three-Dimensional Rotational Angiography in the Pediatric Cath Lab: Optimizing Aortic Interventions.** *Pediatr Cardiol.* 2016; **37**(3): 528–36.
PubMed Abstract | Publisher Full Text
11. Wilson W, Osten M, Benson L, *et al.*: **Evolving trends in interventional cardiology: endovascular options for congenital disease in adults.** *Can J Cardiol.* 2014; **30**(1): 75–86.
PubMed Abstract | Publisher Full Text
12. Goreczny S, Moszura T, Dryzek P, *et al.*: **Three-dimensional image fusion guidance of percutaneous pulmonary valve implantation to reduce radiation exposure and contrast dose: A comparison with traditional two-dimensional and three-dimensional rotational angiographic guidance.** *Neth Heart J.* 2017; **25**(2): 91–9.
PubMed Abstract | Publisher Full Text | Free Full Text
13. Manica JL, Borges MS, Medeiros RF, *et al.*: **A comparison of radiation dose between standard and 3D angiography in congenital heart disease.** *Arq Bras Cardiol.* 2014; **103**(2): 131–7.
PubMed Abstract | Publisher Full Text | Free Full Text
14. Peters M, Krings G, Koster M, *et al.*: **Effective radiation dosage of three-dimensional rotational angiography in children.** *Europace.* 2015; **17**(4): 611–6.
PubMed Abstract | Publisher Full Text
15. Mullins CE: **Cardiac Catheterization in Congenital Heart Disease: Pediatric and Adult**. Blackwell Futura. 2006.
Publisher Full Text
16. Noecker AM, Chen JF, Zhou Q, *et al.*: **Development of patient-specific three-dimensional pediatric cardiac models.** *ASAIO J.* 2006; **52**(3): 349–53.
PubMed Abstract | Publisher Full Text
17. D'Urso PS, Barker TM, Earwaker WJ, *et al.*: **Stereolithographic biomodelling in cranio-maxillofacial surgery: a prospective trial.** *J Craniomaxillofac Surg.* 1999; **27**(1): 30–7.
PubMed Abstract | Publisher Full Text
18. Hananouchi T, Saito M, Koyama T, *et al.*: **Tailor-made surgical guide based on rapid prototyping technique for cup insertion in total hip arthroplasty.** *Int J Med Robot.* 2009; **5**(2): 164–9.
PubMed Abstract | Publisher Full Text
19. Ripley B, Kelil T, Cheezum MK, *et al.*: **3D printing based on cardiac CT assists anatomic visualization prior to transcatheter aortic valve replacement.** *J Cardiovasc Comput Tomogr.* 2016; **10**(1): 28–36.
PubMed Abstract | Publisher Full Text | Free Full Text
20. Giannopoulos AA, Mitsouras D, Yoo SJ, *et al.*: **Applications of 3D printing in cardiovascular diseases.** *Nat Rev Cardiol.* 2016; **13**(12): 701–18.
PubMed Abstract | Publisher Full Text
21. Valverde I, Gomez G, Coserria JF, *et al.*: **3D printed models for planning endovascular stenting in transverse aortic arch hypoplasia.** *Catheter Cardiovasc Interv.* 2015; **85**(6): 1006–12.
PubMed Abstract | Publisher Full Text
22. Olivieri L, Krieger A, Chen MY, *et al.*: **3D heart model guides complex stent angioplasty of pulmonary venous baffle obstruction in a Mustard repair of D-TGA.** *Int J Cardiol.* 2014; **172**(2): e297–8.
PubMed Abstract | Publisher Full Text
23. F Cantinotti M, Valverde I, Kutty S: **Three-dimensional printed models in congenital heart disease.** *Int J Cardiovasc Imaging.* 2017; **33**(1): 137–44.
PubMed Abstract | Publisher Full Text | F1000 Recommendation
24. Chaowu Y, Hua L, Xin S: **Three-Dimensional Printing as an Aid in Transcatheter Closure of Secundum Atrial Septal Defect With Rim Deficiency: *In Vitro* Trial Occlusion Based on a Personalized Heart Model.** *Circulation.* 2016; **133**(17): e608–10.
PubMed Abstract | Publisher Full Text
25. Kim MS, Hansgen AR, Wink O, *et al.*: **Rapid prototyping: a new tool in understanding and treating structural heart disease.** *Circulation.* 2008; **117**(18): 2388–94.
PubMed Abstract | Publisher Full Text
26. Dankowski R, Baszko A, Sutherland M, *et al.*: **3D heart model printing for preparation of percutaneous structural interventions: description of the technology and case report.** *Kardiol Pol.* 2014; **72**(6): 546–51.
PubMed Abstract | Publisher Full Text
27. Lazkani M, Bashir F, Brady K, *et al.*: **Postinfarct VSD management using 3D computer printing assisted percutaneous closure.** *Indian Heart J.* 2015; **67**(6): 581–5.
PubMed Abstract | Publisher Full Text | Free Full Text
28. Glatz AC, Purrington KS, Klinger A, *et al.*: **Cumulative exposure to medical radiation for children requiring surgery for congenital heart disease.** *J Pediatr.* 2014; **164**(4): 789–794.e10.
PubMed Abstract | Publisher Full Text
29. F Gould R, McFadden SL, Hughes CM: **Radiation dose in paediatric cardiac catheterisation: A systematic literature review.** *Radiography (Lond).* 2017; **23**(4): 358–64.
PubMed Abstract | Publisher Full Text | F1000 Recommendation
30. Nicholson GT, Gao K, Kim SI, *et al.*: **Direct physician reporting is associated with reductions in radiation exposure in pediatric cardiac catheterizations.** *Catheter Cardiovasc Interv.* 2015; **86**(5): 834–40.
PubMed Abstract | Publisher Full Text
31. Justino H: **The ALARA concept in pediatric cardiac catheterization: techniques and tactics for managing radiation dose.** *Pediatr Radiol.* 2006; **36**(Suppl 2): 146–53.
PubMed Abstract | Publisher Full Text | Free Full Text
32. Glatz AC, Patel A, Zhu X, *et al.*: **Patient radiation exposure in a modern, large-volume, pediatric cardiac catheterization laboratory.** *Pediatr Cardiol.* 2014; **35**(5): 870–8.
PubMed Abstract | Publisher Full Text
33. F Ghelani SJ, Glatz AC, David S, *et al.*: **Radiation dose benchmarks during cardiac catheterization for congenital heart disease in the United States.** *JACC Cardiovasc Interv.* 2014; **7**(9): 1060–9.
PubMed Abstract | Publisher Full Text | F1000 Recommendation
34. Verghese GR, McElhinney DB, Strauss KJ, *et al.*: **Characterization of radiation exposure and effect of a radiation monitoring policy in a large volume pediatric cardiac catheterization lab.** *Catheter Cardiovasc Interv.* 2012; **79**(2): 294–301.
PubMed Abstract | Publisher Full Text
35. Harbron RW, Pearce MS, Salotti JA, *et al.*: **Radiation doses from fluoroscopically guided cardiac catheterization procedures in children and young adults in the United Kingdom: a multicentre study.** *Br J Radiol.* 2015; **88**(1048): 20140852.
PubMed Abstract | Publisher Full Text
36. Smith BG, Tibby SM, Qureshi SA, *et al.*: **Quantification of temporal, procedural, and hardware-related factors influencing radiation exposure during pediatric cardiac catheterization.** *Catheter Cardiovasc Interv.* 2012; **80**(6): 931–6.
PubMed Abstract | Publisher Full Text
37. F Lamers LJ, Moran M, Torgeson JN, *et al.*: **Radiation Reduction Capabilities of a Next-Generation Pediatric Imaging Platform.** *Pediatr Cardiol.* 2016; **37**(1): 24–9.
PubMed Abstract | Publisher Full Text | F1000 Recommendation
38. Sellmer A, Bjerre JV, Schmidt MR, *et al.*: **Morbidity and mortality in preterm neonates with patent ductus arteriosus on day 3.** *Arch Dis Child Fetal Neonatal Ed.* 2013; **98**(6): F505–10.
PubMed Abstract | Publisher Full Text
39. Noori S, McCoy M, Friedlich P, *et al.*: **Failure of ductus arteriosus closure is associated with increased mortality in preterm infants.** *Pediatrics.* 2009;

123(1): e138–44.
PubMed Abstract | Publisher Full Text

40. Heuchan AM, Clyman RI: **Managing the patent ductus arteriosus: current treatment options.** *Arch Dis Child Fetal Neonatal Ed.* 2014; **99**(5): F431–6.
PubMed Abstract | Publisher Full Text

41. Hamrick SE, Hansmann G: **Patent ductus arteriosus of the preterm infant.** *Pediatrics.* 2010; **125**(5): 1020–30.
PubMed Abstract | Publisher Full Text

42. Abadir S, Boudjemline Y, Rey C, *et al.*: **Significant persistent ductus arteriosus in infants less or equal to 6 kg: percutaneous closure or surgery?** *Arch Cardiovasc Dis.* 2009; **102**(6–7): 533–40.
PubMed Abstract | Publisher Full Text

43. Backes CH, Cheatham SL, Deyo GM, *et al.*: **Percutaneous Patent Ductus Arteriosus (PDA) Closure in Very Preterm Infants: Feasibility and Complications.** *J Am Heart Assoc.* 2016; **5**(2): pii: e002923.
PubMed Abstract | Free Full Text

44. Baspinar O, Sahin DA, Sulu A, *et al.*: **Transcatheter closure of patent ductus arteriosus in under 6 kg and premature infants.** *J Interv Cardiol.* 2015; **28**(2): 180–9.
PubMed Abstract | Publisher Full Text

45. Dimas VV, Takao C, Ing FF, *et al.*: **Outcomes of transcatheter occlusion of patent ductus arteriosus in infants weighing ≤ 6 kg.** *JACC Cardiovasc Interv.* 2010; **3**(12): 1295–9.
PubMed Abstract | Publisher Full Text

46. Kang SL, Jivanji S, Mehta C, *et al.*: **Outcome after transcatheter occlusion of patent ductus arteriosus in infants less than 6 kg: A national study from United Kingdom and Ireland.** *Catheter Cardiovasc Interv.* 2017; **90**(7): 1135–44.
PubMed Abstract | Publisher Full Text

47. F Backes CH, Kennedy KF, Locke M, *et al.*: **Transcatheter Occlusion of the Patent Ductus Arteriosus in 747 Infants <6 kg: Insights From the NCDR IMPACT Registry.** *JACC Cardiovasc Interv.* 2017; **10**(17): 1729–37.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

48. Zahn EM, Nevin P, Simmons C, *et al.*: **A novel technique for transcatheter patent ductus arteriosus closure in extremely preterm infants using commercially available technology.** *Catheter Cardiovasc Interv.* 2015; **85**(2): 240–8.
PubMed Abstract | Publisher Full Text

49. Bentham J, Meur S, Hudsmith L, *et al.*: **Echocardiographically guided catheter closure of arterial ducts in small preterm infants on the neonatal intensive care unit.** *Catheter Cardiovasc Interv.* 2011; **77**(3): 409–15.
PubMed Abstract | Publisher Full Text

50. Francis E, Singhi AK, Lakshmivenkateshaiah S, *et al.*: **Transcatheter occlusion of patent ductus arteriosus in pre-term infants.** *JACC Cardiovasc Interv.* 2010; **3**(5): 550–5.
PubMed Abstract | Publisher Full Text

51. Roberts P, Adwani S, Archer N, *et al.*: **Catheter closure of the arterial duct in preterm infants.** *Arch Dis Child Fetal Neonatal Ed.* 2007; **92**(4): F248–50.
PubMed Abstract | Publisher Full Text | Free Full Text

52. F Zahn EM, Peck D, Phillips A, *et al.*: **Transcatheter Closure of Patent Ductus Arteriosus in Extremely Premature Newborns: Early Results and Midterm Follow-Up.** *JACC Cardiovasc Interv.* 2016; **9**(23): 2429–37.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

53. Pass RH, Hijazi Z, Hsu DT, *et al.*: **Multicenter USA Amplatzer patent ductus arteriosus occlusion device trial: initial and one-year results.** *J Am Coll Cardiol.* 2004; **44**(3): 513–9.
PubMed Abstract | Publisher Full Text

54. Liddy S, Oslizlok P, Walsh KP: **Comparison of the results of transcatheter closure of patent ductus arteriosus with newer Amplatzer devices.** *Catheter Cardiovasc Interv.* 2013; **82**(2): 253–9.
PubMed Abstract | Publisher Full Text

55. Gruenstein DH, Ebeid M, Radtke W, *et al.*: **Transcatheter closure of patent ductus arteriosus using the AMPLATZER™ duct occluder II (ADO II).** *Catheter Cardiovasc Interv.* 2017; **89**(6): 1118–28.
PubMed Abstract | Publisher Full Text

56. Backes CH, Cua C, Kreutzer J, *et al.*: **Low weight as an independent risk factor for adverse events during cardiac catheterization of infants.** *Catheter Cardiovasc Interv.* 2013; **82**(5): 786–94.
PubMed Abstract | Publisher Full Text

57. Glatz AC, Shah SS, McCarthy AL, *et al.*: **Prevalence of and risk factors for acute occlusive arterial injury following pediatric cardiac catheterization: a large single-center cohort study.** *Catheter Cardiovasc Interv.* 2013; **82**(3): 454–62.
PubMed Abstract | Publisher Full Text

58. Brotschi B, Hug MI, Kretschmar O, *et al.*: **Incidence and predictors of cardiac catheterisation-related arterial thrombosis in children.** *Heart.* 2015; **101**(12): 948–53.
PubMed Abstract | Publisher Full Text

59. Kharouf R, Heitschmidt M, Hijazi ZM: **Pulmonary perfusion scans following transcatheter patent ductus arteriosus closure using the Amplatzer devices.** *Catheter Cardiovasc Interv.* 2011; **77**(5): 664–70.
PubMed Abstract | Publisher Full Text

60. Sreeram N, Tofeig M, Walsh KP, *et al.*: **Lung perfusion studies after detachable coil occlusion of persistent arterial duct.** *Heart.* 1999; **81**(6): 642–5.
PubMed Abstract | Publisher Full Text | Free Full Text

61. F Wang-Giuffre EW, Breinholt JP: **Novel use of the medtronic micro vascular plug for PDA closure in preterm infants.** *Catheter Cardiovasc Interv.* 2017; **89**(6): 1059–65.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

62. F Sathanandam S, Justino H, Waller BR 3rd, *et al.*: **Initial clinical experience with the Medtronic Micro Vascular Plug™ in transcatheter occlusion of PDAs in extremely premature infants.** *Catheter Cardiovasc Interv.* 2017; **89**(6): 1051–8.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

63. Sandoval JP, Chaturvedi RR, Benson L, *et al.*: **Right Ventricular Outflow Tract Stenting in Tetralogy of Fallot Infants With Risk Factors for Early Primary Repair.** *Circ Cardiovasc Interv.* 2016; **9**(12): pii: e003979.
PubMed Abstract | Publisher Full Text

64. Stumper O, Ramchandani B, Noonan P, *et al.*: **Stenting of the right ventricular outflow tract.** *Heart.* 2013; **99**(21): 1603–8.
PubMed Abstract | Publisher Full Text

65. Dohlen G, Chaturvedi RR, Benson LN, *et al.*: **Stenting of the right ventricular outflow tract in the symptomatic infant with tetralogy of Fallot.** *Heart.* 2009; **95**(2): 142–7.
PubMed Abstract | Publisher Full Text

66. Kanter KR, Kogon BE, Kirshbom PM, *et al.*: **Symptomatic neonatal tetralogy of Fallot: repair or shunt?** *Ann Thorac Surg.* 2010; **89**(3): 858–63.
PubMed Abstract | Publisher Full Text

67. Castleberry CD, Gudausky TM, Berger S, *et al.*: **Stenting of the right ventricular outflow tract in the high-risk infant with cyanotic teratology of Fallot.** *Pediatr Cardiol.* 2014; **35**(3): 423–30.
PubMed Abstract | Publisher Full Text

68. Quandt D, Ramchandani B, Bhole V, *et al.*: **Initial experience with the cook formula balloon expandable stent in congenital heart disease.** *Catheter Cardiovasc Interv.* 2015; **85**(2): 259–66.
PubMed Abstract | Publisher Full Text

69. Haas NA, Laser TK, Moysich A, *et al.*: **Stenting of the right ventricular outflow tract in symptomatic neonatal tetralogy of Fallot.** *Cardiol Young.* 2014; **24**(2): 369–73.
PubMed Abstract | Publisher Full Text

70. Bertram H, Emmel M, Ewert P, *et al.*: **Stenting of Native Right Ventricular Outflow Tract Obstructions in Symptomatic Infants.** *J Interv Cardiol.* 2015; **28**(3): 279–87.
PubMed Abstract | Publisher Full Text

71. McGovern E, Morgan CT, Oslizlok P, *et al.*: **Transcatheter stenting of the right ventricular outflow tract augments pulmonary arterial growth in symptomatic infants with right ventricular outflow tract obstruction and hypercyanotic spells.** *Cardiol Young.* 2016; **26**(7): 1260–5.
PubMed Abstract | Publisher Full Text

72. Barron DJ, Ramchandani B, Murala J, *et al.*: **Surgery following primary right ventricular outflow tract stenting for Fallot's tetralogy and variants: rehabilitation of small pulmonary arteries.** *Eur J Cardiothorac Surg.* 2013; **44**(4): 656–62.
PubMed Abstract | Publisher Full Text

73. F Quandt D, Ramchandani B, Penford G, *et al.*: **Right ventricular outflow tract stent versus BT shunt palliation in Tetralogy of Fallot.** *Heart.* 2017; **103**(24): 1985–91.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

74. F Quandt D, Ramchandani B, Stickley J, *et al.*: **Stenting of the Right Ventricular Outflow Tract Promotes Better Pulmonary Arterial Growth Compared With Modified Blalock-Taussig Shunt Palliation in Tetralogy of Fallot-Type Lesions.** *JACC Cardiovasc Interv.* 2017; **10**(17): 1774–84.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

75. Zampi JD, Armstrong AK, Hirsch-Romano JC: **Hybrid perventricular pulmonary valve perforation and right ventricular outflow stent placement: *a case report of a premature, 1.3-kg neonate with tetralogy of Fallot and pulmonary atresia*.** *World J Pediatr Congenit Heart Surg.* 2014; **5**(2): 338–41.
PubMed Abstract | Publisher Full Text

76. Cools B, Boshoff D, Heying R, *et al.*: **Transventricular balloon dilation and stenting of the RVOT in small infants with tetralogy of fallot with pulmonary atresia.** *Catheter Cardiovasc Interv.* 2013; **82**(2): 260–5.
PubMed Abstract | Publisher Full Text

77. Santoro G, Capozzi G, Capogrosso C, *et al.*: **Pulmonary artery growth after arterial duct stenting in completely duct-dependent pulmonary circulation.** *Heart.* 2016; **102**(6): 459–64.
PubMed Abstract | Publisher Full Text

78. Bentham JR, Zava NK, Harrison WJ, *et al.*: **Duct Stenting Versus Modified Blalock-Taussig Shunt in Neonates With Duct-Dependent Pulmonary Blood Flow: Associations With Clinical Outcomes in a Multicenter National Study.** *Circulation.* 2018; **137**(6): 581–8.
PubMed Abstract | Publisher Full Text

79. McMullan DM, Permut LC, Jones TK, *et al.*: **Modified Blalock-Taussig shunt versus ductal stenting for palliation of cardiac lesions with inadequate pulmonary blood flow.** *J Thorac Cardiovasc Surg.* 2014; **147**(1): 397–401.
PubMed Abstract | Publisher Full Text

80. Mallula K, Vaughn G, El-Said H, *et al.*: **Comparison of ductal stenting versus surgical shunts for palliation of patients with pulmonary atresia and intact ventricular septum.** *Catheter Cardiovasc Interv.* 2015; **85**(7): 1196–202.
PubMed Abstract | Publisher Full Text

81. Santoro G, Gaio G, Capozzi G, *et al.*: **Fate of Hypoplastic Pulmonary Arteries**

After Arterial Duct Stenting in Congenital Heart Disease With Duct-Dependent Pulmonary Circulation. *JACC Cardiovasc Interv.* 2015; **8**(12): 1626–32.
PubMed Abstract | Publisher Full Text

82. Sivakumar K, Bhagyavathy A, Coelho R, *et al.*: **Longevity of neonatal ductal stenting for congenital heart diseases with duct-dependent pulmonary circulation.** *Congenit Heart Dis.* 2012; **7**(6): 526–33.
PubMed Abstract | Publisher Full Text

83. Amoozgar H, Cheriki S, Borzoee M, *et al.*: **Short-term result of ductus arteriosus stent implantation compared with surgically created shunts.** *Pediatr Cardiol.* 2012; **33**(8): 1288–94.
PubMed Abstract | Publisher Full Text

84. Lee K, Hinek A, Chaturvedi RR, *et al.*: **Rapamycin-eluting stents in the arterial duct: experimental observations in the pig model.** *Circulation.* 2009; **119**(15): 2078–85.
PubMed Abstract | Publisher Full Text

85. F Lee K, Seto W, Benson L, *et al.*: **Pharmacokinetics of sirolimus-eluting stents implanted in the neonatal arterial duct.** *Circ Cardiovasc Interv.* 2015; **8**(5): pii: e002233.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

86. Cheatham JP, Hellenbrand WE, Zahn EM, *et al.*: **Clinical and hemodynamic outcomes up to 7 years after transcatheter pulmonary valve replacement in the US melody valve investigational device exemption trial.** *Circulation.* 2015; **131**(22): 1960–70.
PubMed Abstract | Publisher Full Text

87. Butera G, Milanesi O, Spadoni I, *et al.*: **Melody transcatheter pulmonary valve implantation. Results from the registry of the Italian Society of Pediatric Cardiology.** *Catheter Cardiovasc Interv.* 2013; **81**(2): 310–6.
PubMed Abstract | Publisher Full Text

88. Eicken A, Ewert P, Hager A, *et al.*: **Percutaneous pulmonary valve implantation: two-centre experience with more than 100 patients.** *Eur Heart J.* 2011; **32**(10): 1260–5.
PubMed Abstract | Publisher Full Text

89. McElhinney DB, Hellenbrand WE, Zahn EM, *et al.*: **Short- and medium-term outcomes after transcatheter pulmonary valve placement in the expanded multicenter US melody valve trial.** *Circulation.* 2010; **122**(5): 507–16.
PubMed Abstract | Publisher Full Text | Free Full Text

90. F Leon MB, Smith CR, Mack M, *et al.*: **Transcatheter aortic-valve implantation for aortic stenosis in patients who cannot undergo surgery.** *N Engl J Med.* 2010; **363**(17): 1597–607.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

91. F Smith CR, Leon MB, Mack MJ, *et al.*: **Transcatheter versus surgical aortic-valve replacement in high-risk patients.** *N Engl J Med.* 2011; **364**(23): 2187–98.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

92. F Kenny D, Hijazi ZM, Kar S, *et al.*: **Percutaneous implantation of the Edwards SAPIEN transcatheter heart valve for conduit failure in the pulmonary position: early phase 1 results from an international multicenter clinical trial.** *J Am Coll Cardiol.* 2011; **58**(21): 2248–56.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

93. Boone RH, Webb JG, Horlick E, *et al.*: **Transcatheter pulmonary valve implantation using the Edwards SAPIEN™ transcatheter heart valve.** *Catheter Cardiovasc Interv.* 2010; **75**(2): 286–94.
PubMed Abstract | Publisher Full Text

94. Wilson WM, Benson LN, Osten MD, *et al.*: **Transcatheter Pulmonary Valve Replacement With the Edwards Sapien System: The Toronto Experience.** *JACC Cardiovasc Interv.* 2015; **8**(14): 1819–27.
PubMed Abstract | Publisher Full Text

95. Faza N, Kenny D, Kavinsky C, *et al.*: **Single-center comparative outcomes of the Edwards SAPIEN and Medtronic Melody transcatheter heart valves in the pulmonary position.** *Catheter Cardiovasc Interv.* 2013; **82**(4): E535–41.
PubMed Abstract | Publisher Full Text

96. Morray BH, McElhinney DB, Cheatham JP, *et al.*: **Risk of coronary artery compression among patients referred for transcatheter pulmonary valve implantation: a multicenter experience.** *Circ Cardiovasc Interv.* 2013; **6**(5): 535–42.
PubMed Abstract | Publisher Full Text

97. Hascoet S, Mauri L, Claude C, *et al.*: **Infective Endocarditis Risk After Percutaneous Pulmonary Valve Implantation With the Melody and Sapien Valves.** *JACC Cardiovasc Interv.* 2017; **10**(5): 510–7.
PubMed Abstract | Publisher Full Text

98. Guccione P, Milanesi O, Hijazi ZM, *et al.*: **Transcatheter pulmonary valve implantation in native pulmonary outflow tract using the Edwards SAPIEN™ transcatheter heart valve.** *Eur J Cardiothorac Surg.* 2012; **41**(5): 1192–4.
PubMed Abstract | Publisher Full Text

99. Bertels RA, Blom NA, Schalij MJ: **Edwards SAPIEN transcatheter heart valve in native pulmonary valve position.** *Heart.* 2010; **96**(9): 661.
PubMed Abstract | Publisher Full Text

100. Levi DS, Sinha S, Salem MM, *et al.*: **Transcatheter native pulmonary valve and tricuspid valve replacement with the sapien XT: Initial experience and development of a new delivery platform.** *Catheter Cardiovasc Interv.* 2016; **88**(3): 434–43.
PubMed Abstract | Publisher Full Text

101. Thanopoulos BV, Giannakoulas G, Arampatzis CA: **Percutaneous pulmonary valve implantation in the native right ventricular outflow tract.** *Catheter Cardiovasc Interv.* 2012; **79**(3): 427–9.
PubMed Abstract | Publisher Full Text

102. Gillespie MJ, Dori Y, Harris MA, *et al.*: **Bilateral branch pulmonary artery melody valve implantation for treatment of complex right ventricular outflow tract dysfunction in a high-risk patient.** *Circ Cardiovasc Interv.* 2011; **4**(4): e21–3.
PubMed Abstract | Publisher Full Text

103. Carr JA: **The results of catheter-based therapy compared with surgical repair of adult aortic coarctation.** *J Am Coll Cardiol.* 2006; **47**(6): 1101–7.
PubMed Abstract | Publisher Full Text

104. Travelli FC, Herrington CS, Ing FF: **A novel hybrid technique for transcatheter pulmonary valve implantation within a dilated native right ventricular outflow tract.** *J Thorac Cardiovasc Surg.* 2014; **148**(2): e145–6.
PubMed Abstract | Publisher Full Text

105. Boudjemline Y, Schievano S, Bonnet C, *et al.*: **Off-pump replacement of the pulmonary valve in large right ventricular outflow tracts: a hybrid approach.** *J Thorac Cardiovasc Surg.* 2005; **129**(4): 831–7.
PubMed Abstract | Publisher Full Text

106. Promphan W, Prachasilchai P, Siripornpitak S, *et al.*: **Percutaneous pulmonary valve implantation with the Venus P-valve: clinical experience and early results.** *Cardiol Young.* 2016; **26**(4): 698–710.
PubMed Abstract | Publisher Full Text

107. Cao QL, Kenny D, Zhou D, *et al.*: **Early clinical experience with a novel self-expanding percutaneous stent-valve in the native right ventricular outflow tract.** *Catheter Cardiovasc Interv.* 2014; **84**(7): 1131–7.
PubMed Abstract | Publisher Full Text

108. F Husain J, Praichasilchai P, Gilbert Y, *et al.*: **Early European experience with the Venus P-valve®: filling the gap in percutaneous pulmonary valve implantation.** *EuroIntervention.* 2016; **12**(5): e643–51.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

109. Jalal Z, Thambo J, Boudjemline Y: **The future of transcatheter pulmonary valvulation.** *Arch Cardiovasc Dis.* 2014; **107**(11): 635–42.
PubMed Abstract | Publisher Full Text

110. Bergersen L, Benson LN, Gillespie MJ, *et al.*: **Harmony Feasibility Trial: Acute and Short-Term Outcomes With a Self-Expanding Transcatheter Pulmonary Valve.** *JACC Cardiovasc Interv.* 2017; **10**(17): 1763–73.
PubMed Abstract | Publisher Full Text

111. Gillespie MJ, Benson LN, Bergersen L, *et al.*: **Patient Selection Process for the Harmony Transcatheter Pulmonary Valve Early Feasibility Study.** *Am J Cardiol.* 2017; **120**(8): 1387–92.
PubMed Abstract | Publisher Full Text

112. Amahzoune B, Szymansky C, Fabiani JN, *et al.*: **A new endovascular size reducer for large pulmonary outflow tract.** *Eur J Cardiothorac Surg.* 2010; **37**(3): 730–2.
PubMed Abstract | Publisher Full Text

113. Mollet A, Basquin A, Stos B, *et al.*: **Off-pump replacement of the pulmonary valve in large right ventricular outflow tracts: a transcatheter approach using an intravascular infundibulum reducer.** *Pediatr Res.* 2007; **62**(4): 428–33.
PubMed Abstract | Publisher Full Text

114. Boudjemline Y, Laborde F, Pineau E, *et al.*: **Expandable right ventricular-to-pulmonary artery conduit: an animal study.** *Pediatr Res.* 2006; **59**(6): 773–7.
PubMed Abstract | Publisher Full Text

115. Godart F, Baruteau AE, Petit J, *et al.*: **Transcatheter tricuspid valve implantation: a multicentre French study.** *Arch Cardiovasc Dis.* 2014; **107**(11): 583–91.
PubMed Abstract | Publisher Full Text

116. Raval J, Nagaraja V, Eslick GD, *et al.*: **Transcatheter valve-in-valve implantation: a systematic review of literature.** *Heart Lung Circ.* 2014; **23**(11): 1020–8.
PubMed Abstract | Publisher Full Text

117. F McElhinney DB, Cabalka AK, Aboulhosn JA, *et al.*: **Transcatheter Tricuspid Valve-in-Valve Implantation for the Treatment of Dysfunctional Surgical Bioprosthetic Valves: An International, Multicenter Registry Study.** *Circulation.* 2016; **133**(16): 1582–93.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

118. F Cullen MW, Cabalka AK, Alli OO, *et al.*: **Transvenous, antegrade Melody valve-in-valve implantation for bioprosthetic mitral and tricuspid valve dysfunction: a case series in children and adults.** *JACC Cardiovasc Interv.* 2013; **6**(6): 598–605.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

119. Aboulhosn J, Cabalka AK, Levi DS, *et al.*: **Transcatheter Valve-in-Ring Implantation for the Treatment of Residual or Recurrent Tricuspid Valve Dysfunction After Prior Surgical Repair.** *JACC Cardiovasc Interv.* 2017; **10**(1): 53–63.
PubMed Abstract | Publisher Full Text

120. Bouleti C, Fassa AA, Himbert D, *et al.*: **Transfemoral implantation of transcatheter heart valves after deterioration of mitral bioprosthesis or previous ring annuloplasty.** *JACC Cardiovasc Interv.* 2015; **8**(1 Pt A): 83–91.
PubMed Abstract | Publisher Full Text

121. Eleid MF, Whisenant BK, Cabalka AK, *et al.*: **Early Outcomes of Percutaneous Transvenous Transseptal Transcatheter Valve Implantation in Failed Bioprosthetic Mitral Valves, Ring Annuloplasty, and Severe Mitral Annular Calcification.** *JACC Cardiovasc Interv.* 2017; **10**(19): 1932–42.
PubMed Abstract | Publisher Full Text

122. F Cheung A, Webb JG, Barbanti M, *et al.*: **5-year experience with transcatheter**

transapical mitral valve-in-valve implantation for bioprosthetic valve dysfunction. *J Am Coll Cardiol.* 2013; **61**(17): 1759–66.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

123. Seiffert M, Conradi L, Baldus S, *et al.*: **Transcatheter mitral valve-in-valve implantation in patients with degenerated bioprostheses.** *JACC Cardiovasc Interv.* 2012; **5**(3): 341–9.
PubMed Abstract | Publisher Full Text

124. Wilbring M, Alexiou K, Tugtekin SM, *et al.*: **Pushing the limits-further evolutions of transcatheter valve procedures in the mitral position, including valve-in-valve, valve-in-ring, and valve-in-native-ring.** *J Thorac Cardiovasc Surg.* 2014; **147**(1): 210–9.
PubMed Abstract | Publisher Full Text

125. F Hasan BS, McElhinney DB, Brown DW, *et al.*: **Short-term performance of the transcatheter Melody valve in high-pressure hemodynamic environments in the pulmonary and systemic circulations.** *Circ Cardiovasc Interv.* 2011; **4**(6): 615–20.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

126. Maisano F, Reser D, Pavicevic J, *et al.*: **Successful first-in-man Melody transcatheter valve implant in a dehisced mitral annuloplasty ring transapical valve-in-ring implant.** *EuroIntervention.* 2014; **10**(8): 961–7.
PubMed Abstract | Publisher Full Text

127. Kliger C, Al-Badri A, Wilson S, *et al.*: **Successful first-in-man percutaneous transapical-transseptal Melody mitral valve-in-ring implantation after complicated closure of a para-annular ring leak.** *EuroIntervention.* 2014; **10**(8): 968–74.
PubMed Abstract | Publisher Full Text

128. Borger MA, Kodali S: **Transcatheter mitral valve-in-ring with the Melody prosthesis: a new therapeutic opportunity.** *EuroIntervention.* 2014; **10**(8): 903–5.
PubMed Abstract | Publisher Full Text

129. Guerrero M, Greenbaum A, O'Neill W: **First in human percutaneous implantation of a balloon expandable transcatheter heart valve in a severely stenosed native mitral valve.** *Catheter Cardiovasc Interv.* 2014; **83**(7): E287–91.
PubMed Abstract | Publisher Full Text

130. Sinning J, Mellert F, Schiller W, *et al.*: **Transcatheter mitral valve replacement using a balloon-expandable prosthesis in a patient with calcified native mitral valve stenosis.** *Eur Heart J.* 2013; **34**(33): 2609.
PubMed Abstract | Publisher Full Text

131. Mellert F, Sinning JM, Werner N, *et al.*: **First-in-man transapical mitral valve replacement using the Direct Flow Medical® aortic valve prosthesis.** *Eur Heart J.* 2015; **36**(31): 2119.
PubMed Abstract | Publisher Full Text

132. F Frigiola A, Pluchinotta FR, Saracino A, *et al.*: **Surgical mitral valve replacement with the Melody valve in infants and children: the Italian experience.** *EuroIntervention.* 2017; **12**(17): 2104–9.
PubMed Abstract | Publisher Full Text | F1000 Recommendation

133. Quiñonez LG, Breitbart R, Tworetsky W, *et al.*: **Stented bovine jugular vein graft (Melody valve) for surgical mitral valve replacement in infants and children.** *J Thorac Cardiovasc Surg.* 2014; **148**(4): 1443–9.
PubMed Abstract | Publisher Full Text

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Recent advances in pediatric interventional cardiology

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During the last 10 years, there have been major technological achievements in pediatric interventional cardiology. In addition, there have been several advances in cardiac imaging, especially in 3-dimensional imaging of echocardiography, computed tomography, magnetic resonance imaging, and cineangiography. Therefore, more types of congenital heart diseases can be treated in the cardiac catheter laboratory today than ever before. Furthermore, lesions previously considered resistant to interventional therapies can now be managed with high success rates. The hybrid approach has enabled the overcoming of limitations inherent to percutaneous access, expanding the application of endovascular therapies as adjunct to surgical interventions to improve patient outcomes and minimize invasiveness. Percutaneous pulmonary valve implantation has become a successful alternative therapy. However, most of the current recommendations about pediatric cardiac interventions (including class I recommendations) refer to off-label use of devices, because it is difficult to study the safety and efficacy of catheterization and transcatheter therapy in pediatric cardiac patients. This difficulty arises from the challenge of identifying a control population and the relatively small number of pediatric patients with congenital heart disease. Nevertheless, the pediatric interventional cardiology community has continued to develop less invasive solutions for congenital heart defects to minimize the need for open heart surgery and optimize overall outcomes. In this review, various interventional procedures in patients with congenital heart disease are explored.

Key words: Congenital heart disease, Intervention, Catheterization

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Introduction

Cardiac catheterization and intervention in pediatric cardiac diseases have evolved significantly since the publication of previous review articles on this subject in 1992, 1993, 2003, and 2006 in Korea[1-4]. During the last 10 years, there have been major technological achievements in pediatric interventional cardiology. There have also been substantial advancements in cardiac imaging modalities, such as intracardiac echocardiography (ICE), real-time 3-dimensional (3D) transesophageal echocardiography (TEE), cardiac computed tomography (CT) and magnetic resonance imaging (MRI), rotational angiography with 3D roadmap, holography, 3D printing, and EchoNavigator and VesselNavigator systems. As a result of such technological advances, more types of congenital heart diseases (CHDs) can be treated in the cardiac catheter laboratory today than ever before. Therefore, the possibility exists that many surgical procedures will be replaced by catheter-based procedures. Furthermore, lesions previously considered resistant to interventional therapies can now be managed with a high success rate, including peripheral pulmonary artery (PA) stenosis, obstructive surgical conduits, and acute postoperative stenosis[5]. The hybrid approach[6-15] has enabled overcoming the limitations inherent to percutaneous access, expanding the application of endovascular

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therapies as adjunct to surgical interventions to improve patient outcomes and minimize invasiveness. Some technologies that were considered far-off have actually came into being and emerged as alternative successful therapies, such as percutaneous pulmonic valve implantation[16-22]. However, most of the current recommendations[23] (including class I recommendations) refer to off-label use of devices that are approved for other coronary, peripheral vascular, or noncardiovascular (typically adult) indications[24]. Of 126 recommendations[23], 56% were based on level C evidence (consensus opinion), 42% were based on level B evidence, and <2% were based on level A evidence. Unfortunately, studies testing the safety and efficacy of catheterization and transcatheter therapy are rare in the field because of the difficulty in identifying a control population, the relatively small number of pediatric patients with CHD, and the broad spectrum of clinical expression. This has resulted in the almost exclusively "off-label" use of transcatheter devices, initially developed for the management of adult diseases, in the treatment of CHD[23]. Nevertheless, the pediatric interventional cardiology community has continued to develop less invasive solutions for congenital heart defects to minimize the need for open heart surgery and optimize overall outcomes. For most such interventions, these efforts lead to more highly acceptable outcomes and lower complication rates than the alternatives of surgery or no intervention[5]. In the following sections, various interventional procedures in patients with CHD are reviewed, and current issues on challenges and limitations in pediatric cardiac interventions are explored.

Defect closure

1. Atrial septal defect

Atrial septal defect (ASD) is the second most common congenital heart defect in adults after bicuspid aortic valve disease. Although most patients with ASD show no significant symptoms, defect closure is recommended in patients with a pulmonary-to-systemic flow ratio of 1.5:1.0 or greater. However, in view of the almost nonexistent surgical mortality in patients with an uncomplicated defect, the potential cardiomyopathic effect of chronic volume overload, the potential risk of paradoxical embolization, and the possibility of a late increase in shunt size owing to the onset of left ventricular disease, even smaller defects may warrant closure.

Since King and Mill invented the first device for closing ASDs in 1976, several devices have been introduced for this purpose. However, only the Amplatzer septal occluder (ASO; St Jude Medical, St. Paul, MN, USA) has been widely used owing to its advantage of being a double disc with a self-centering mechanism. ASO is the first device to receive approval for clinical use in patients with ASD from the U.S. Food and Drug Administration (FDA)[25].

ASO can be used in any patient with an ostium secundum ASD with an adequate rim (>5 mm); however, the presence of an anterior rim is not essential. The procedure is usually done under general anesthesia if TEE is planned. However, only minimal sedation is needed under ICE guidance by using the AcuNav catheter (Biosense Webster Co., Diamond Bar, CA, USA).

Complications with the use of ASO are rare, and most of them occur in the immediate period after implantation. Arrhythmia such as atrial flutter or supraventricular tachycardia can be encountered; however, most of them are transient. The other major complication is device embolization, which was reported to occur in 1%, and the most serious complication is development of erosion, which was reported to occur in 0.1%. Amin et al.[25] initially suggested that a deficient anterior or superior rim and an oversized device might be risk factors that significantly increases the erosion risk; however, they later modified their proposed risk factors to the following: absence of an aortic rim in multiple views, poor posterior rim consistency, septal malalignment, and dynamic ASD[26]. Although the exact mechanism of erosion with the use of ASO is still unknown, it is interesting that erosion is very rare or absent with the use of Figulla Flex II (Occlutech Co., Helsingborg, Sweden), Cocoon ASD occluder (Vascular Innovations Co., Nonthaburi, Thailand), or several Chinese ASD occluders that have a similar shape to the original ASO but are softer.

2. Patent ductus arteriosus (PDA)

Since Porstmann first attempted transcatheter closure of patent ductus arteriosus (PDA) in 1967, many devices have been introduced for percutaneous PDA closure. However, the incidence of residual leakage was relatively high (3%–38%) and the use of those devices was technically challenging for large PDAs. The Amplatzer duct occluder (ADO, St Jude Medical) has shown excellent results for closing ductus of any size or any shape, except for large tubular ductus that can be closed with the Amplatzer muscular ventricular septal defect (VSD) occluder (St Jude Medical). PDAs may become markedly dilated and aneurysmal, and calcified and degenerative changes within their wall occur in elderly patients, increasing the risk for surgical PDA ligation. Short and wide PDAs present a somewhat higher intraoperative risk. Ligation and division of these PDAs should be performed with cardiac pump on standby. However, the most distinguishing advantage of ADO compared with surgery is that dilated, aneurysmal, calcific, or friable PDAs in older adults can be closed easily with ADO. Nowadays, the percutaneous closure method is the treatment of choice for PDA. Nevertheless, it is still challenging to percutaneously close PDAs in premature babies or small infants. Recently, Amplatzer vascular plug, ADO II, and ADO II additional sizes (St Jude Medical) have been tried for such purpose and showed acceptable results[27-31]. However, the risk of migration of the device is a problem. Another important issue is closing a large ductus that cannot be closed with a standard-sized ADO. Amplatzer muscular VSD occluder[32-36] has been used for this purpose. In some countries, devices similar to the ADO are available in larger sizes (up

to 26 mm)[37], which can be used to close PDAs >12 mm. There have been case reports of large PDAs with pulmonary hypertension that were closed with an ASO with acceptable results[37-42].

3. Ventricular septal defect

VSD is the most common CHD and perimembranous VSD (PMVSD) is the most common subtype. Surgical closure has been a standard treatment method for PMVSD. Transcatheter closure of PMVSD is a challenging procedure, and the use of an Amplatzer PMVSD occluder (APMVSDO) was first reported in 2003[43]. In several reports, the APMVSDO has been shown to be safe and effective in closing PMVSDs[44-49]. However, several studies reported a high incidence of complete atrioventricular block (CAVB). Researchers from Toronto reported a 22% rate (4 of 20 patients) of CAVB after percutaneous closure of PMVSD with APMVSDO, and most other reports demonstrated an around 5% rate of CAVB[50-54]. Concerning the mechanism of occurrence of CAVB after percutaneous closure of PMVSDs with APMVSDO, it was suggested that the device may cause direct compression trauma or provoke inflammatory reaction or scar formation in the conduction tissue[51]. In addition, as the APMVSDO itself has a high stiffness, use of an oversized device would give the appearance of "stenting" the VSD and may be more traumatic to the conduction tissue. Compared with the APMVSDO, the Chinese PMVSDO is less stiff and has a longer waist. Therefore, it would theoretically cause less squeezing and less trauma to the conduction tissue even with oversized devices. Liu et al.[55] reported a 1.9% (11 of 576) incidence of CAVB. Of these, nine patients recovered in 3 weeks and permanent pacemakers were implanted in 2 patients. Recently, the second-generation APMVSDO has been developed by Saint-Jude Company and clinical trials are being conducted[56]. Lee et al.[57] reported transcatheter closure of PMVSD with ADO in 20 patients with PMVSD. ADO has a short rim (2–3 mm) in the distal part, which is supposed to be implanted in the space between the right coronary cusp and the noncoronary cusp of the aortic valve; thus, it is not likely to touch the aortic valve and is safe from aortic regurgitation. Furthermore, it has less contact with the left bundle branch compared with APMVSDO owing to its shorter rim. The other crucial advantage of ADO is that it does not have a proximal disc and thus does not squeeze the His bundle. These are the reasons for the author's preference in using ADO in percutaneous closure of PMVSDs (Fig. 1). However, percutaneous closure of PMVSDs is not approved by the Korean FDA.

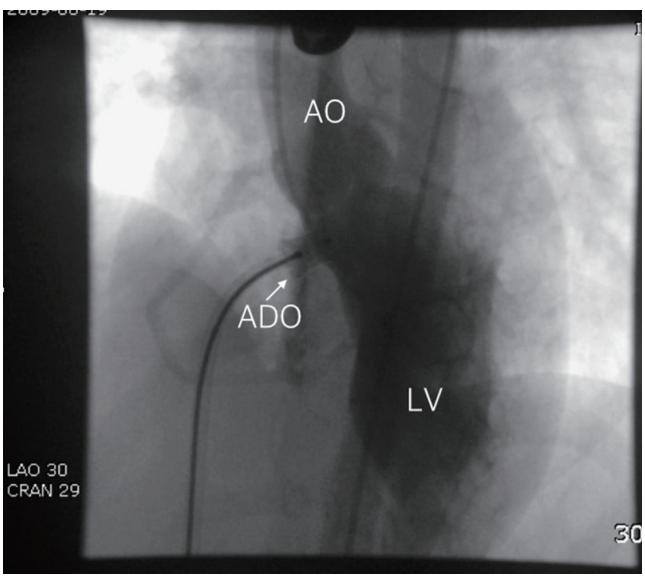

Fig. 1. Left ventriculogram taken after deployment of the Amplatzer ductal occluder in the perimembranous ventricular septal defect before releasing it. The image shows a well-positioned device and small residual leakage through it. AO, aorta; ADO, Amplatzer ductal occluder; LV, left ventricle.

Dilatation

1. Pulmonary valvular stenosis

Percutaneous transcatheter valvuloplasty is a treatment of choice for pulmonary valvular stenosis in both children and adults. It is reasonable to dilate valves with a peak gradient of at least 30 mmHg. Adult patients with pulmonary valvular stenosis have large valve annulus and sometimes require the double-balloon technique. The restenosis rates are low[58].

2. Aortic valvular stenosis

The congenital bicuspid aortic valve often becomes progressively stenotic; therefore, congenital aortic stenosis more commonly manifests clinically in old age. Balloon valvuloplasty can be a suitable palliation method for children with moderate to severe aortic stenosis (peak-peak gradient >50 mmHg) and mild aortic regurgitation at most, but not for adult patients because of high restenosis rates[59]. Infants with critical valvular aortic stenosis constitute a special group that needs a different approach. These patients usually show congestive heart failure early in life and rapidly progress to life-threatening conditions. The pressure gradient through the aortic valve is usually <30 mmHg because of poor left ventricular function. Urgent balloon valvotomy under ventilator care is crucial; however, its reintervention rate is high[60].

3. Percutaneous pulmonary valve implantation

Percutaneous pulmonary valve implantation (PPVI) is an established therapy for pulmonary regurgitation and right ventricular outflow tract (RVOT) obstruction in postoperative patients with tetralogy of Fallot and pulmonary atresia, the Ross procedure for aortic stenosis, truncus arteriosus, and the Rastelli procedure for transposition of the great arteries or double-outlet right ventricle, who had required surgical placement of valved conduits from the right ventricle to the PA[18,20,22,61-73]. With time, these conduits

become progressively stenotic and insufficient, and surgical replacement of the pulmonary valve has been needed in these cases. PPVI in both animals and humans has become a reality in the last decades[18,20,22,61-73]. A percutaneous stent-based expandable pulmonary valve, designed by Dr. Bonhoeffer[18], named Melody valve (Medtronic, Minneapolis, MN, USA), uses a glutaraldehyde-treated bovine venous jugular valve sewn into a balloon-expandable stent. This valve has been implanted in more than 10,000 patients; however, this procedure is limited by the conduit size (upper limitation <22 mm) and compliance, patient size (body weight >24 kg needs a 22F sheath), and uncertain long-term efficacy of the valve. In fact, an initial report showed a high incidence of stent fracture[22,62]. Nowadays, prestenting is a routine procedure before PPVI with the Melody valve to prevent stent fracture[68]. At present, because of its size, the use of the Melody valve is restricted to only approximately 15% of patients with CHD in whom pulmonary valve replacement is indicated. Extensive research and development are being conducted to design a suitable transcatheter device for patients with a dysfunctional native or patch-augmented RVOT that is too large for the current Melody valve. Further research and development of designs based on this model are under way. The Harmony valve (Medtronic)[74], Venus P-valve (Venus Medtech, Shanghai, China)[75,76], and Edwards SAPIEN XT valve (Edwards Lifesciences, Irvine, CA, USA)[77] were developed and have been used clinically for patients with a large (>22 mm) RVOT (Fig. 2).

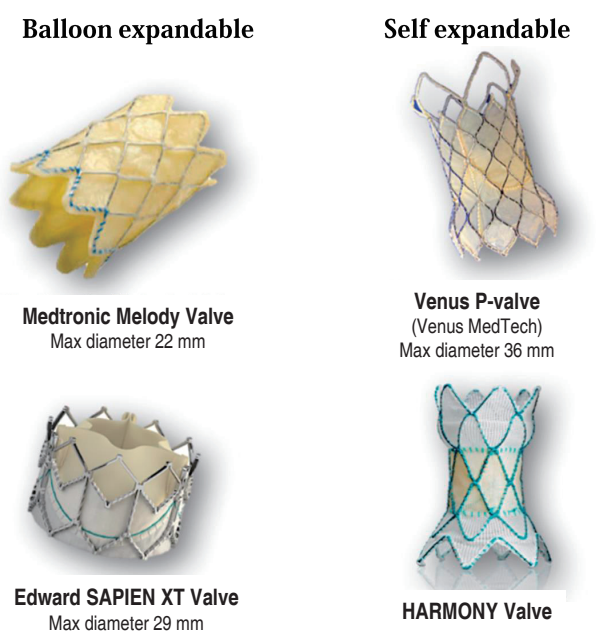

Fig. 2. Available valves for percutaneous pulmonary valve implantation.

Hybrid procedures

The hybrid approach involves the cooperation between surgeons and interventionists to maximize the outcomes and minimize the limitations of their respective approaches. It has enabled overcoming the limitations inherent to percutaneous access, expanding the application of endovascular therapies as adjunct to surgical interventions to improve patient outcomes and minimize invasiveness[6-15].

1. Hybrid procedure for hypoplastic left heart syndrome

The first hybrid palliative approach to hypoplastic left heart syndrome was reported in 1993 with surgical banding of the branch PAs and percutaneous stenting of the arterial duct[78,79], and modified by the Gissen group with the goal of achieving distal PA pressure <50% of the systemic pressure and a reduction in systemic oxygen saturation to approximately 80%[12], which showed 82% survival through stage II palliation[80]. Further modification by the Columbus group[13], who performed PA banding and stenting of the arterial duct through the PA with the surgeon and interventionist in the same hybrid room, showed 83% survival through stage III palliation[81].

2. Hybrid approach to VSD closure (perventricular closure)

The perventricular approach for closure of membranous and muscular VSDs in infants was reported in 1999[82]. The benefits of this approach were direct access to the heart after surgical sternotomy for direct placement of a closure device across the VSD under the guidance of TEE, without the need for cardiopulmonary bypass or radiation[8,9].

3. Other hybrid procedures

Hybrid pulmonic valve replacement[7,83], intraoperative stenting[6], and hybrid Fontan completion[10] have been used.

Fetal intervention

Fetal interventions for CHD have become important treatment modalities in the last 20 years, especially for severe aortic or pulmonary stenosis. Critical aortic stenosis in utero can progress into hypoplastic left heart syndrome, which has a high postnatal mortality rate. Fetal interventions may remodel cardiac morphology and function to such an extent that it may favorably alter the in utero natural history, resulting in improved prenatal and postnatal outcomes, including an increased likelihood of achieving biventricular circulation[84]. However, in a recent meta-analysis study [85], fetal aortic valvuloplasty had a live-birth rate of 65% with a neonatal death rate of 16%. In fetal pulmonary valvuloplasty, the live-birth rate was 56% and the neonatal mortality was 33%. Although the results of the meta-analysis are encouraging in terms of perinatal

survival, they should be interpreted with caution when comparing with procedures performed after delivery.

Advances in cardiac imaging

During the last 10 years, development of imaging software has facilitated major advances in cardiac imaging modalities such as ICE, real-time 3D TEE, cardiac CT and MRI, rotational angiography with 3D roadmap, holography, 3D printing, and EchoNavigator and VesselNavigator systems. Especially, fusion imaging with fluoroscopy and echocardiography (EchoNavigator) or fluoroscopy and tomography (VesselNavigator) further assist complex percutaneous interventional catheterization procedures. Cardiac imaging has to be done in real time with an excellent temporal resolution to ensure hand-eye synchronization and accurate positioning between the device and the target area[86]. As a result of recent technological advances, more types of CHDs than ever before are now possible to treat in the cardiac catheter laboratory. For example, VesselNavigator is a new fusion imaging modality that overlays a 3D CT image onto a live fluoroscopy image (Fig. 3). It provides an intuitive and continuous 3D roadmap by rotating overlaid CT images at any direction, and allows for both advanced diagnostic and interventional cardiac catheterization procedures in patients with CHD. Therefore, lesions previously considered resistant to interventional therapies can now be managed with a high success rate, such as peripheral PA stenosis[87].

Evolution and challenges

Several kinds of pediatric cardiac interventional procedures that were considered far-off in the last 2 decades have become standards of care owing to major technological advances, including PPVI. Therefore, the indications of pediatric cardiac interventions should be modified, and Feltes et al.[23] summarized the American Heart Association recommendations on the indications for cardiac catheterization and intervention in pediatric cardiac disease, which were endorsed by the American Academy of Pediatrics and Society for Cardiovascular Angiography and Intervention. However, even in the United States, most of the current recommendations about pediatric cardiac interventions (including class I recommendations) refer to off-label use of devices, because it is difficult to study the safety and efficacy of catheterization and transcatheter therapy in pediatric cardiac patients. This difficulty results from the challenge of identifying a control population and the relatively small number of pediatric patients with CHD. In Korea, many kinds of devices for interventional procedures are not available, such as several kinds of stents such as Genesis XD, Valeo, or covered stents. Furthermore, several kinds of interventional procedures are not approved by the Korean FDA, including percutaneous closure of PMVSD, although it has been performed since 2009 and reported by the author and coworkers[57]. Nevertheless, the pediatric interventional cardiology community has continued to develop less invasive solutions for congenital heart defects to minimize the need for open heart surgery and optimize overall outcomes.

Conclusions

As a result of recent technological advances, more types of CHDs than ever before are now possible to treat in the cardiac catheter laboratory. Furthermore, lesions previously considered resistant to interventional therapies can now be managed with high success rates. In addition, the hybrid approach, fetal cardiac intervention, and percutaneous pulmonic valve implantation have evolved significantly. However, most current recommendations for interventional procedures refer to off-label use of devices. Unfortunately, studies testing the safety and efficacy of transcatheter therapy in pediatric cardiac patients are rare because of the difficulty in identifying a

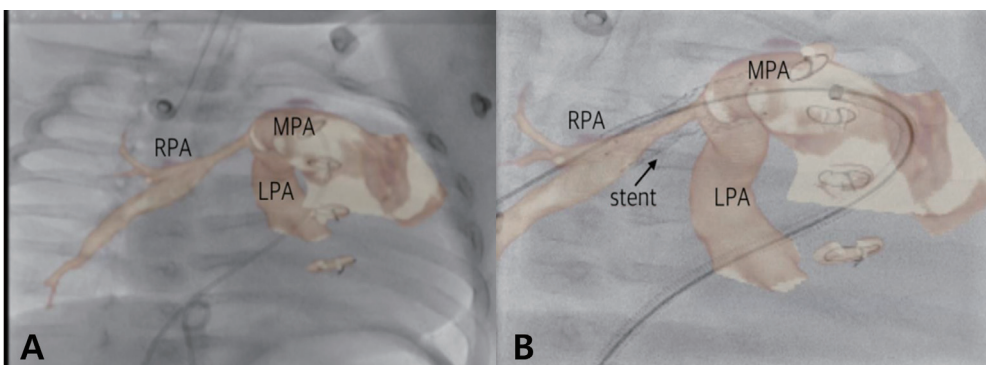

Fig. 3. Severe narrowing of the proximal right pulmonary artery is evident on live fluoroscopy with VesselNavigator (fusion imaging with computed tomography and fluoroscopy) (A), which offers a good 3-dimensional roadmap image for stenting without additional angiography (B). MPA, main pulmonary artery; RPA, right pulmonary artery; LPA, left pulmonary artery.

control population, the relatively small number of pediatric patients with CHD, and the broad spectrum of clinical expression. Nevertheless, the pediatric interventional cardiology community has made attempts to develop better solutions to minimize the need for open heart surgery and optimize overall outcomes.

Conflicts of interest

No potential conflict of interest relevant to this article was reported.

References

1. Kim SH. Interventional catheterization in congenital heart disease. Sejong Med J 1992;9:143-8.
2. Kang IS. Recent advance of interventional catheterization in congenital heart disease. J Korean Pediatr Soc 2003;46:1178-85.
3. Kim SH. Therapeutic catheterization in congenital heart diseases. Korean J Pediatr 2004;47Suppl 1:S150-8.
4. Choi JY. Recent advances in transcatheter treatment of congenital heart disease. Korean J Pediatr 2006;49:917-29.
5. Crystal MA, Ing FF. Pediatric interventional cardiology: 2009. Curr Opin Pediatr 2010;22:567-72.
6. Ungerleider RM, Johnston TA, O'Laughlin MP, Jaggers JJ, Gaskin PR. Intraoperative stents to rehabilitate severely stenotic pulmonary vessels. Ann Thorac Surg 2001;71:476-81.
7. Boudjemline Y, Schievano S, Bonnet C, Coats L, Agnoletti G, Khambadkone S, et al. Off-pump replacement of the pulmonary valve in large right ventricular outflow tracts: a hybrid approach. J Thorac Cardiovasc Surg 2005;129:831-7.
8. Bacha EA, Cao QL, Galantowicz ME, Cheatham JP, Fleishman CE, Weinstein SW, et al. Multicenter experience with perventricular device closure of muscular ventricular septal defects. Pediatr Cardiol 2005;26:169-75.
9. Amin Z, Woo R, Danford DA, Froemming SE, Reddy VM, Lof J, et al. Robotically assisted perventricular closure of perimembranous ventricular septal defects: preliminary results in Yucatan pigs. J Thorac Cardiovasc Surg 2006;131:427-32.
10. Konertz W, Schneider M, Herwig V, Kampmann C, Waldenberger F, Hausdorf G. Modified hemi-Fontan operation and subsequent nonsurgical Fontan completion. J Thorac Cardiovasc Surg 1995;110:865-7.
11. Ruiz CE, Gamra H, Zhang HP, García EJ, Boucek MM. Brief report: stenting of the ductus arteriosus as a bridge to cardiac transplantation in infants with the hypoplastic left-heart syndrome. N Engl J Med 1993;328:1605-8.
12. Akintuerk H, Michel-Behnke I, Valeske K, Mueller M, Thul J, Bauer J, et al. Stenting of the arterial duct and banding of the pulmonary arteries: basis for combined Norwood stage I and II repair in hypoplastic left heart. Circulation 2002;105:1099-103.
13. Galantowicz M, Cheatham JP. Lessons learned from the development of a new hybrid strategy for the management of hypoplastic left heart syndrome. Pediatr Cardiol 2005;26:190-9.
14. Bacha EA, Daves S, Hardin J, Abdulla RI, Anderson J, Kahana M, et al. Single-ventricle palliation for high-risk neonates: the emergence of an alternative hybrid stage I strategy. J Thorac Cardiovasc Surg 2006;131:163-71.e2.
15. Boudjemline Y, Pineau E, Borenstein N, Behr L, Bonhoeffer P. New insights in minimally invasive valve replacement: description of a cooperative approach for the off-pump replacement of mitral valves. Eur Heart J 2005;26:2013-7.
16. Bonhoeffer P, Boudjemline Y, Saliba Z, Merckx J, Aggoun Y, Bonnet D, et al. Percutaneous replacement of pulmonary valve in a right-ventricle to pulmonary-artery prosthetic conduit with valve dysfunction. Lancet 2000;356:1403-5.
17. Beekman RH 3rd. Transcatheter cardiac valve replacement and repair. Congenit Heart Dis 2006;1:2-9.
18. Khambadkone S, Coats L, Taylor A, Boudjemline Y, Derrick G, Tsang V, et al. Percutaneous pulmonary valve implantation in humans: results in 59 consecutive patients. Circulation 2005;112:1189-97.
19. Cribier A, Eltchaninoff H, Bash A, Borenstein N, Tron C, Bauer F, et al. Percutaneous transcatheter implantation of an aortic valve prosthesis for calcific aortic stenosis: first human case description. Circulation 2002;106:3006-8.
20. Sridharan S, Coats L, Khambadkone S, Taylor AM, Bonhoeffer P. Images in cardiovascular medicine. Transcatheter right ventricular outflow tract intervention: the risk to the coronary circulation. Circulation 2006;113:e934-5.
21. Boudjemline Y, Agnoletti G, Bonnet D, Sidi D, Bonhoeffer P. Percutaneous pulmonary valve replacement in a large right ventricular outflow tract: an experimental study. J Am Coll Cardiol 2004;43:1082-7.
22. McElhinney DB, Hellenbrand WE, Zahn EM, Jones TK, Cheatham JP, Lock JE, et al. Short- and medium-term outcomes after transcatheter pulmonary valve placement in the expanded multicenter US melody valve trial. Circulation 2010;122:507-16.
23. Feltes TF, Bacha E, Beekman RH 3rd, Cheatham JP, Feinstein JA, Gomes AS, et al. Indications for cardiac catheterization and intervention in pediatric cardiac disease: a scientific statement from the American Heart Association. Circulation 2011;123:2607-52.
24. Sutherell JS, Hirsch R, Beekman RH 3rd. Pediatric interventional cardiology in the United States is dependent on the off-label use of medical devices. Congenit Heart Dis 2010;5:2-7.
25. Amin Z, Hijazi ZM, Bass JL, Cheatham JP, Hellenbrand WE, Kleinman CS. Erosion of Amplatzer septal occluder device after closure of secundum atrial septal defects: review of registry of complications and recommendations to minimize future risk. Catheter Cardiovasc Interv 2004;63:496-502.
26. Amin Z. Echocardiographic predictors of cardiac erosion after Amplatzer septal occluder placement. Catheter Cardiovasc Interv 2014;83:84-92.
27. Backes CH, Cheatham SL, Deyo GM, Leopold S, Ball MK, Smith CV, et al. Percutaneous patent ductus arteriosus (PDA) closure in very preterm infants: feasibility and complications. J Am Heart Assoc 2016;5(2). pii: e002923. https://doi.org/10.1161/JAHA.115.002923.
28. Sungur M, Karakurt C, Ozbarlas N, Baspinar O. Closure of patent ductus arteriosus in children, small infants, and premature babies with Amplatzer duct occluder II additional sizes: multicenter study. Catheter Cardiovasc Interv 2013;82:245-52.
29. Bruckheimer E, Godfrey M, Dagan T, Levinzon M, Amir G, Birk E. The Amplatzer Duct Occluder II Additional Sizes device for transcatheter PDA closure: initial experience. Catheter Cardiovasc Interv 2014;83:1097-101.
30. Roberts P, Adwani S, Archer N, Wilson N. Catheter closure of the arterial duct in preterm infants. Arch Dis Child Fetal Neonatal Ed 2007;92:F248-50.
31. Zahn EM, Nevin P, Simmons C, Garg R. A novel technique for transcatheter patent ductus arteriosus closure in extremely preterm infants

using commercially available technology. Catheter Cardiovasc Interv 2015;85:240-8.
32. Ghasemi A, Pandya S, Reddy SV, Turner DR, Du W, Navabi MA, et al. Trans-catheter closure of patent ductus arteriosus-What is the best device? Catheter Cardiovasc Interv 2010;76:687-95.
33. Brunetti MA, Ringel R, Owada C, Coulson J, Jennings JM, Hoyer MH, et al. Percutaneous closure of patent ductus arteriosus: a multiinstitutional registry comparing multiple devices. Catheter Cardiovasc Interv 2010;76:696-702.
34. Thanopoulos BD, Tsaousis GS, Djukic M, Al Hakim F, Eleftherakis NG, Simeunovic SD. Transcatheter closure of high pulmonary artery pressure persistent ductus arteriosus with the Amplatzer muscular ventricular septal defect occluder. Heart 2002;87:260-3.
35. García-Montes JA, Cerdeira CZ, Colmenero JC, Espinóla N, de la Reguera GF, Hernández AB. Percutaneous closure of ductus arteriosus and muscular ventricular defect with Amplatzer occluder in a patient with severe pulmonary hypertension. Arch Cardiol Méx 2005;75:320-6.
36. Zabal C, García-Montes JA, Buendía-Hernández A, Calderón-Colmenero J, Patiño-Bahena E, Juanico-Enriquez A, et al. Percutaneous closure of hypertensive ductus arteriosus. Heart 2010;96:625-9.
37. Fatema NN. Closure of large patent ductus arteriosus by Amplatzer Septal Occluder (ASO): a case report. J Armed Force Med Coll Bangladesh 2009;5:46–8.
38. Spies C, Ujivari F, Schräder R. Transcatheter closure of a 22 mm patent ductus arteriosus with an Amplatzer atrial septal occluder. Catheter Cardiovasc Interv 2005;64:352-5.
39. Moszura T, Niwald M, Dryzek P, Moll J, Sysa A. Successful closure of a large PDA with an Amplazter septal occluder in a child with heart failure and pulmonary hypertension--a case report. Kardiol Pol 2006;64:1284-6.
40. Zanjani KS. Closure of a short patent ductus arteriosus using an atrial septal occluder. Chin Med J (Engl) 2010;123:1220-1.
41. Yang SW, Zhou YJ, Hu DY, Liu YY, Shi DM, Guo YH, et al. Feasibility and safety of transcatheter intervention for complex patent ductus arteriosus. Angiology 2010;61:372-6.
42. García-Montes JA, Camacho-Castro A, Sandoval-Jones JP, Buendía-Hernández A, Calderón-Colmenero J, Patiño-Bahena E, et al. Closure of large patent ductus arteriosus using the Amplatzer Septal Occluder. Cardiol Young 2015;25:491-5.
43. Bass JL, Kalra GS, Arora R, Masura J, Gavora P, Thanopoulos BD, et al. Initial human experience with the Amplatzer perimembranous ventricular septal occluder device. Catheter Cardiovasc Interv 2003;58:238-45.
44. Hijazi ZM, Hakim F, Haweleh AA, Madani A, Tarawna W, Hiari A, et al. Catheter closure of perimembranous ventricular septal defects using the new Amplatzer membranous VSD occluder: initial clinical experience. Catheter Cardiovasc Interv 2002;56:508-15.
45. Fu YC, Bass J, Amin Z, Radtke W, Cheatham JP, Hellenbrand WE, et al. Transcatheter closure of perimembranous ventricular septal defects using the new Amplatzer membranous VSD occluder: results of the U.S. phase I trial. J Am Coll Cardiol 2006;47:319-25.
46. Holzer R, de Giovanni J, Walsh KP, Tometzki A, Goh T, Hakim F, et al. Transcatheter closure of perimembranous ventricular septal defects using the amplatzer membranous VSD occluder: immediate and midterm results of an international registry. Catheter Cardiovasc Interv 2006;68:620-8.
47. Masura J, Gao W, Gavora P, Sun K, Zhou AQ, Jiang S, et al. Percutaneous closure of perimembranous ventricular septal defects with the eccentric Amplatzer device: multicenter follow-up study. Pediatr Cardiol 2005;26:216-9.
48. Pedra CA, Pedra SR, Esteves CA, Pontes SC Jr, Braga SL, Arrieta SR, et al. Percutaneous closure of perimembranous ventricular septal defects with the Amplatzer device: technical and morphological considerations. Catheter Cardiovasc Interv 2004;61:403-10.
49. Pinto RJ, Dalvi BV, Sharma S. Transcatheter closure of perimembranous ventricular septal defects using amplatzer asymmetric ventricular septal defect occluder: preliminary experience with 18-month follow up. Catheter Cardiovasc Interv 2006;68:145-52.
50. Butera G, Carminati M, Chessa M, Piazza L, Micheletti A, Negura DG, et al. Transcatheter closure of perimembranous ventricular septal defects: early and long-term results. J Am Coll Cardiol 2007;50:1189-95.
51. Walsh MA, Bialkowski J, Szkutnik M, Pawelec-Wojtalik M, Bobkowski W, Walsh KP. Atrioventricular block after transcatheter closure of perimembranous ventricular septal defects. Heart 2006;92:1295-7.
52. Butera G, Massimo C, Mario C. Late complete atriovenous block after percutaneous closure of a perimembranous ventricular septal defect. Catheter Cardiovasc Interv 2006;67:938-41.
53. Yip WC, Zimmerman F, Hijazi ZM. Heart block and empirical therapy after transcatheter closure of perimembranous ventricular septal defect. Catheter Cardiovasc Interv 2005;66:436-41.
54. Sullivan ID. Transcatheter closure of perimembranous ventricular septal defect: is the risk of heart block too high a price? Heart 2007;93:284-6.
55. Liu J, You XH, Zhao XX, Hu JQ, Cao J, Xu RL, et al. Outcome of transcatheter closure of perimembranous ventricular septal defect with modified double-disk occluder device. Zhonghua Xin Xue Guan Bing Za Zhi 2010;38:321-5.
56. Miro J. Live case demonstration of percutaneous closure of perimembranous ventricular septal defect with Amplatzer perimembranous ventricular septal defect occluder II. In: Pediatric & Adult Interventional Cardiac Symposium (PICS~AICS 2012); 2012 Apr 15-18; Chicago (IL), USA.
57. Lee SM, Song JY, Choi JY, Lee SY, Paik JS, Chang SI, et al. Transcatheter closure of perimembranous ventricular septal defect using Amplatzer ductal occluder. Catheter Cardiovasc Interv 2013;82:1141-6.
58. Lin SC, Hwang JJ, Hsu KL, Lee CM, Wang JK, Tseng CD, et al. Balloon pulmonary valvuloplasty in adults with congenital valvular pulmonary stenosis. Acta Cardiol Sin 2004;20:147-53.
59. Czarny MJ, Resar JR. Diagnosis and management of valvular aortic stenosis. Clin Med Insights Cardiol 2014;8(Suppl 1):15-24.
60. Keane JF, Fyler DC. Aortic outflow abnormalities. In: Keane JF, Lock JE, Fyler DC, editors. Nadas' pediatric cardiology. 2nd ed. Philadelphia: Elsevier Saunders, 2006:581-601.
61. Coats L, Khambadkone S, Derrick G, Sridharan S, Schievano S, Mist B, et al. Physiological and clinical consequences of relief of right ventricular outflow tract obstruction late after repair of congenital heart defects. Circulation 2006;113:2037-44.
62. Nordmeyer J, Khambadkone S, Coats L, Schievano S, Lurz P, Parenzan G, et al. Risk stratification, systematic classification, and anticipatory management strategies for stent fracture after percutaneous pulmonary valve implantation. Circulation 2007;115:1392-7.
63. Coats L, Khambadkone S, Derrick G, Hughes M, Jones R, Mist B, et al. Physiological consequences of percutaneous pulmonary valve implantation: the different behaviour of volume- and pressure-overloaded ventricles. Eur Heart J 2007;28:1886-93.
64. Lurz P, Coats L, Khambadkone S, Nordmeyer J, Boudjemline Y, Schievano S, et al. Percutaneous pulmonary valve implantation: impact of evolving technology and learning curve on clinical outcome. Circulation 2008;117:1964-72.
65. Nordmeyer J, Coats L, Lurz P, Lee TY, Derrick G, Rees P, et al. Percutaneous pulmonary valve-in-valve implantation: a successful treat-

ment concept for early device failure. Eur Heart J 2008;29:810-5.
66. Kostolny M, Tsang V, Nordmeyer J, Van Doorn C, Frigiola A, Khambadkone S, et al. Rescue surgery following percutaneous pulmonary valve implantation. Eur J Cardiothorac Surg 2008;33:607-12.
67. Lurz P, Puranik R, Nordmeyer J, Muthurangu V, Hansen MS, Schievano S, et al. Improvement in left ventricular filling properties after relief of right ventricle to pulmonary artery conduit obstruction: contribution of septal motion and interventricular mechanical delay. Eur Heart J 2009;30:2266-74.
68. Lurz P, Nordmeyer J, Muthurangu V, Khambadkone S, Derrick G, Yates R, et al. Comparison of bare metal stenting and percutaneous pulmonary valve implantation for treatment of right ventricular outflow tract obstruction: use of an x-ray/magnetic resonance hybrid laboratory for acute physiological assessment. Circulation 2009;119:2995-3001.
69. Lurz P, Nordmeyer J, Coats L, Taylor AM, Bonhoeffer P, Schulze-Neick I. Immediate clinical and haemodynamic benefits of restoration of pulmonary valvar competence in patients with pulmonary hypertension. Heart 2009;95:646-50.
70. Zahn EM, Hellenbrand WE, Lock JE, McElhinney DB. Implantation of the melody transcatheter pulmonary valve in patients with a dysfunctional right ventricular outflow tract conduit early results from the u.s. Clinical trial. J Am Coll Cardiol 2009;54:1722-9.
72. Romeih S, Kroft LJ, Bokenkamp R, Schalij MJ, Grotenhuis H, Hazekamp MG, et al. Delayed improvement of right ventricular diastolic function and regression of right ventricular mass after percutaneous pulmonary valve implantation in patients with congenital heart disease. Am Heart J 2009;158:40-6.
73. Momenah TS, El Oakley R, Al Najashi K, Khoshhal S, Al Qethamy H, Bonhoeffer P. Extended application of percutaneous pulmonary valve implantation. J Am Coll Cardiol 2009;53:1859-63.
74. Moiduddin N, Asoh K, Slorach C, Benson LN, Friedberg MK. Effect of transcatheter pulmonary valve implantation on short-term right ventricular function as determined by two-dimensional speckle tracking strain and strain rate imaging. Am J Cardiol 2009;104:862-7.
74. Schoonbeek RC, Takebayashi S, Aoki C, Shimaoka T, Harris MA, Fu GL, et al. Implantation of the medtronic harmony transcatheter pulmonary valve improves right ventricular size and function in an ovine model of postoperative chronic pulmonary insufficiency. Circ Cardiovasc Interv 2016;9(10). pii:e003920.
75. Promphan W, Prachasilchai P, Siripornpitak S, Qureshi SA, Layangool T. Percutaneous pulmonary valve implantation with the Venus P-valve: clinical experience and early results. Cardiol Young 2016;26:698-710.
76. Cao QL, Kenny D, Zhou D, Pan W, Guan L, Ge J, et al. Early clinical experience with a novel self-expanding percutaneous stent-valve in the native right ventricular outflow tract. Catheter Cardiovasc Interv 2014;84:1131-7.
77. Kenny D, Hijazi ZM, Kar S, Rhodes J, Mullen M, Makkar R, et al. Percutaneous implantation of the Edwards SAPIEN transcatheter heart valve for conduit failure in the pulmonary position: early phase 1 results from an international multicenter clinical trial. J Am Coll Cardiol 2011;58:2248-56.
78. Gibbs JL, Wren C, Watterson KG, Hunter S, Hamilton JR. Stenting of the arterial duct combined with banding of the pulmonary arteries and atrial septectomy or septostomy: a new approach to palliation for the hypoplastic left heart syndrome. Br Heart J 1993;69:551-5.
79. Gibbs JL, Uzun O, Blackburn ME, Wren C, Hamilton JR, Watterson KG. Fate of the stented arterial duct. Circulation 1999;99:2621-5.
80. Akintürk H, Michel-Behnke I, Valeske K, Mueller M, Thul J, Bauer J, et al. Hybrid transcatheter-surgical palliation: basis for univentricular or biventricular repair: the Giessen experience. Pediatr Cardiol 2007;28:79-87.
81. Galantowicz M, Cheatham JP, Phillips A, Cua CL, Hoffman TM, Hill SL, et al. Hybrid approach for hypoplastic left heart syndrome: intermediate results after the learning curve. Ann Thorac Surg 2008 Jun;85(6):2063-70;discussion 2070-1.
82. Amin Z, Gu X, Berry JM, Titus JL, Gidding SS, Rocchini AP. Perventricular closure of ventricular septal defects without cardiopulmonary bypass. Ann Thorac Surg 1999;68:149-53.
83. Simpson KE, Huddleston CB, Foerster S, Nicholas R, Balzer D. Successful subxyphoid hybrid approach for placement of a Melody percutaneous pulmonary valve. Catheter Cardiovasc Interv 2011;78:108-11.
84. Pedra SF, Peralta CF, Pedra CAC. Future directions of fetal interventions in congenital heart disease. Interv Cardiol Clin 2013;2:1-10.
85. Araujo Júnior E, Tonni G, Chung M, Ruano R, Martins WP. Perinatal outcomes and intrauterine complications following fetal intervention for congenital heart disease: systematic review and meta-analysis of observational studies. Ultrasound Obstet Gynecol 2016;48:426-33.
86. Hascoët S, Warin-Fresse K, Baruteau AE, Hadeed K, Karsenty C, Petit J, et al. Cardiac imaging of congenital heart diseases during interventional procedures continues to evolve: Pros and cons of the main techniques. Arch Cardiovasc Dis 2016;109:128-42.
87. Glöckler M, Halbfaβ J, Koch A, Achenbach S, Dittrich S. Multimodality 3D-roadmap for cardiovascular interventions in congenital heart disease: a single-center, retrospective analysis of 78 cases. Catheter Cardiovasc Interv 2013;82:436-42.

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Transcatheter Pulmonary Valve Implantation: A Comprehensive Systematic Review and Meta-Analyses of Observational Studies

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***Background*—**Transcatheter pulmonary valve implantation is approved for the treatment of dysfunctional right ventricle to pulmonary artery conduits. However, the literature is limited because of a small patient population, and it does not reflect changing procedural practice patterns over the last decade.

***Methods and Results*—**A comprehensive search of Medline and Scopus databases from inception through August 31, 2016 was conducted using predefined criteria. We included studies reporting transcatheter pulmonary valve implantation in at least 5 patients with a follow-up duration of 6 months or more. In 19 eligible studies, 1044 patients underwent transcatheter pulmonary valve implantation with a pooled follow-up of 2271 person-years. Procedural success rate was 96.2% (95% confidence intervals [CI], 94.6–97.4) with a conduit rupture rate of 4.1% (95% CI, 2.5–6.8) and coronary complication rate of 1.3% (95% CI, 0.7–2.3). Incidence of reintervention was 4.4 per 100 person-years overall (95% CI, 3.0–5.9) with a marked reduction in studies reporting ≥75% prestenting (2.9 per 100 person-years [95% CI, 1.5–4.3] versus 6.5/100 person-years [95% CI, 4.6–8.5]; $P<0.01$). Pooled endocarditis rate was 1.4 per 100 person-years (95% CI, 0.9–2.0).

***Conclusions*—**Our study provides favorable updated estimates of procedural and follow-up outcomes after transcatheter pulmonary valve implantation. Widespread adoption of prestenting has improved longer-term outcomes in these patients. **(*J Am Heart Assoc*. 2017;6:e006432. DOI: 10.1161/JAHA.117.006432.)**

Key Words: endocarditis • Melody valve • reintervention • transcatheter pulmonary valve

Transcatheter pulmonary valve implantation (TPVI) was first performed by Bonhoeffer et al[1] in 2000. Bonhoeffer's work led to the development of the Melody Transcatheter Pulmonary Valve (Medtronic Inc, Minneapolis, MN). The Melody valve received US Food and Drug Administration approval under Humanitarian Device Exemption (HDE) in 2010 and Pre-Market Approval in 2015 for the treatment of right ventricular outflow tract (RVOT) conduit dysfunction. Use of the Melody valve has also been reported in off-label, nonconduit cases in both small series[2,3] and cohort studies including both conduit and native RVOT implantation. More recently, the ES-THV (Edwards Lifesciences LLC, Irvine, CA) has been implanted off-label in the pulmonary valve (PV) position, and the Sapien XT (Edwards Lifesciences LLC, Irvine, California) valve has been approved by the US Food and Drug Administration for use in dysfunctional right ventricle to pulmonary artery (PA) conduits.

In the last 16 years, multiple reports of outcomes of patients post-TPVI with the Melody valve and ES-THV have been published; however, the largest series is comprised of only 155 patients.[4] The longest duration of follow-up was a median period of 4.6 years.[5] In comparison, an estimated 50 000 adults underwent transcatheter aortic valve implantation between 2002 and 2012.[6] Randomized studies in various populations of adult degenerative aortic stenosis are feasible and have been performed comparing transcatheter aortic valve implantion to surgical aortic valve replacement.[7–10] Because of patient numbers and disease heterogeneity, randomized trials for TPVI are not feasible; therefore, to improve the body of knowledge of the short- and long-term

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Clinical Perspective

What Is New?

- Pooled data for >1000 patients suggest improving longevity for transcatheter pulmonary valve implantation, especially with universal adoption of pre-stenting and low rates of endocarditis.

What Are the Clinical Implications?

- The study provides updated estimates for procedural risk as well as medium-term outcomes which should facilitate decision making by physicians and patients/families alike.

outcomes post-TPVI, a systematic statistical review and meta-analyses of published observational reports is performed.

Methods

The study was reviewed and approved by the University of Alabama at Birmingham Institutional Review Board (Birmingham, AL).

Search Strategy

We queried the Medline and SCOPUS databases from inception until August 31, 2016 with the following MeSH terms: "Melody valve," "transcatheter pulmonary valve," "percutaneous pulmonary valve," and "transcutaneous pulmonary valve."

Study Characteristics

All observational studies, including case series and abstracts, were considered. Of these, studies that reported outcomes post-TPVI in at least 5 patients with a minimum of 6 months follow-up were included. There were instances of multiple publications from the same research group with overlapping patient populations. Caution was exercised in this scenario to carefully select only the publication with largest sample size and longest follow-up. Two authors (A.C., M.A.L.) independently reviewed studies with overlapping authors/institutions, and studies were included by mutual consensus. Figure 1 shows the relevant details of the study selection process.

Data Extraction

Two authors (A.C., J.S.W.) searched all titles and associated abstracts using the described search strategy. Full-text articles for all potentially relevant studies were extracted and reviewed with focus on inclusion criteria and outcome reporting. From these articles, studies were selected for inclusion. The data from these studies were extracted into prestructured forms and reviewed for accuracy and validity by 2 authors (A.C., M.A.L.). Disagreements were resolved with mutual consensus between authors.

Outcome Measures

We analyzed the data primarily to evaluate procedural success of TPVI and to estimate rate of reintervention post-TPVI. Definition of "success" was variable in the studies; however, it was most commonly defined as deployment of a transcatheter pulmonary valve (TPV) with acceptable gradient (<30 mm Hg peak to peak) and regurgitation (≤mild) without a need for surgical conversion before discharge. Reinterventions included catheter-based intervention (balloon angioplasty/valvuloplasty or TPVI) on the TPV or surgical right ventricle to PA conduit replacement.

Secondary outcomes evaluated included procedural complications, survival postprocedure, and incidence of endocarditis in follow-up. Endocarditis was defined as bloodstream

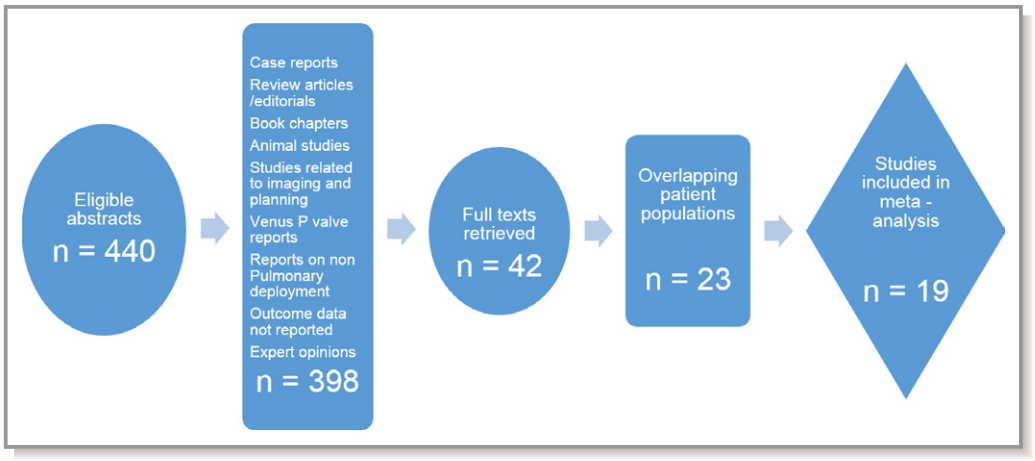

Figure 1. Flow diagram showing selection of studies for analysis.

infection classified in the respective study as possible or definite by the modified Duke criteria.[11] Endocarditis events were further analyzed as TPV-specific endocarditis (vegetation visualized on TPV or new dysfunction of TPV) and endocarditis leading to reintervention, explantation, or death. Additionally, a subgroup analysis was performed to ascertain relationship of prestenting with need for reintervention. To evaluate effect of prestenting, studies were divided into 2 groups—1 with ≥75% patients prestented before valve deployment and the other with <75% patients prestented. This cut off was chosen to reflect the change in practice in the United States pre- and post-HDE approval of the Melody valve as reported by Armstrong et al.[12]

Statistical Analysis

Systematic and statistical analyses were carried out with Comprehensive Meta-Analysis (version 3; Biostat, Englewood, NJ). Pooled event rates were computed using standard methods. Procedural outcomes are reported as percentages whereas follow-up outcomes are reported as events per 100 person-years (PY) of follow-up. Heterogeneity was assessed with the I^2 test (I^2 >50 and Q-statistic, P<0.05 implying substantial heterogeneity).[13] Random-effects modeling was utilized to account for studies' heterogeneity and observational nature. Publication bias was assessed using the funnel plot method (Figure 2). All of the P values were 2-tailed, with statistical significance specified at P<0.05 and confidence intervals (CI) computed at the 95% level. The analysis has been reported in accord with the PRISMA guidelines.[14]

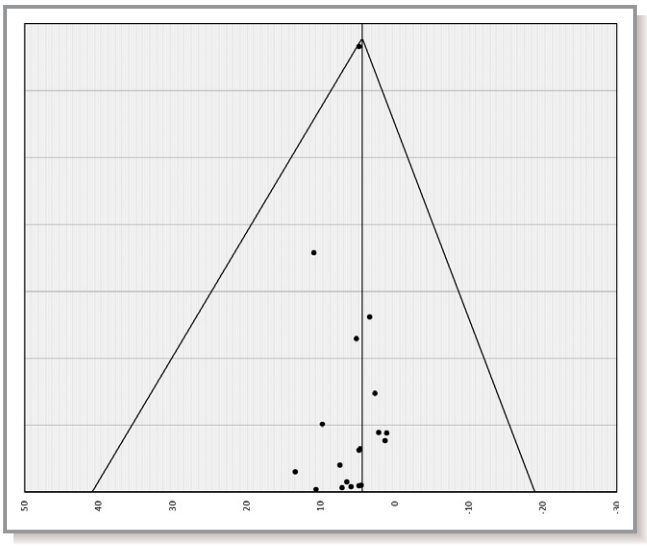

Figure 2. Funnel plot of rate of reinterventions using the SE method (95% CI).

Results

Nineteen observational studies[2–5,12,15–28] met inclusion criteria and were included in the final analysis. Table 1 illustrates the baseline characteristics of the included studies. A total of 1044 patients underwent attempted TPVI. The pooled analysis yielded a follow-up of 2271 PY. Thirteen studies solely used the Melody valve, 3 reported use of Edwards Sapien or Sapien XT THV, and 3 studies used both Melody and Edwards valve systems. Of the latter 3, Faza et al[21] reported separate outcomes for Melody and Edwards cohorts. The Edwards cohort had overlapping patients with the study reported by Kenny et al.[24] Hence, only the data for the Melody valve cohort were included for analysis from this article. Our data include TPVI attempted with the Melody valve system in 942 patients and Edwards THV system in 102 patients. Seven studies included at least 1 patient with a nonconduit RVOT whereas 2 studies reported solely on TPVI in patients with nonconduit RVOTs.

Patient Selection for TPVI

Eight studies[4,12,15,16,18,24,25,28] elaborated on the patient cardiac catheterization selection process before attempting TPVI. The pooled estimate of patients considered ineligible for TPVI was 7.7% (95% CI, 4.8–12.2%). In total, 52 of 623 patients were screened out as not suitable for TPVI. Reasons for exclusion included the following: coronary compression on balloon testing (n=18; 2.9%); conduit size not suitable for TPVI (n=18; 2.9%); conduit function better than anticipated on hemodynamic catheterization (n=8; 1.2%), branch PA stenosis (n=2; 0.3%) an exclusion criteria in early trials[29]; conduit stenosis adequately relieved by angioplasty alone (n=4; 0.6%); surgery needed for other congenital heart defects (n=1; 0.2%); and unspecified (n=1; 0.2%).

Procedural Outcomes

Success and procedural complications

Overall, 1019 of 1044 patients had a successful TPVI, yielding a pooled procedural success rate of 96.2% (95% CI, 94.6–97.4). Pooled procedural mortality was 1.5% (95% CI, 0.8–2.6%). There were a total of 5 procedural deaths. Two deaths were secondary to coronary compression or dissection whereas the other 3 patient deaths occurred when TPVI was utilized in a compassionate salvage procedure and mortality was likely not secondary to an adverse outcome of TPVI.

The adjusted pooled rate for total short-term complications was 10.1% (95% CI, 7.3–13.8). The most

Table 1. Studies Included and Demographic/Clinical Factors of Patients

First Author, Year (Ref)	Patients Considered/ Attempted	Age (y)	Median Follow-up (y)	Valve Used	Primary Pathology				Native RVOT (Yes/No/Only)	Indication		
					TOF/ PA/PS	Ross	TGA/ Truncus	Other		Stenosis	Regurg	Mixed
Wilson, 2015[27]	NA/25	34.0	3.5*	E	17	6	2	0	No	8	7	10
Cheatham, 2015[28]	167/150	19.0	4.5	M	80	31	31	8	No	39	80	31
Cools, 2015[19]	NA/111	19.3	2.4	M	71	22	18	0	Yes	49	36	26
Jalal, 2015[23]	NA/10	16.3	0.9*	M	7	0	2	1	Yes	3	2	5
Biernacka, 2015[16]	42/40	25.4	1.7*	M/E	30	5	4	1	Yes	19	21	0
Borik, 2015[17]	NA/51	20.2	4.2	M	35	5	10	1	No	NA	NA	NA
Berman, 2014[15]	25/24	8.0	1.3	M	18	2	5	0	No	5	7	13
Armstrong, 2014[12]	120/101	19.9	0.9	M	61	20	28	11	No	16	52	32
Fraisse, 2014[5]	NA/64	21.4	4.6	M	35	8	15	6	No	14	7	43
Meadows, 2014[3]	NA/31	24.0	1.3	M	28	0	1	2	Only	3	14	14
Malekzadeh-Milani, 2014[2]	NA/34	26.0	2.6	M	26	2	2	4	Only	18	16	0
Faza, 2013[21]	NA/13	20.9	0.5	M	9	0	2	2	No	7	3	3
Odemis, 2013[26]	NA/10	19.2	0.8	M/E	NA	NA	NA	NA	Yes	NA	NA	NA
Butera, 2013[18]	63/61	24.0	2.5	M	27	9	12	15	No	21	12	30
Haas, 2013[22]	NA/22	21.7	0.5*	E	13	2	4	3	Yes	2	11	9
Eicken, 2011[20]	NA/102	21.5	1.0	M	61	8	23	10	Yes	36	18	48
Kenny, 2011[24]	36/34	30.3	0.5	E	16	11	1	8	No	15	19	2
Martins, 2010[25]	7/6	19.0	0.7	M	3	0	4	0	No	0	0	7
Lurz, 2008[4]	163/155	21.2	2.4	M	94	12	31	18	Yes	61	46	44

E indicates Edwards; M, melody; NA, not applicable; PA/PS, pulmonic atresia/stenosis; Ref, reference number; RVOT, right ventricular outflow tract; TGA, transposition of great vessels; TOF, tetralogy of fallot.
*Mean follow-up.

frequent complication reported was conduit rupture: 4.1% (95% CI, 2.5–6.8). A total of 32 conduit ruptures were reported. The majority of ruptures were treated with covered stent and/or valve deployment. Only 5 required surgical repair. Other frequently observed complications were access-site complications requiring blood transfusion or vascular surgery: 2.8% (95% CI, 1.7–4.6) and dislodgement of stent/valve system: 2.5% (95% CI, 1.3–4.8). Table 2 lists rates of all procedural complications. Notably, despite prescreening for coronary compression in most protocols, 5 patients had a coronary complication from either the bare metal stent used for prestenting or the valve system itself (pooled incidence rate, 1.3%; 95% CI, 0.7–2.3).

Surgical conversion for the management of complications occurred in 3.4% of cases (95% CI, 2.3–5.2). Reasons for surgical conversion were stent/valve dislodgement in 9 cases, conduit rupture in 5 cases, coronary compression in 4 cases, obstructed branch PA in 1 case, and stent compression causing acutely elevated gradient in another case.

Follow-up Outcomes

Death

The adjusted pooled rate for death following discharge after a successful TPVI was 0.6 per 100 PY (95% CI, 0.3–0.9). There were a total of 17 deaths reported. Four of these were attributed to sepsis/endocarditis, 2 were secondary to progressive right ventricle dysfunction despite TPVI, 7 were considered to be unrelated to TPVI, whereas 4 were unexplained and may have been caused by arrhythmia.

Stent fractures

Reporting of stent fractures was not uniform across the studies included. Twelve studies reported on total and significant stent fractures, 2 reported total fractures only,

Table 2. Pooled Estimates for Short-Term Procedural Outcomes

	No. of Studies	Pooled Estimate (%)	I^2	*P* Value
Procedural success	19	96.2 (94.6–97.4)	0.0	0.48
Total complications	17	10.1 (7.3–13.8)	52.1	0.01
Death	19	1.5 (0.8–2.6)	0.0	0.98
Access complications	16	2.8 (1.7–4.6)	0.0	0.50
Coronary compression/dissection	17	1.3 (0.7–2.3)	0.0	1.00
Conduit rupture	17	4.1 (2.5–6.8)	43.6	0.03
Pulmonary artery perforation/laceration	17	2.1 (1.3–3.5)	0.0	0.85
Stent/valve dislodgement	17	2.5 (1.3–4.8)	38.5	0.05
Surgical conversion	18	3.4 (2.3–5.2)	7.8	0.36

whereas 2 others reported on significant stent fractures only (assumed to be either type 2 or 3 stent fractures per the Nordemeyer classification).[29] Pooled incidence of all stent fractures was 4.4 per 100 PY (95% CI, 2.4–6.3) whereas type 2/3 stent fractures were noted in 1.3 per 100 PY (95% CI, 0.5–2.0).

Reintervention

Overall, 4.4 patients required a RVOT reintervention per 100 PY of follow-up (95% CI, 3.0–5.9). Breaking these down, catheter-based reinterventions accounted for 2.7 events per 100 PY (95% CI, 1.7–3.7) whereas adjusted rate for surgical reinterventions was 1.7 per 100 PY (95% CI, 1.2–2.2). There is significant heterogeneity in the studies in this regard, which is negated once we analyze studies after adoption of prestenting (Figure 3).[2–5,12,15–28] In total, 77.5% of reinterventions were done for restenosis, 15.2% for endocarditis, only 1.8% for valve insufficiency, and 5.2% for other indications.

Effect of prestenting on stent fractures and reintervention

Studies with ≥75% prestenting had a much lower total rate of stent fractures (2.3 versus 7.2 per 100 PY; $P<0.01$). Reintervention was also less frequent in this group: 2.9 per 100 PY (95% CI, 1.5–4.3) as compared with 6.5 per 100 PY (95% CI, 4.6–8.5) for the studies with <75% prestenting ($P<0.01$). This difference persisted if we analyze catheter based or surgical reinterventions separately (Table 3).

Endocarditis

Pooled incidence rate of endocarditis in these 19 studies was 1.4 per 100 PY (95% CI, 0.9–2.0). TPV-specific endocarditis (vegetation involving TPV or new TPV dysfunction) and endocarditis requiring reintervention/TPV explantation or causing death occurred at a rate of 0.6 per 100 PY (95% CI, 0.3–0.9).

Discussion

Our meta-analysis is the first attempt to systematically pool high-quality observational studies to provide an estimate of procedural as well as follow-up outcomes. We report pooled outcomes of more than 1000 patients with a follow-up of 2271 PY. Because 20% of patients with congenital heart disease have RVOT or PV dysfunction,[30] many patients undergo surgical RVOT conduit or PV placements during their lifetime and will need revisions with age. TPVI is an attractive option to minimize the need for repeated cardiac surgery for these patients. Although several studies have reported on the safety and feasibility of TPVI with excellent short-term results[4,18,28] and improvement in cardiopulmonary exercise capacity and quality of life,[31,32] direct comparisons between surgical valve replacement and TPVI have not been made. European Society of Cardiology guidelines[33] do not distinguish between surgical and catheter interventions. American societies give TPVI a Class IIa recommendation.[34] The pooled data from this meta-analysis support TPVI as a highly successful intervention to treat RVOT dysfunction with an acceptable complication profile and low reintervention rate.

Procedural Success and Complications

The procedural success for TPVI is greater than 96%, with a complication rate of 10%. Our pooled estimate for procedural success is consistent with the high rates reported in the US IDE trial[28] and postapproval study[12] as well as the larger European studies.[4,19,20] Failed TPVI procedures were commonly associated with a complication requiring surgical conversion, which occurred in over 3% of cases. We believe

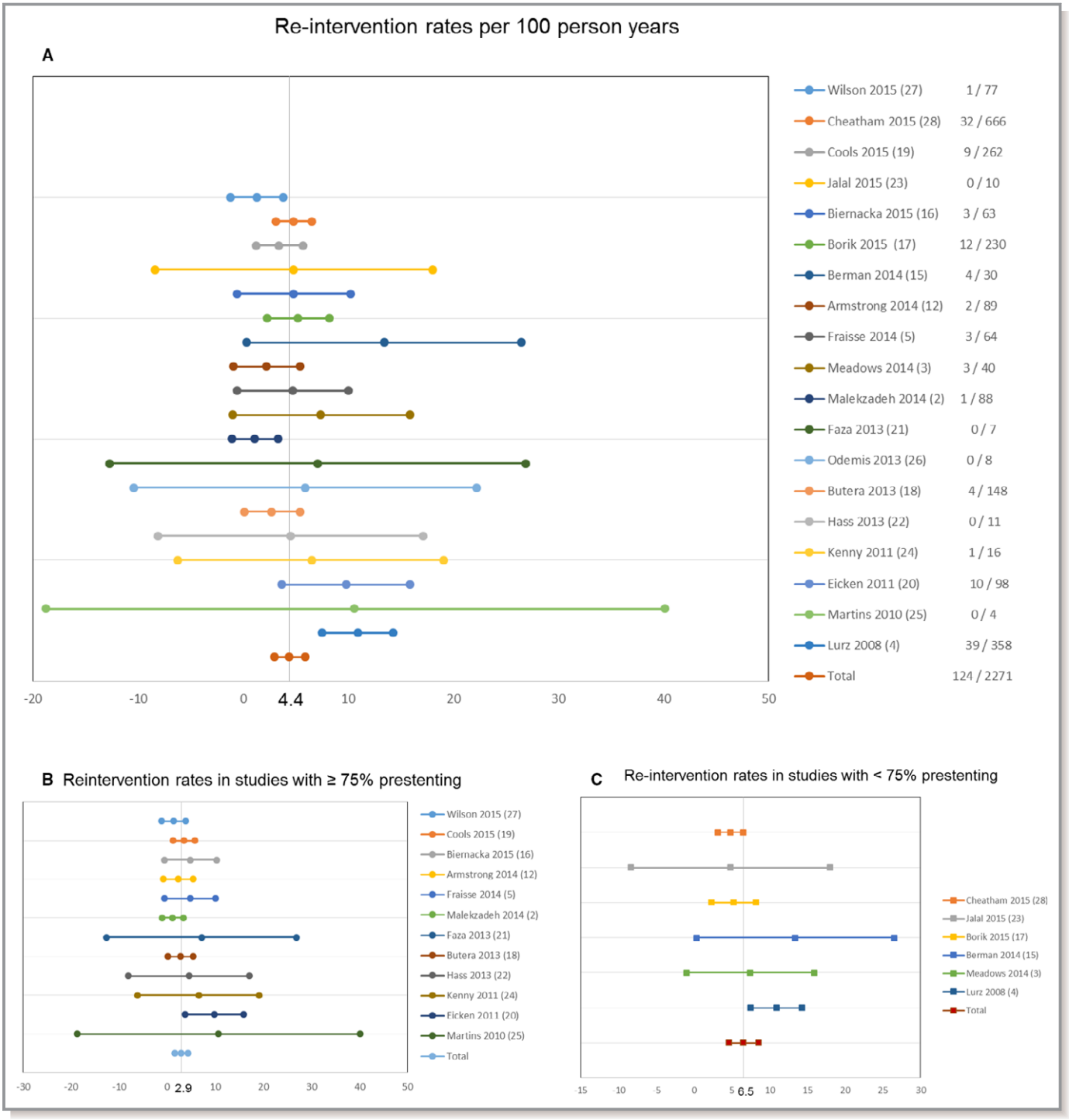

Figure 3. Forest plots depicting reintervention rates in the total pooled sample (A)—individual study event rates are noted in the right column (events/follow-up in person-years); reintervention rates contrasted among studies with <75% (B) and ≥75% presenting rates (C).

that procedural experience focusing on decreasing or treating these known complications will further increase TPVI success rates and decrease the frequency of surgical conversion.

Conduit rupture is a significant complication of TPVI. Berman et al[15] reported a very high rate of 20.8% conduit rupture, although this study solely reported on a specific patient population weighing <30 kg with stenotic homograft conduits. In another series of 99 RVOT interventions, which included 76 TPVI procedures, homografts had a higher frequency of rupture.[35] Interestingly, neither conduit size nor type/size of balloon used was associated with risk of rupture. This study classified conduit rupture severity as absent (grade 0), minimal rupture without extension (grade 1), moderate rupture with

Table 3. Pooled Estimates for Outcomes in Follow-up

Parameter	No. of Studies	Events/ 100 PY	Lower CI	Upper CI	I^2	*P* Value
Death	19	0.6	0.3	0.9	0.0	0.95
Stent fracture	14	4.4	2.4	6.3	79.7	0.00
Type 2/3 stent fracture	15	1.3	0.5	2.0	53.3	<0.01
Patients requiring reintervention	19	4.4	3.0	5.9	51.4	<0.01
Catheter re-interventions	19	2.7	1.7	3.7	44.7	0.02
Surgical reintervention	19	1.7	1.2	2.2	0.0	0.56
Endocarditis	19	1.4	0.9	2.0	11.9	0.31
TPV specific endocarditis	19	0.6	0.3	0.9	0.0	0.70
Endocarditis requiring explantation/ death/reintervention	19	0.6	0.3	0.9	0.0	0.88
Effect of prestenting						
Stent fracture						<0.01*
≥75% prestenting	8	2.3	0.8	3.7	57.7	0.02
<75% prestenting	5	7.2	5.0	9.3	26.9	0.24
Type 2/3 stent fracture						0.01*
≥75% prestenting	9	0.6	0	1.2	0.0	0.91
≤75% prestenting	5	2.3	1.4	3.2	60.5	0.04
Patients requiring reintervention						<0.01*
≥75% prestenting	12	2.9	1.5	4.3	0	0.46
<75% prestenting	6	6.5	4.6	8.5	56.5	0.04
Catheter reinterventions						<0.01*
≥75% prestenting	12	1.5	0.7	2.3	1.5	0.43
<75% prestenting	6	4.4	3.3	5.5	0.0	0.56
Surgical reinterventions						<0.01*
≥75% prestenting	12	1.3	0.5	2.0	0.0	0.81
<75% prestenting	6	2.2	1.4	3.0	35.7	0.17

PY indicates person-years; TPV, transcatheter pulmonary valve.
**P* value for subgroup analysis.

extension but contained and without hemodynamic instability (grade 2), and severe rupture with extension causing hemothorax or hemopericardium and with hemodynamic instability requiring blood transfusion (grade 3). Only 2 of 9 conduit ruptures reported were grade 3, and these were managed without surgery. Similarly, very few of the 32 conduit ruptures in our pooled analysis required surgical conversion, mostly managed with covered stents and/or valve implantation. The pooled rate of conduit rupture (4.1%) is comparable with Armstrong et al,[12] who found an incidence of 5.9%.

Notable other procedural complications with important implications for the TPVI procedure are dislodgement of the stent/valve apparatus and PA perforation. Although these complications can sometimes be managed with catheter techniques, this meta-analysis demonstrates that inability to retrieve or stabilize the dislodged/malpositioned valve or control PA bleeding results in surgical conversion. Six of the 9 valve dislodgements in our pooled sample were Edwards THV. Although determining whether this finding is significant is beyond the scope of this report, however, off-label implantation of the Edwards THV into patched or native RVOT may be related to increased risk of valve dislodgement. Similarly, we have insufficient information to conclude if nonconduit Melody implants carry a higher risk of the same. Reports of Sapien use for TPVI are from early use of the device and growing familiarity and technical expertise may obviate this difference.

Eligibility for TPVI

Not all patients needing PV replacement are candidates for TPVI. Our pooled estimate of 7.7% of potential TPVI candidates found at the time of the procedure to be ineligible

is comparable to both the US Melody IDE trial (10.2%)[28] and the largest European study by Lurz et al (4.9%).[4] The post–market approval study by Armstrong et al had a higher exclusion rate of 15.8%.[12] It is important to point out that studies elaborating on the patient selection details predominantly did not include native RVOT candidates, hence this estimate should not be extrapolated to nonconduit implants. Because surgical conversion or death are predictable outcomes of coronary compression, this finding during balloon testing is a contraindication to TPVI. As expected, this is the most common reason for patient exclusion from TPVI. The occurrence of coronary compression on balloon testing (raw, 2.9%; pooled estimate, 3.7%) was similar to the 5% reported by Morray et al.[36] They studied 404 patients considered for TPVI from 4 large-volume centers included in US IDE trial and found that a large proportion of patients with coronary compression on balloon testing had anomalous coronary artery anatomy (15 of 21). The finding in this meta-analysis supports the practice of careful preprocedural and procedural coronary artery imaging and balloon testing for coronary compression before prestenting or valve implantation.

Branch PA stenosis and unsuitable conduit size were other common reasons for exclusion. Two patients in our pooled sample were excluded because of distal PA stenosis, which would not have been an exclusion criterion in current clinical practice where concurrent intervention could be performed, if indicated. Unsuitable conduit size was another common reason for exclusion. Theoretically, the Melody valve mounted on a 24-mm balloon or the Edwards THV could be implanted in some patients who were excluded secondary to large conduit or RVOT size, potentially decreasing the patient exclusion rate.

Reintervention

There is lack of data on the longevity of the Melody valve. Cheatham et al recently published a rate of 76±4% freedom from reintervention at 5 years[28] in the US IDE trial cohort. They found higher rates of reintervention in patients with homografts, without prestenting, a higher post-TPVI RVOT gradient (>25 mm Hg) and preimplantation moderate-to-severe tricuspid valve insufficiency. Our pooled rate of 4.8 per 100 PY also reflects a similar outcome. However, implantation practices have changed over the last decade and now place significant emphasis on prestenting with bare metal stents. Only 10% of cases were prestented in the first tertile of the US IDE trial.[28] In comparison, the postapproval study by Armstrong et al observed prestenting in 76 of 101 patients.[12] Similarly, Cools et al and Fraisse et al report prestenting rates of 96.4% and 96.9%, respectively.[5,19] Schievano et al, in their in vitro modeling study, showed that a stent-in-stent technique decreased mechanical stress on the TPV stent struts.[37] There are increasing data to support that prestenting reduces stent fractures and hence reduces the need of reintervention. A recent meta-analysis investigated the relationship between prestenting and stent fractures pooling data from 5 studies.[38] Prestenting was associated with a 2-fold reduction in all stent fractures and a 6-fold reduction in type II/III stent fractures. However, the pooled sample only included 360 patients, of whom 207 were prestented. This study also showed a reduction in RVOT reintervention in prestented patients in a subgroup analysis including 191 patients only with 1 versus 6 reinterventions in prestented and non-pre-stented patients.

With a lack of clinical data regarding prestenting/stent fractures and reinterventions, we chose to analyze the pooled data in a different manner. Adopting Armstrong et al's postapproval study[12] as a reflection of common clinical practice, we divided the studies into 2 groups—≥75% prestenting and <75% prestenting. We found a markedly lower rate of stent fractures (in total and type 2/3) as well as reintervention rates. The reduction in reintervention rates persisted for both catheter and surgical reinterventions. The rates of reintervention in the first group are more comparable to rates reported for surgical conduits and homografts.[39] Thus, TPVI seems to be bridging the gap in longevity compared with surgical conduits as practice patterns have become more refined and standardized.

Endocarditis

Bloodstream infections have been recognized as a late complication post-TPVI. Varying rates for endocarditis have been reported in different cohorts of patients. McElhinney et al reported an annualized rate of first episode of endocarditis and TPV-related endocarditis of 2.4% per PY and 0.88% per PY, respectively.[40] This was derived from 3 patient cohorts in North America and Europe and had a cumulative follow-up of 687.1 PY. Malekzadeh-Milani et al, in their study of 86 patients followed for a mean duration of 23.6±15 months, reported a rate of 5.8% (5 cases).[41] Interestingly, all 5 of these cases could be classified as TPV-related endocarditis. Buber et al reported a rate of 9.5% (14 cases) in their 147 patient study over a median follow-up period of 19 months.[42] Whereas vegetations were only noted on 4 valves, all 14 cases had a new elevation in RVOT gradient. The pooled rates for endocarditis and TPV-specific endocarditis estimated in our study are considerably lower, with a cumulative follow-up of over 2200 PY.

It is thought that TPVI in a smaller conduit is a risk for endocarditis given a higher residual gradient.[40,43] Also, a majority of cases reported have been associated with predisposing conditions, including noncompliance with antibiotic prophylaxis regimen with dental or other invasive

procedures, and concomitant bacterial infection.[4,18,40] Role of aspirin discontinuation has also been reported.[41] In retrospective comparisons of Melody valve versus surgical RVOT conduits, Melody valves have been noted to have a higher rate of endocarditis.[44,45] The difference is pronounced when comparing Melody valves with homografts, but not for Contegra bovine valved conduit, suggesting possible tropism of micro-organisms to the bovine material used in making the Melody and Contegra valves.[45]

Limitations

The primary study limitations are inherent to the meta-analysis study design. Systematic pooling of different observational studies with differences in baseline characteristics, anatomic substrate, sample sizes, implantation techniques, valve type, and different follow-up durations introduce imprecision in the results because of heterogeneity. Many studies included have small sample sizes and follow-up durations and may lead to falsely low outcome rates, especially for endocarditis. There are variations in reporting how many patients were screened but considered ineligible for TPVI. Under-reporting of outcomes has to be taken into account given that all of the data included are observational. We concede that there is variability in how data are presented in each study, criteria for implant, and adverse event reporting are also nonuniform. There may be under-reporting of endocarditis, especially in the earlier studies. Moreover, there has been refinement of the procedure and improved outcomes as operators have become more experienced. It should be kept in mind that results from this analysis cannot be extrapolated to long-term outcomes.

Because TPVI is now considered standard of care, randomized controlled trials proving the safety and efficacy of TPVI versus surgical right ventricle to PA conduit or PV implantation are not feasible. Furthermore, small sample size limitations in congenital heart disease makes pooling of multiple observational studies a logical approach to increase the evidence to support interventional therapies and outcomes. Thus, in spite of the inherent limitations, this meta-analysis can clarify extensive and sometimes conflicting data by systematic organization and aggregation of available observational data. We hope that the pooled estimates can be used as a "worst-case scenario," especially given that it includes a significant number of patients from the early years of TPVI.

Conclusion

In our systematic review and meta-analyses pooling studies reporting TPVI outcomes on conduit as well as nonconduit RVOTs with Melody and Edwards THV systems, TPVI was found to have an outstanding procedural success rate with an acceptable complication profile and low need for surgical conversion. We also demonstrate corroborative evidence of decrease in stent fractures and RVOT reinterventions with increase in adoption of prestenting with bare metal stents. Our analysis reports lower rates of infective endocarditis and TPV-related endocarditis than previously reported; however, this finding should be evaluated with caution, given the chance of under-reporting of events in observational data and the potentially catastrophic effects of TPV endocarditis. More experience needs to be gained with nonconduit RVOT TPVI procedures as well as with using the newer generations of Edwards Sapien XT and Sapien 3 systems to draw concrete conclusions about the same.

Disclosures

None.

References

1. Bonhoeffer P, Boudjemline Y, Saliba Z, Merckx J, Aggoun Y, Bonnet D, Acar P, Le Bidois J, Sidi D, Kachaner J. Percutaneous replacement of pulmonary valve in a right-ventricle to pulmonary-artery prosthetic conduit with valve dysfunction. *Lancet*. 2000;356:1403–1405.
2. Malekzadeh-Milani S, Ladouceur M, Cohen S, Iserin L, Boudjemline Y. Results of transcatheter pulmonary valvulation in native or patched right ventricular outflow tracts. *Arch Cardiovasc Dis*. 2014;107:592–598.
3. Meadows JJ, Moore PM, Berman DP, Cheatham JP, Cheatham SL, Porras D, Gillespie MJ, Rome JJ, Zahn EM, McElhinney DB. Use and performance of the Melody Transcatheter Pulmonary Valve in native and postsurgical, nonconduit right ventricular outflow tracts. *Circ Cardiovasc Interv*. 2014;7:374–380.
4. Lurz P, Coats L, Khambadkone S, Nordmeyer J, Boudjemline Y, Schievano S, Muthurangu V, Lee TY, Parenzan G, Derrick G, Cullen S, Walker F, Tsang V, Deanfield J, Taylor AM, Bonhoeffer P. Percutaneous pulmonary valve implantation: impact of evolving technology and learning curve on clinical outcome. *Circulation*. 2008;117:1964–1972.
5. Fraisse A, Aldebert P, Malekzadeh-Milani S, Thambo JB, Piéchaud JF, Aucoururier P, Chatelier G, Bonnet D, Iserin L, Bonello B, Assaidi A, Kammache I, Boudjemline Y. Melody (R) transcatheter pulmonary valve implantation: results from a French registry. *Arch Cardiovasc Dis*. 2014;107:607–614.
6. Binder RK, Webb JG. TAVI: from home-made prosthesis to global interventional phenomenon. *Heart*. 2012;98:30–36.
7. Adams DH, Popma JJ, Reardon MJ, Yakubov SJ, Coselli JS, Deeb GM, Gleason TG, Buchbinder M, Hermiller J Jr, Kleiman NS, Chetcuti S, Heiser J, Merhi W, Zorn G, Tadros P, Robinson N, Petrossian G, Hughes GC, Harrison JK, Conte J, Maini B, Mumtaz M, Chenoweth S, Oh JK; U.S. CoreValve Clinical Investigators. Transcatheter aortic-valve replacement with a self-expanding prosthesis. *N Engl J Med*. 2014;370:1790–1798.
8. Leon MB, Smith CR, Mack M, Miller DC, Moses JW, Svensson LG, Tuzcu EM, Webb JG, Fontana GP, Makkar RR, Brown DL, Block PC, Guyton RA, Pichard AD, Bavaria JE, Herrmann HC, Douglas PS, Petersen JL, Akin JJ, Anderson WN, Wang D, Pocock S; PARTNER Trial Investigators. Transcatheter aortic-valve implantation for aortic stenosis in patients who cannot undergo surgery. *N Engl J Med*. 2010;363:1597–1607.
9. Leon MB, Smith CR, Mack MJ, Makkar RR, Svensson LG, Kodali SK, Thourani VH, Tuzcu EM, Miller DC, Herrmann HC, Doshi D, Cohen DJ, Pichard AD, Kapadia S, Dewey T, Babaliaros V, Szeto WY, Williams MR, Kereiakes D, Zajarias A, Greason KL, Whisenant BK, Hodson RW, Moses JW, Trento A, Brown DL, Fearon WF, Pibarot P, Hahn RT, Jaber WA, Anderson WN, Alu MC, Webb JG; PARTNER 2 Investigators. Transcatheter or surgical aortic-valve replacement in intermediate-risk patients. *N Engl J Med*. 2016;374:1609–1620.
10. Smith CR, Leon MB, Mack MJ, Miller DC, Moses JW, Svensson LG, Tuzcu EM, Webb JG, Fontana GP, Makkar RR, Williams M, Dewey T, Kapadia S, Babaliaros V, Thourani VH, Corso P, Pichard AD, Bavaria JE, Herrmann HC, Akin JJ,

Anderson WN, Wang D, Pocock SJ; PARTNER Trial Investigators. Transcatheter versus surgical aortic-valve replacement in high-risk patients. *N Engl J Med*. 2011;364:2187–2198.

11. Li JS, Sexton DJ, Mick N, Nettles R, Fowler VG Jr, Ryan T, Bashore T, Corey GR. Proposed modifications to the Duke criteria for the diagnosis of infective endocarditis. *Clin Infect Dis*. 2000;30:633–638.
12. Armstrong AK, Balzer DT, Cabalka AK, Gray RG, Javois AJ, Moore JW, Rome JJ, Turner DR, Zellers TM, Kreutzer J. One-year follow-up of the Melody transcatheter pulmonary valve multicenter post-approval study. *JACC Cardiovasc Interv*. 2014;7:1254–1262.
13. Higgins JPT, Green S eds. *Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0*. The Cochrane Collaboration; 2011. Available at: www.handbook.cochrane.org. Accessed June 1, 2016.
14. Moher D, Liberati A, Tetzlaff J, Altman DG; Group P. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *J Clin Epidemiol*. 2009;62:1006–1012.
15. Berman DP, McElhinney DB, Vincent JA, Hellenbrand WE, Zahn EM. Feasibility and short-term outcomes of percutaneous transcatheter pulmonary valve replacement in small (<30 kg) children with dysfunctional right ventricular outflow tract conduits. *Circ Cardiovasc Interv*. 2014;7:142–148.
16. Biernacka EK, Ruzyllo W, Demkow M, Kowalski M, Śpiewak M, Piotrowski W, Kuśmierczyk M, Banaś S, Różanski J, Hoffman P. Transcatheter pulmonary valve implantation in patients with right ventricular outflow tract dysfunction: early and mid-term results. *J Invasive Cardiol*. 2015;27:E82–E89.
17. Borik S, Crean A, Horlick E, Osten M, Lee KJ, Chaturvedi R, Friedberg MK, McCrindle BW, Manlhiot C, Benson L. Percutaneous pulmonary valve implantation: 5 years of follow-up: does age influence outcomes? *Circ Cardiovasc Interv*. 2015;8:e001745.
18. Butera G, Milanesi O, Spadoni I, Piazza L, Donti A, Ricci C, Agnoletti G, Pangrazi A, Chessa M, Carminati M. Melody transcatheter pulmonary valve implantation. Results from the registry of the Italian Society of Pediatric Cardiology. *Catheter Cardiovasc Interv*. 2013;81:310–316.
19. Cools B, Budts W, Heying R, Boshoff D, Eyskens B, Frerich S, Troost E, Gewillig M. Medium term follow-up after percutaneous pulmonary valve replacement with the Melody® valve. *IJC Heart Vasc*. 2015;7:92–97.
20. Eicken A, Ewert P, Hager A, Peters B, Fratz S, Kuehne T, Busch R, Hess J, Berger F. Percutaneous pulmonary valve implantation: two-centre experience with more than 100 patients. *Eur Heart J*. 2011;32:1260–1265.
21. Faza N, Kenny D, Kavinsky C, Amin Z, Heitschmidt M, Hijazi ZM. Single-center comparative outcomes of the Edwards SAPIEN and Medtronic Melody transcatheter heart valves in the pulmonary position. *Catheter Cardiovasc Interv*. 2013;82:E535–E541.
22. Haas NA, Moysich A, Neudorf U, Mortezaeian H, Abdel-Wahab M, Schneider H, De Wolf D, Petit J, Narayanswami S, Laser KT, Sandica E. Percutaneous implantation of the Edwards SAPIEN(TM) pulmonic valve: initial results in the first 22 patients. *Clin Res Cardiol*. 2013;102:119–128.
23. Jalal Z, Malekzadeh-Milani S, Hofbeck M, Al Najashi K, Thambo JB, Boudjemline Y. A new percutaneous pulmonary valve implantation technique for complex right ventricular outflow tracts: the "folded melody valve". *Catheter Cardiovasc Interv*. 2015;85:604–610.
24. Kenny D, Hijazi ZM, Kar S, Rhodes J, Mullen M, Makkar R, Shirali G, Fogel M, Fahey J, Heitschmidt MG, Cain C. Percutaneous implantation of the Edwards SAPIEN transcatheter heart valve for conduit failure in the pulmonary position: early phase 1 results from an international multicenter clinical trial. *J Am Coll Cardiol*. 2011;58:2248–2256.
25. Martins JD, Ewert P, Sousa L, Freitas I, Trigo C, Jalles N, Matos P, Agapito A, Ferreira R, Pinto FF. Percutaneous pulmonary valve implantation: initial experience. *Rev Port Cardiol*. 2010;29:1839–1846.
26. Odemis E, Guzeltas A, Saygi M, Bakir I. Percutaneous pulmonary valve implantation; first experiences from Turkey. *Anadolu Kardiyol Derg*. 2013;13:409–410.
27. Wilson WM, Benson LN, Osten MD, Shah A, Horlick EM. Transcatheter pulmonary valve replacement with the Edwards Sapien system: the Toronto experience. *JACC Cardiovasc Interv*. 2015;8:1819–1827.
28. Cheatham JP, Hellenbrand WE, Zahn EM, Jones TK, Berman DP, Vincent JA, McElhinney DB. Clinical and hemodynamic outcomes up to 7 years after transcatheter pulmonary valve replacement in the US melody valve investigational device exemption trial. *Circulation*. 2015;131:1960–1970.
29. Nordmeyer J, Khambadkone S, Coats L, Schievano S, Lurz P, Parenzan G, Taylor AM, Lock JE, Bonhoeffer P. Risk stratification, systematic classification, and anticipatory management strategies for stent fracture after percutaneous pulmonary valve implantation. *Circulation*. 2007;115:1392–1397.
30. McElhinney DB, Hennesen JT. The Melody(R) valve and Ensemble(R) delivery system for transcatheter pulmonary valve replacement. *Ann N Y Acad Sci*. 2013;1291:77–85.
31. Batra AS, McElhinney DB, Wang W, Zakheim R, Garofano RP, Daniels C, Yung D, Cooper DM, Rhodes J. Cardiopulmonary exercise function among patients undergoing transcatheter pulmonary valve implantation in the US Melody valve investigational trial. *Am Heart J*. 2012;163:280–287.
32. Muller J, Engelhardt A, Fratz S, Eicken A, Ewert P, Hager A. Improved exercise performance and quality of life after percutaneous pulmonary valve implantation. *Int J Cardiol*. 2014;173:388–392.
33. Baumgartner H, Bonhoeffer P, De Groot NM, de Haan F, Deanfield JE, Galie N, Gatzoulis MA, Gohlke-Baerwolf C, Kaemmerer H, Kilner P, Meijboom F, Mulder BJ, Oechslin E, Oliver JM, Serraf A, Szatmari A, Thaulow E, Vouhe PR, Walma E; Task Force on the Management of Grown-up Congenital Heart Disease of the European Society of Cardiology (ESC); Association for European Paediatric Cardiology (AEPC); ESC Committee for Practice Guidelines (CPG). ESC guidelines for the management of grown-up congenital heart disease (new version 2010). *Eur Heart J*. 2010;31:2915–2957.
34. Feltes TF, Bacha E, Beekman RH III, Cheatham JP, Feinstein JA, Gomes AS, Hijazi ZM, Ing FF, de Moor M, Morrow WR, Mullins CE, Taubert KA, Zahn EM. Indications for cardiac catheterization and intervention in pediatric cardiac disease: a scientific statement from the American Heart Association. *Circulation*. 2011;123:2607–2652.
35. Boudjemline Y, Malekzadeh-Milani S, Patel M, Thambo JB, Bonnet D, Iserin L, Fraisse A. Predictors and outcomes of right ventricular outflow tract conduit rupture during percutaneous pulmonary valve implantation: a multicentre study. *EuroIntervention*. 2016;11:1053–1062.
36. Morray BH, McElhinney DB, Cheatham JP, Zahn EM, Berman DP, Sullivan PM, Lock JE, Jones TK. Risk of coronary artery compression among patients referred for transcatheter pulmonary valve implantation: a multicenter experience. *Circ Cardiovasc Interv*. 2013;6:535–542.
37. Schievano S, Petrini L, Migliavacca F, Coats L, Nordmeyer J, Lurz P, Khambadkone S, Taylor AM, Dubini G, Bonhoeffer P. Finite element analysis of stent deployment: understanding stent fracture in percutaneous pulmonary valve implantation. *J Interv Cardiol*. 2007;20:546–554.
38. Cardoso R, Ansari M, Garcia D, Sandhu S, Brinster D, Piazza N. Prestenting for prevention of melody valve stent fractures: a systematic review and meta-analysis. *Catheter Cardiovasc Interv*. 2016;87:534–539.
39. Batlivala SP, Emani S, Mayer JE, McElhinney DB. Pulmonary valve replacement function in adolescents: a comparison of bioprosthetic valves and homograft conduits. *Ann Thorac Surg*. 2012;93:2007–2016.
40. McElhinney DB, Benson LN, Eicken A, Kreutzer J, Padera RF, Zahn EM. Infective endocarditis after transcatheter pulmonary valve replacement using the Melody valve: combined results of 3 prospective North American and European studies. *Circ Cardiovasc Interv*. 2013;6:292–300.
41. Malekzadeh-Milani S, Ladouceur M, Patel M, Boughenou FM, Iserin L, Bonnet D, Boudjemline Y. Incidence and predictors of Melody(R) valve endocarditis: a prospective study. *Arch Cardiovasc Dis*. 2015;108:97–106.
42. Buber J, Bergersen L, Lock JE, Gauvreau K, Esch JJ, Landzberg MJ, Valente AM, Sandora TJ, Marshall AC. Bloodstream infections occurring in patients with percutaneously implanted bioprosthetic pulmonary valve: a single-center experience. *Circ Cardiovasc Interv*. 2013;6:301–310.
43. Patel M, Iserin L, Bonnet D, Boudjemline Y. Atypical malignant late infective endocarditis of Melody valve. *J Thorac Cardiovasc Surg*. 2012;143:e32–e35.
44. O'Donnell C, Holloway R, Tilton E, Stirling J, Finucane K, Wilson N. Infective endocarditis following Melody valve implantation: comparison with a surgical cohort. *Cardiol Young*. 2017;27:294–301.
45. Van Dijck I, Budts W, Cools B, Eyskens B, Boshoff DE, Heying R, Frerich S, Vanagt WY, Troost E, Gewillig M. Infective endocarditis of a transcatheter pulmonary valve in comparison with surgical implants. *Heart*. 2015;101:788–793.

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Review

Evolving Trends in Interventional Cardiology: Endovascular Options for Congenital Disease in Adults

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ABSTRACT

As increasing numbers of patients with congenital heart disease enter adulthood, there is a growing need for minimally invasive percutaneous interventions, primarily to minimize the number of repeated surgeries required by these patients. The use of percutaneous devices is commonplace for the treatment of simple lesions, such as atrial septal defect, patent foramen ovale, patent duct arteriosus, and abnormal vascular connections. There is also substantial experience with device closure of membranous and muscular ventricular septal defects, as well as more complex shunts such as baffle leaks after atrial switch repair and ventricular pseudoaneurysms. An increasing use of covered stents has improved the safety of aortic coarctation, conduit, and branch pulmonary stenosis interventions. Percutaneous pulmonary valve implantation now has an established role in the setting of dysfunctional right ventricle-pulmonary artery conduits or failing bioprosthetic pulmonary valves. Many patients remain unsuitable for percutaneous pulmonary valve implantation because of large diameter "native" outflow tracts, however, various techniques have emerged and multiple devices are in development to provide solutions

RÉSUMÉ

Alors que de plus en plus de patients ayant une cardiopathie congénitale arrivent à l'âge adulte, le besoin d'interventions percutanées minimalement invasives se fait croissant, principalement pour minimiser le nombre de chirurgies répétées souvent requises par ces patients. L'utilisation de dispositifs percutanés est devenue fréquente pour le traitement des lésions simples, comme la communication interauriculaire, la persistance du foramen ovale, la persistance du canal artériel et les anastomoses vasculaires anormales. L'expérience concernant la fermeture des anomalies du septum membraneux et du septum musculaire par un dispositif, ainsi que les shunts plus complexes comme les fuites de la cloison après la détransposition auriculaire et les pseudoanévrismes ventriculaires est également non négligeable. L'utilisation croissante des endoprothèses recouvertes a amélioré l'innocuité des interventions liées à la coarctation de l'aorte, des sténoses du conduit et des branches pulmonaires. L'implantation percutanée d'une valvule pulmonaire a maintenant un rôle bien établi dans le cadre des conduits dysfonctionnels du ventricule droit et de l'artère pulmonaire défaillantes, ou des bioprothèses

The development and implementation of new surgical techniques in conjunction with improvements in medical care for patients with congenital heart disease has resulted in a significant reduction in childhood mortality rates from near 100% in the mid twentieth century to approximately 20% in the 1970s and 5% in the current era.[1,2] Increasing numbers of patients with congenital heart disease are now surviving to adulthood, such that there are now more adults than children with congenital heart disease.[3] Most patients with complex disease have had palliative surgery in childhood and many will require further interventions in adulthood, many of which can now be performed via a transcatheter approach, owing to improvements in transcatheter techniques and advances in equipment. Concurrent improvements in cardiac imaging have facilitated more accurate diagnosis and guidance of increasingly complex lesion sets.

In this article, the evolving trends in interventional procedures for congenital heart disease, including simple lesions such as ventricular septal defects (VSDs) and coarctation, and more complex interventions such as percutaneous pulmonary valve replacement and those used in patients with complex congenital heart disease are reviewed.

Imaging and the Cardiac Catheterization Laboratory

Intraprocedural imaging is of great importance in guiding structural and congenital interventions. Fluoroscopic imaging and angiography are employed universally and have been widely used since the 1950s. Over the past 20 years, there has been

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for these unique anatomic challenges. Hybrid approaches involving use of surgical and transcatheter techniques are increasingly common, serving to optimize efficacy and safety of certain procedures; they depend on a collaborative and collegial relationship between cardiac surgeons and interventionalists that is primarily patient-centred.

valvulaires pulmonaires dé faillantes. L'implantation percutanée d'une valvule pulmonaire demeure inappropriée pour plusieurs patients en raison des voies d'éjection « natives » de grand diamètre. Cependant, des techniques variées sont apparues, et de nombreux dispositifs sont en développement pour offrir des solutions à ces particularités anatomiques. Les approches hybrides avec l'utilisation de techniques chirurgicales et par cathéter sont de plus en plus fréquentes, et servent à optimiser l'efficacité et l'innocuité de certaines interventions; elles dépendent d'une relation collégiale et de collaboration entre les chirurgiens cardiaques et les cathétériseurs interventionnels, qui est principalement axée sur le patient.

an increasing use of intraprocedural transesophageal echocardiography (TEE) and, more recently, intracardiac echocardiography (ICE). TEE and ICE are of particular use in assisting percutaneous device closure of septal defects (atrial and ventricular), paravalvular leaks and left atrial appendage occlusion. Familiarity with ICE is a useful skill for the interventionalist because it affords independence and obviates the need for an echocardiographer to be present during certain interventions, in particular, atrial septal defect (ASD) device closure. 3-D ICE might provide additional insight into complex lesions of the atrial septum and enhance our ability to guide intracardiac intervention. TEE (2-dimensional and 3-D) retains an important preprocedural role in this setting, in particular for definition of multiple ASDs. Rotational angiography with 3-D reconstruction capability and computed tomography aortography (CTA)/magnetic resonance aortography (MRA) 3-D fluoroscopic overlay are now commercially available; these can afford 3-D visualization and allow fusion of 3-D models with fluoroscopic images.[4] Potential benefits include improved image quality, improved interventional guidance, lower overall radiation exposure and, thus, improved patient safety. In the structural intervention arena, such 3-D imaging is of particular use for planning and guidance of coarctation stenting, percutaneous pulmonary valve implantation (PPVI) and complex interventions in the Fontan circulation or after atrial switch repair.[5,6] Imaging in the setting of a single ventricle is enhanced by cessation of respiration and manipulation of the heart rate and cardiac output (with adenosine or rapid pacing, for example[6,7]) to slow contrast transit time. Limitations currently include the inability to overlay in the lateral plane and the lack of "dynamic" overlay (current images are static with no adjustment for heart motion or respiration). Future advances should resolve these issues, allowing for the development of the "triple overlay" technique with coregistration of preprocedural CTA or MRA, intraprocedural 3-D rotational angiography, and echocardiography with live fluoroscopy.

Most structural interventions are currently performed in catheterization laboratories designed for coronary intervention. Ideally, delivery of valves and devices should be performed in a setting with operating room standards of air exchange and optimized imaging systems, including a biplane fluoroscopy system coregistered with intraprocedure TEE and preprocedure computed tomography (CT)/magnetic resonance imaging (MRI) scans. Furthermore, such procedures often require extra space to accommodate extra personnel (anaesthetic team, echocardiographer) and extra equipment. The "hybrid" laboratory has been designed to meet these requirements.

Simple Congenital Lesions

Shunts

ASDs. ASDs remain the most common congenital defect diagnosed in adulthood. Indications for ASD closure include a hemodynamically significant shunt, evidence of right atrial or right ventricular enlargement, paradoxical embolism, or platypnea-orthodeoxia syndrome.[8] Percutaneous treatment is well established as a therapy for secundum ASDs with appropriate anatomy, which includes diameter < 38 mm and adequate rims. The Amplatzer Septal Occluder device instructions for use[9] list the presence of any rim of less than 5 mm (other than the aortic rim) as a contraindication to device insertion, and a deficient aortic rim is listed as a warning. In our experience, however, it is possible to safely implant a device without long-term issues in those with shorter rims (as long as an indent is evident during balloon sizing). Other types of ASDs, including ostium primum and sinus venosus defects, remain unsuitable for device closure. Patients with coexisting secundum defects and anomalous pulmonary veins might be carefully evaluated using cardiac MRI[10] to define the relative flow from the anomalous vein vs the intracardiac shunt; in adults, especially of older age, closure of the defect without addressing the anomalous venous drainage might provide symptomatic relief (likely at the expense of mild residual right ventricle [RV] enlargement).

Improvements in the ASD occluder devices, delivery systems, and techniques have improved safety and efficacy of the procedure and have allowed for closure of larger, more complex defects. Two designs frequently used currently are (Supplemental Fig. S1): nitinol wire mesh-based double disk plugs (including the Amplatzer septal occluders [St Jude Medical, Plymouth, MN] and the Occlutech device [Occlutech International AB, Helsingborg, Sweden]) and the Gore Septal occluder (Gore Medical, Flagstaff, AZ). The Gore septal occluder uses a 5-wire frame covered with a polytetrafluoroethylene patch-like material and has a better design than its predecessor, the Gore Helex device. The Gore septal occluder has superior conformability, apposition, and closure performance[11] but is only suitable for defects smaller than 20 mm.

Several nonrandomized studies have compared percutaneous secundum ASD closure with surgical repair; in a recent retrospective study of 718 patients from a Québec database (1988-2005), 30-day mortality rates were similar (1.0% vs 0.3%; $P = 0.38$) and there was no difference in 5-year mortality rates.[12] Procedural success rates of more than 95%

have been documented with no differences in efficacy (defined as successful closure without major complications or need for surgical intervention) in the medium term in another study.[13] Percutaneous closure is, therefore, the procedure of choice where technically feasible.

Overall complication rates are low after transcatheter device occlusion of ASDs.[14] Medical Device Reporting-reported major adverse events for the on-label use of the Amplatzer Septal Occluder device (with associated rates based on world-wide reported events and sales) include: embolization (0.16%), erosion (0.04%), arrhythmia (0.02%), thrombus on device (0.005%), and stroke (0.003%).[15] Device erosion, when it occurs, usually does so in the region of the antero-superior wall and often involving the aorta. Conjecture exists regarding the exact mechanism for erosion; although an AGA expert panel recommended against device oversizing and avoidance of overstretching the balloon when balloon-sizing the defect to reduce erosion risk, many operators believe an undersized device with tip protrusion into the aortic root or excess motion of the device relative to the heart to be greater risk factors.[16,17] We avoid device oversizing relative to balloon size (ie, no more than 1 mm for devices less than 20 mm and no more than 2 mm for those more than 20 mm), but in the case of a deficient aortic rim, we prefer the device splay around the aorta, rather than causing an indent. Late erosions have not been reported with the flexible Gore septal occluder, however, there remains limited experience with this device.

Intracardiac echocardiography has emerged as a useful adjunctive tool for ASD device closure, and is particularly useful for defining the inferoposterior margin of the defect.[18]

Challenging subsets include:

- A fenestrated septum: options include use of a cribriform Amplatzer device or performance of a balloon septostomy to coalesce smaller defects into 1 large defect that is closed with a single device;
- Multiple defects: multiple devices can be inserted in the septum;
- Coexistent systolic and/or diastolic left ventricular dysfunction, where there is risk of decompensation with occlusion of the ASD. In this setting, test balloon occlusion to assess for a significant rise in left atrial pressure (of more than 10 mm Hg) should be performed, in which case, so-called "anti-congestive conditioning" or deliberate device "fenestration" has been discussed.[19] In our experience however, heart failure rarely, if ever, ensues in this scenario when diuretics are used for 2 weeks before ASD closure.
- Pulmonary hypertension (PAH): closure is contraindicated if there exists irreversible PAH (pulmonary artery [PA] pressure more than two-thirds systemic arterial blood pressure or pulmonary arteriolar resistance greater than two-thirds the systemic arteriolar resistance). Closure is possible if PAH is present with a net left-to-right shunt of greater than 1.5:1, or there is evidence of PA reactivity when challenged with a pulmonary vasodilator.[8] Evaluation of a patient with PAH and an ASD might involve pretreatment with a vasodilator or initiation of a loop diuretic, depending on the aetiology (the "treat and close" model). Involving experts in PAH in the multidisciplinary team responsible for the management of these patients is mandatory.

VSDs. VSDs amenable to transcatheter closure include postoperative residual defects, defects of the muscular septum (congenital or acquired after myocardial infarction), and membranous defects that are remote from the aortic and tricuspid valves with an adequate rim. Current indications for closure include a hemodynamically significant shunt (ie, symptomatic, left ventricular volume overload or dysfunction, or a shunt more than 2:1), recurrent endocarditis, or in the presence of more than mild aortic incompetence in the setting of a perimembranous or subarterial VSD. Closure of a VSD to prevent paradoxical emboli in the setting of transvenous pacing is controversial.[8] VSD closure should be avoided in the setting of PAH with Eisenmenger physiology. As with ASDs, pulmonary vasodilator challenge might be useful in patients with PA pressures more then two-thirds systemic arterial pressure and a pulmonary vascular resistance of more than two-thirds systemic arteriolar resistance.

The first successful percutaneous VSD device closure was reported by Lock et al. in 1987 using a Rashkind double umbrella device for a muscular VSD.[20] Multiple devices have since been developed including the Amplatzer muscular VSD occluder, the Amplatzer post myocardial infarction VSD occluder, and the Amplatzer membranous VSD occluder (St Jude Medical). A technique for VSD closure using the Nit Occlud coil (PFM Medical Ag, Koln, Germany) has also been described and is in use in other parts of the world.

The technical success rate for transcatheter closure of selected muscular and membranous VSDs is high (87%-97%) with a low mortality rate (0-2.7%).[21-24] A US prospective multicentre registry described an 87% procedural success rate for congenital muscular VSD closure with an 11% major complication rate (death, stroke, device embolization, or cardiac perforation).[23] Residual shunting after muscular VSD closure is commonly seen after device deployment but is uncommon at discharge and rare at long-term follow-up.[25]

Device closure of perimembranous VSDs is more complicated owing to proximity to the aortic valve and conducting system, and there are persistent concerns regarding the high rate of peri- and post-procedure complete heart block. Heart block and permanent pacing in younger patients is a significant issue with potential for many device-related complications over a lifetime, thus all efforts to avoid it should be made.

In a large European registry of 430 patients with a congenital VSD (119 muscular, 250 perimembranous, 45 residual after surgery), a success rate of 95% was described (85% were Amplatzer devices).[21] Complete atrioventricular block occurred more commonly with closure of membranous (5%) or post-operative VSDs (6.7%) compared with muscular VSDs (0.8%). Complete heart block in this setting might sometimes respond to corticosteroids or device explantation. When a ventricular septal aneurysm coexists with a perimembranous defect, device implantation within the aneurysm has been shown to be an effective technique to avoid complete heart block by avoidance of impingement on the conduction system.[26] A new version of the Amplatzer perimembranous VSD occluder, which has been designed to reduce the incidence of complete heart block, is under investigation (Supplemental Fig. S2).[27]

Other issues encountered in the published European experience included tricuspid regurgitation not requiring surgery in 6% and aortic regurgitation in 3.2%.

A very low complication rate after perimembranous device VSD closure has been reported in a large Chinese study of 848 subjects,[28] using either the asymmetric Amplatzer perimembranous occluder or the domestic symmetric Shanghai perimembranous occluder. Technical success was 98% with a major complication rate of only 0.9% at a median follow-up of 37 months. Complications in this series included complete heart block (2 patients), tricuspid insufficiency (3 patients), device embolization (2 patients), and endocarditis (1 patient). Many of these VSDs might not have been truly membranous in location, however, and might have been smaller than those closed in the US and European experience.

The long-term outcome of percutaneous device closure of VSDs remains unknown, hence close follow-up is warranted.

Patent ductus arteriosus. Patent ductus arteriosus (PDA) closure is indicated if there exists associated left cardiac chamber enlargement, if PAH is present (with evidence of pulmonary vascular vasoreactivity as for ASD or VSD), in the setting of previous endarteritis or in the presence of an audible continuous murmur regardless of endocarditis status. Closure is contraindicated in the presence of Eisenmenger physiology with right-to-left shunting. PDA was the first vascular anomaly to be successfully closed via a transcatheter approach in 1967 and early attempts at PDA closure required the creative use of coils or other devices. Dedicated PDA devices are now available and associated with excellent success rates and low complication rates.[29] Percutaneous closure is thus now favoured over surgical closure; small PDAs can be closed with coils or the Amplatzer PDA2 device (a double disc device that can be delivered from the aortic or venous side), and larger ducts are usually closed with the single-disc Amplatzer duct occluder device which is usually delivered from the venous side (Supplemental Fig. S3). Issues encountered in the pediatric population such as left PA or aortic isthmus obstruction are not apparent in adults. CTA is a useful tool to define the duct anatomy before intervention and can exclude other causes of a continuous murmur such as coronary fistulae, sequestered lung segment, or a mammary artery-to-PA connection. There is a paucity of high-quality long-term follow-up data after PDA closure in adults, and ongoing follow-up is therefore recommended.[8]

PA Stenosis and Aortic Coarctation

Branch PA stenosis

PA stenosis usually occurs in the setting of complex cardiac disease. It can be diffuse or focal and can occur in any segment of the pulmonary tree. Intervention for branch PA stenosis is recommended if there are attributable symptoms, if there is a $>$ 50% reduction in luminal diameter, or a subpulmonic ventricular systolic pressure $>$ 50 mm Hg. It is worth noting that pressure gradient per se across the lesion might be unreliable in this setting.[30] Other indications to treat an angiographically evident stenosis include: coexistent pulmonary regurgitation (branch PA stenosis might worsen pulmonic regurgitation); evidence of differential pulmonary perfusion; or in the presence of a Glenn anastomosis or Fontan circulation (given the reliance on passive forward flow). Options for treatment include balloon angioplasty, cutting balloon angioplasty, or endovascular stent insertion (in first- and second-order branches only) (Supplemental Fig. S4). Endovascular PA stents were first implanted in humans in the late 1980s and numerous studies have confirmed good short- and long-term outcomes.[31,32] Significant in-stent restenosis and stent fracture appear uncommon, although jailing of side branches has been associated with a high rate of abnormal side branch flow in 1 study,[32] the clinical significance of which remains unclear. Improved techniques (including management of bifurcation lesions for example) and better PA stents (more flexible with smoother edges), have improved the utility and success of the procedure,[33] however, insertion of stents in pulmonary arteries remains "off label" in the United States. Covered stents are usually reserved for management of complications, such as perforation.

PA angioplasty has been described as part of a hybrid approach when additional cardiac surgery is required. In this setting, intraoperative stenting using direct visualization can be performed instead of surgical arterioplasty, thus reducing procedural time and complexity.[34]

Aortic coarctation

Current indications for intervention for coarctation include the presence of hypertension with a catheter-derived simultaneous peak-to-peak pressure gradient of $>$ 20 mm Hg, or imaging evidence of coarctation with significant collateral formation in the absence of hypertension.[30] Arm-to-leg gradient measured clinically is a useful screen for the presence of a coarctation, however, the absolute value attained should not be used as evidence for the need for intervention. Intervention is performed with the intention to prevent complications including stroke and heart failure. The association of coarctation with accelerated atherosclerosis remains controversial, thus it remains unclear whether coarctation intervention modifies the risk for coronary vascular events.[35,36]

Percutaneous intervention was first reported in 1982, as an alternative to surgery in those with recoarctation after surgical repair,[37] however, it has emerged as a viable alternative to surgery in native and recurrent coarctations.[38-41] Stent implantation (Supplemental Fig. S5), first performed in 1991,[42] is associated with improved results compared with balloon angioplasty alone, with fewer complications (including aneurysm formation) and more durable results (less elastic recoil of the aorta).[43] Furthermore, the development of covered stents might possibly reduce the incidence of procedural complications such as rupture and aneurysm formation, but can be complicated by side branch occlusion, dissection, or residual gradients across the coarctation site (if the superior aspect protrudes into the arch, for example).[44-46] Covered stents have a role in certain situations, including complex coarctation anatomy, balloon/stent related aortic perforation, or aneurysm formation post surgery or intervention,[47] but there is a growing literature base supporting their use as a primary therapy in all patients undergoing coarctation intervention.[48]

Long-term outcome data for percutaneous intervention for coarctation are lacking, however, the prospective, multicentre, single-arm **Co**arctation of the **A**orta **St**ent (COAST) trial demonstrated coarctation stenting in 105 patients with native

or recurrent coarctations with a Cheatham-Platinum (CP) stent (NuMED, Hopkinton, NY) to be effective and safe (no deaths, low serious complication rate including small aneurysm formation [3 patients], stent migration [1 patient], and dissection [1 patient]) with medium-term follow-up complete.[49] The stent fracture rate at 2 years was 12% (none led to loss of stent integrity) and repeat intervention was required in 8% (5 redilation and 3 therapy for aneurysm formation). The COAST II trial to evaluate the covered CP stent is under way.[50]

The morbidity rate after surgical repair is greater than for primary stenting, however, the need for reintervention because of persistent hypertension appears to be greater after stent insertion. Approximately 30% of patients have residual hypertension after successful coarctation stent insertion, which might relate in part to deliberate stent undersizing at the initial procedure to reduce the risk of aortic dissection/rupture (with a view to staged elective repeat intervention).[51] These repeat procedures themselves impart risk, thus it might be that a definitive procedure with a covered stent is preferable, however, this is yet to be demonstrated. Ongoing trials to compare long-term results of coarctation stenting with surgical repair are warranted to ensure that late hypertension, in particular, is not an issue. Surgery might still be the preferred option in the setting of significant arch hypoplasia or long coarctation segments. Wall complications (including aneurysm formation), aortic dilatation, and stent recoil have been reported after coarctation angioplasty and/or stenting. Considering the potential for serious clinical sequelae relating to these issues, we believe that serial imaging after coarctation stent insertion is warranted. Guidelines suggest evaluation of the coarctation site using CT or MRI every 5 years or less.[30]

The development of bioabsorbable scaffolds might revolutionize the treatment of coarctations, presuming concerns regarding radial strength can be overcome.[52]

Valvular Interventions

Aortic valvuloplasty

Percutaneous balloon aortic valve dilation remains a low risk and effective treatment option for congenital aortic stenosis (AS) in children and young adults. The fibrocalcific valve of congenital AS responds well to valvuloplasty, which is usually performed with a balloon sized 0.9 to 1 to the aortic annulus measured using aortography at catheterization.[53,54] In young adults without significant aortic valve calcification and no aortic regurgitation, indications for balloon aortic valvuloplasty include: the presence of symptoms with peak-to-peak gradients at catheterization $>$ 50 mm Hg; or, in the absence of symptoms, a peak-to-peak catheter gradient greater than 60 mm Hg with ST or T wave abnormalities in the left precordial leads on electrocardiogram at rest or with exercise. Excellent long-term outcomes have been achieved in this setting with aortic valvuloplasty, thus avoiding a sternotomy and long-term anticoagulation that would be required if a mechanical valve was inserted.[54,55] This contrasts with the poor long-term results of valvuloplasty seen in elderly patients with degenerative, calcific AS.

Pulmonary valvuloplasty

Pulmonary stenosis can occur as an isolated lesion or as part of complex congenital heart conditions, such as Tetralogy of Fallot. Indications for treatment of isolated pulmonary stenosis include the presence of symptoms associated with a peak or mean gradient $>$ 50 mm Hg or 30 mm Hg respectively, or, if asymptomatic, peak/mean gradients of 60/40 mm Hg. Stenosis is usually due to commissural fusion, which is readily addressed by balloon angioplasty (balloon size 1.3 to 1 to the pulmonary annulus assessed angiographically), hence percutaneous intervention is preferred over surgery. The first transcatheter congenital intervention was indeed a pulmonary valvuloplasty performed in 1956 and, when performed for congenital pulmonary stenosis, has been associated with excellent early and late outcomes, in addition to low complication rates.[56-59] The dysplastic valve of Noonan syndrome usually require a larger balloon to annulus ratio and have less favourable results. Significant outflow tract obstruction or pulmonary regurgitation requiring intervention appear to be uncommon during long-term follow-up.[57]

Percutaneous pulmonary valve implantation

PPVI has now emerged as a viable alternative to surgery in certain patients with dysfunctional right ventricular outflow tracts (RVOTs). PPVI is mostly performed within dysfunctional synthetic right ventricle-to-PA (RV-PA) conduits, bioprosthetic pulmonary valves (xenografts), or pulmonary homografts (as part of the Ross procedure, for example), all of which can act as a framework to house the percutaneous valve. In these patients, PPVI effectively extends the longevity of the conduit or tissue valve, thus reducing the number of surgical procedures required over a lifetime. In general, PPVI is not currently suitable for use in patients with dysfunctional "native" RVOTs, however, we and others have performed PPVI in selected patients in whom the native outflow tract is of an appropriate diameter or can be made so using insertion of multiple stents.[60,61]

PPVI is currently recommended when the following criteria are met[62]:

1. Indication for surgical pulmonary valve replacement exists (such as: RVOT obstruction with symptoms and a right ventricular systolic pressure-to-aortic pressure ratio more than two-thirds; or free pulmonary regurgitation with significant RV dilatation [right ventricular end-diastolic volume $>$ 150 cm/m^2 according to cardiac MRI]);[10] or significant RV dysfunction in the presence of significant pulmonary regurgitation.
2. Suitable RVOT anatomy: RVOT diameter of $<$ 29 mm (in jurisdictions where the Sapien XT 29 mm valve [Edwards Lifesciences Corp, Irvine, CA] is available). The maximum feasible diameter depends, in part, on the compliance of the RVOT, which can be assessed using a sizing balloon. A 28 mm RVOT, for example, might be amenable to PPVI if it is a rigid conduit, but not if it is a "native" and very compliant RVOT.
3. Absence of contraindications with no evidence of: coronary occlusion with full-sized inflation with a noncompliant balloon inflation in the RVOT; infective endocarditis; central vein occlusion (can use jugular vein in setting of

inferior vena cava occlusion); need for concomitant procedures such as tricuspid annuloplasty, arrhythmia surgery, or coronary bypass surgery.

Over time, there has been a gradual lowering of the threshold for surgical pulmonic valve replacement in the setting of severe pulmonic regurgitation (lower right ventricular end-diastolic volume on MRI). The advent of a percutaneous alternative has shifted the risk/benefit ratio, such that patients might be considered for replacement at an earlier stage than they would have been for the more invasive surgical option. PPVI has also extended treatment to those considered high risk for conduit revision, and advances in other transcatheter approaches, such as percutaneous coronary intervention and ablation procedures for atrial and ventricular arrhythmias, have meant that PPVI has become applicable to patients who might have otherwise required surgery for concomitant issues (such as coronary bypass grafting or arrhythmia surgery). Furthermore, in high surgical risk patients with RVOT dysfunction and coexisting cardiac issues, such as severe tricuspid regurgitation, a less invasive but less "complete" strategy of pulmonary valve replacement only via PPVI can be effective in improving hemodynamics and affording clinical stability, which might allow for safer cardiac surgery for the coexisting lesions at a later stage should symptoms fail to resolve.

Currently available percutaneous pulmonary valves include the Medtronic Melody transcatheter pulmonary valve (Medtronic, Minneapolis, MN) and the Edwards Sapien Pulmonic Transcatheter Heart Valve (THV) (Edwards Lifesciences Corp) (Supplemental Fig. S6). The Melody Valve, first implanted by Bonhoeffer in 2000, is composed of a bovine jugular venous valve, which has been sutured into a balloon-expandable stent (CP Stent, NuMED) that needs to be crimped onto a custom-made delivery system. Only 1 size is available (stent is 34 mm in length when unexpanded and is expected to shorten with expansion), but the delivery system is available with an outer balloon diameter of 18, 20, or 22 mm. The competence of the valve is maintained at diameters of 16-22 mm and at 22 mm, the outer diameter of the valve is 24 mm. There are anecdotal reports of deploying the Melody valve on a 24-mm balloon-in-balloon system (NuMED) through a long sheath. The yield for harvesting bovine jugular veins is low, and a drought in 2012 has further limited the number of animals available with suitable jugular veins, thus creating a supply issue for the Melody valve.

The Sapien THV consists of 3 bovine pericardial leaflets hand-sewn to a tubular, stainless steel, balloon-expandable stent and is the same valve used successfully in the aortic position for transcatheter aortic valve implantation. The first-generation device is available in 2 sizes (23 and 26 mm), whilst the newer Sapien XT valve is available in the same diameters and 29 mm. The stent scaffold of the XT valve is made of cobalt chromium in an attempt to improve durability and reduce profile. The XT valve is designed for use in the aortic position and exits the sheath behind the balloon to further minimize profile; an alignment manoeuvre is then carried out such that the balloon is withdrawn into the stent. Experience in the pulmonary position is thus far favourable, despite initial concerns regarding valve orientation in this setting. The implantation technique for the 2 devices is similar and venous access is usually obtained through the femoral vein, but use of the jugular vein is possible. Supplemental Figure S7 depicts valve delivery via a Glenn shunt.

Complications encountered while the procedure was being perfected led to modifications in PPVI technique, in particular to avoid coronary compression, valve failure due to stent fracture, and the need for repeated surgery. Modifications include:

- Use of a full-size noncompliant balloon inflation within the conduit to exclude coronary compression, which was noted in 6% of patients in the pivotal United States Investigational Device Exemption (US IDE) trial (Fig. 1)[63,64];
- Prestenting: conduits are now routinely prestented to reduce the risk of fracture of the Melody valves and reduce the risk of premature valve failure.[65] Occasionally, multiple stents are required and it is common practice to insert additional stents until no stent recoil is identified upon balloon deflation;
- Post dilation to achieve a peak transvalvular gradient of less than 20 mm Hg has reduced the repeat intervention rate.
- Covered stents: a covered stent is preferred in some instances (eg, small calcified homografts). Covered stents are generally not necessary when a Melody valve will be placed but might be preferred for Sapien valve implantation to reduce the risk of paravalvular leak because of the relatively short stented segment with a circumferential skirt. This is especially so in irregular conduits or where the potential landing zone is short.

The implantation technique is the same for insertion into a degenerative homograft, conduit, or a failing pulmonary bioprosthesis. When performing PPVI in a bioprosthesis, one must be mindful of the different positions of radiographic markers in bioprosthetic valves. Furthermore, coronary compression testing and prestenting are not necessarily required for "valve-in-valve" PPVI.

Both Melody and Sapien valves appear to perform well in the early phase with a significant reduction in RV-PA gradient without significant pulmonary incompetence (more than trace pulmonary incompetence is unusual). Interestingly, delayed improvement in valve hemodynamic performance has been described and might relate to resolution of perivalvular edema/hematoma after valve implantation and long-term exposure to pulsatile transvalvular flow which might optimize valve configuration and valve opening kinetics.[66] Freedom from valve dysfunction at 1 year is high with both valves (> 95%).

More data are available for the Melody valve in the pulmonary position, with 4 published studies,[63,67-69] comprising 464 patients from the UK, US, German, and Italian registries, describing 1- to 5-year follow-up. The US Melody Valve trial[63] was a formal protocol-driven monitored study describing a high procedural success rate with excellent short-term valve function. There is less published experience with the THV Sapien valve (4 small studies, 72 patients),[70-73] although there is abundant positive experience with this valve in the aortic position with follow-up to 5 years.

Insertion of either valve is almost uniformally successful (92%-98%) with very low mortality rates (0%-2%). The

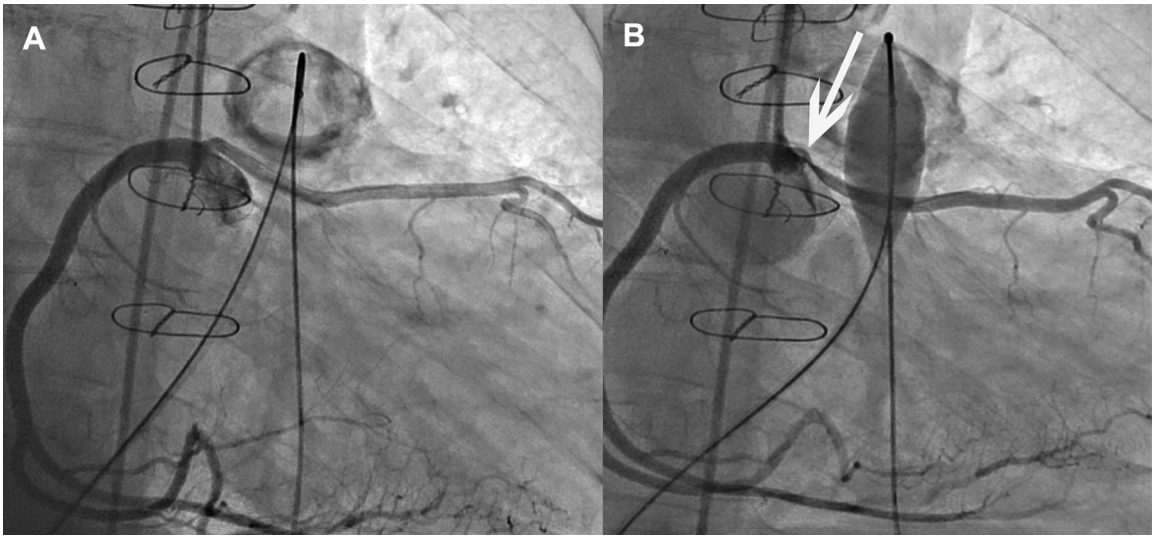

Figure 1. Cineangiogram in a potential percutaneous pulmonary valve implantation candidate showing compression of an anomalous LAD from the RCA during balloon inflation in the RVOT ([**A**] RCA angiography with anomalous LAD; [**B**] angiography during balloon inflation in the RVOT with **arrow** indicating compression of the proximal LAD). LAD, left anterior descending artery; RCA, right coronary artery; RVOT, right ventricular outflow tract.

overall complication rate of the procedure is low (approximately 5%). Specific complications include device embolization (< 1%), conduit rupture with hemodynamic compromise (1%), coronary compression after device deployment (< 1%), tricuspid valve injury (0.5%), or distal PA perforation (1%, mostly guide wire-related and usually well tolerated). Endocarditis rates are approximately 1%-3%. Stent fracture was an issue early in the experience with the Melody valve (up to 20% if no prestenting), however, is rarely an issue with routine prestenting.

The restriction of PPVI use to those with a pre-existing "scaffold," such as a dysfunctional conduit or bioprosthetic valve, significantly limits the applicability of PPVI. It is estimated that only 15% of dysfunctional RVOTs are currently amenable to PPVI, and a large population therefore exists with dysfunctional "native" RVOTs who could benefit from a transcatheter approach. A "native" outflow tract refers to: a RVOT with no previous surgery, previous balloon valvotomy for pulmonary stenosis, or previous transannular patch repair for anatomic correction of Tetralogy of Fallot. Common to these scenarios is the absence of a stable framework to anchor the valve and the presence of distensible tissue in the mobile and contractile "native" RVOT, which is associated with an increased risk of valve dislodgement, perforation, paravalvular leak, and stent fracture. PPVI in smaller native outflow tracts has, however, been described in case reports,[74,75] and case series (approximately 2.5% and 7% of published case series of Melody and Sapien valve implantations, respectively, were in "native" RVOTs).[67,68,73] Prestenting in this scenario is mandatory to provide a "conduit" to stabilize the valve. Other techniques used to facilitate PPVI in native outflow tracts include the "PA jailing" technique (a stent scaffold is created with overlapping stents from a branch PA that is < 25 mm, extending back into the RVOT), the "Russian dolls technique" (multiple stents with decremental diameters deployed within each other to reduce the RVOT diameter), or alternatively, implantation of a pulmonary valve in 1 or both branch pulmonary arteries.[76] In particularly challenging circumstances, implantation of a pulmonary valve in 1 branch might suffice, especially wherein there exists differential relative contribution of each PA to pulmonary regurgitation.[77]

Percutaneous implantable RVOT size reducers are in development to further expand the applicability of PPVI. A 35-mm diameter endovascular size reducer (Cormove, Ivry le Temple, France) has shown promise in animal studies,[78] and the Native Outflow Tract Transcatheter Pulmonary Valve Device (Medtronic) is currently approved for use in a phase 1 feasibility study in humans.

Future developments might centre on hybrid approaches, such as RVOT banding with radio-opaque rings via a left thoracotomy and subsequent percutaneous valved stent implantation,[79] or the implantation of an expandable conduit at the time of initial repair that can later be dilated or replaced with a percutaneous valve as it fails.[80,81]

Tricuspid Valve Dysfunction

Bioprosthetic valves are used for tricuspid valve replacement in certain congenital cardiac conditions, such as Ebstein anomaly. Dysfunctional bioprosthetic valves in the tricuspid position have been successfully palliated with transcatheter implantation of Melody[82] or Sapien valves.[83] Some operators advocate jugular vein access for improved stability in this setting.

Interventions in Complex Patients

Improved survival of patients with complex congenital heart disease means increasingly that interventionalists will be required to undertake interventions in patients with complex anatomy and unusual pathology. The heterogenous nature of lesions requiring treatment in this population demands that interventionalists are not only very familiar with congenital cardiac anatomy but are also flexible and creative in devising solutions for these patients. Examples include potential complications in patients who have been palliated with a Fontan circulation or in patients post atrial switch repair.

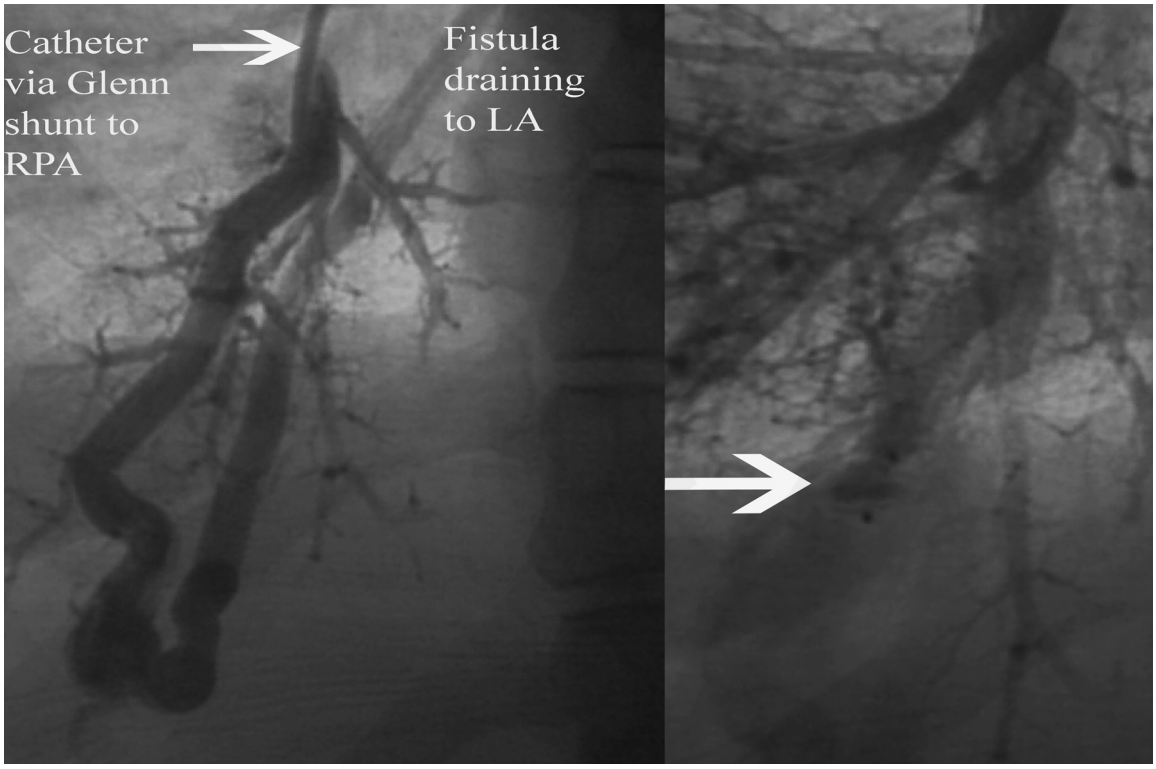

Figure 2. Pulmonary arteriovenous malformation closure with an 8-mm Amplatzer AVP4 device in a hypoxic patient with a classic Glenn shunt (a recognized complication of this procedure). LA, left atrium; RPA, right pulmonary artery.

Issues in the Fontan circulation

Fontan fenestrations. Fenestrations (between the systemic venous and pulmonary venous circulations) are commonly surgically created at the time of Fontan surgery to reduce Fontan circuit pressure and improve cardiac output perioperatively. Closure might be desired in the setting of cyanosis or paradoxical embolism, and can be achieved with septal occluders or covered stents.

Fontan baffle puncture. Creation of fenestrations, in contrast, might be required to treat protein-losing enteropathy, for example, and requires familiarity with techniques for transseptal puncture.

The inferior vena cava to PA conduits are often made of stiff Goretex, thus can be difficult to puncture; use of a standard transseptal puncture kit might suffice, but often more aggressive strategies might be required, such as use of steerable sheaths, filing of the back end of a wire for sharpness, electrocautery, and balloon dilatation of the puncture.[84]

Despite a significant reduction in arrhythmia burden with the "newer" Fontan circuits (lateral tunnel and extracardiac),[85] arrhythmias still occur in many patients; electrophysiology/ablation procedures in this setting have thus become complex interventions, requiring Fontan circuit baffle puncture to afford catheter access to the atria.[86] Structural interventionalists have needed to work closely with electrophysiologists to resolve this issue.

Expertise with the transseptal puncture kits has also been exploited in other scenarios pertaining to the Fontan circulation, such as percutaneous conversion of a classical Glenn shunt to a bidirectional cavopulmonary anastomosis using a radiofrequency wire.[87]

PPVI on Bjork Fontans. PPVI has been described in the setting of a failing Fontan circulation because of right ventricular inflow obstruction in a patient with a Bjork modification Fontan (Supplemental Fig. S8).[88]

Fistulae and collaterals. A variety of other abnormal connections commonly seen in patients with congenital cardiac conditions are amenable to transcatheter closure including:

- right-to-left shunts including systemic venous-to-pulmonary venous collaterals (especially in Fontan patients) and pulmonary arterial-to-pulmonary venous malformations, which can cause cyanosis and allow passage of paradoxical emboli (Fig. 2);
- left-to-right shunts such as systemic arterial-to-pulmonary arterial collaterals (in conditions associated with pulmonary hypoperfusion) can pose a volume load on the systemic ventricle;
- coronary artery fistulae, which can arise from either coronary artery and drain into a right cardiac chamber or systemic vein, thus causing a coronary steal phenomenon (Supplemental Fig. S9)[59];
- previously created surgical shunts, which might no longer be useful.

Coils have traditionally been used to occlude such structures, however, a range of vascular plugs are now available and

have proved to be useful in facilitating these interventions.[89] Device oversizing is recommended in these interventions to prevent embolization (for example, plug devices should be 20%-50% larger and coils 50% larger than the target vessel).

Baffle leaks or stenosis after atrial switch surgery

The arterial switch procedure is the current surgery of choice for patient with d-transposition of the great arteries, however, a large population has now entered adulthood having survived a Mustard or Senning operation. Atrial switch surgery relies on creation of "baffles" (from native atrial tissue in the Senning procedure and with pericardium or synthetic material in the Mustard procedure) to separate the pulmonary venous and systemic venous circulations at the atrial level. As many as 25% of atrial switch surgery patients have been shown to have a baffle leak, but most are not hemodynamically significant.[90] Most leaks occur at the suture line of the superior limb of the systemic venous baffle, and when hemodynamically significant, can be closed using Amplatzer septal occluders or covered stents (especially when baffle stenosis coexists).

Baffle stenosis can also occur at either baffle location and indications to intervene include exercise intolerance attributable to baffle obstruction (usually the inferior baffle), a caval syndrome or before transvenous pacemaker insertion in the superior baffle. Stent insertion has been reported to be feasible with satisfactory medium-term outcomes and is clearly superior to balloon angioplasty alone (Supplemental Fig. S10).[91,92]

Conclusions

There has been a rapid expansion of percutaneous interventions for adult congenital heart disease patients over the past few decades, which have improved the quality of life of these patients and reduced the number of surgical procedures required. Limited data exist, however, for long-term outcomes for many such interventions, in part because of the rarity of certain conditions, thus caution is required and data surveillance/reporting are important to ensure appropriate future use. Collaboration between interventional cardiologists, cardiac surgeons, and imaging specialists is paramount to facilitate appropriate treatment and further development of newer interventional techniques.

Disclosures

Dr Horlick is a consultant for St Jude Medical, Edwards, and Medtronic. Drs Benson and Osten are consultants for Medtronic. Dr Wilson has no conflicts of interest to disclose.

References

1. Gilboa SM, Salemi JL, Nembhard WN, Fixler DE, Correa A. Mortality resulting from congenital heart disease among children and adults in the United States, 1999 to 2006. Circulation 2010;122:2254-63.

2. Boneva RS, Botto LD, Moore CA, et al. Mortality associated with congenital heart defects in the United States: trends and racial disparities, 1979-1997. Circulation 2001;103:2376-81.

3. Stuart AG. Changing lesion demographics of the adult with congenital heart disease: an emerging population with complex needs. Future Cardiol 2012;8:305-13.

4. Glockler M, Halbfass J, Koch A, et al. Multimodality 3D-roadmap for cardiovascular interventions in congenital heart disease – a single centre retrospective analysis of 78 cases. Catheter Cardiovasc Interv 2013;82:436-42.

5. Fagan T, Kay J, Carroll J, Neubauer A. 3-D guidance of complex pulmonary artery stent placement using reconstructed rotational angiography with live overlay. Catheter Cardiovasc Interv 2012;79:414-21.

6. Berman DP, Khan DM, Gutierrz Y, Zahn EM. The use of three-dimensional rotational angiography to assess the pulmonary circulation following cavopulmonary connection in patients with single ventricle. Catheter Cardiovasc Interv 2012;80:922-30.

7. Noble S, Miró J, Yong G, et al. Rapid pacing rotational angiography with three-dimensional reconstruction: use and benefits in structural heart disease interventions. EuroIntervention 2009;5:244-9.

8. Silversides CK, Poirier N, Taylor D, et al. Canadian Cardiovascular Society 2009 Consensus Conference on the management of adults with congenital heart disease: shunt lesions. Can J Cardiol 2010;26:e70-9.

9. Amplatzer Septal Occluder and delivery system: instructions for use. Available at: http://professional.sjm.com/professional/resources/ifu/sh/asd-closure. Accessed November 2, 2013.

10. Windram JD, Siu SC, Wald RM, Silversides CK. New directives in cardiac imaging: imaging the adult with congenital heart disease. Can J Cardiol 2013;29:830-40.

11. Freixa X, Garceau P, Asgar AW. First experience with the new GORE septal occluder for the closure of multiple atrial septal defects. Catheter Cardiovasc Interv 2013;81:1238-42.

12. Kotowycz MA, Therrien J, Ionescu-Ittu R, et al. Long-term outcomes after surgical versus transcatheter closure of atrial septal defects in adults. JACC Cardiovasc Interv 2013;6:497-503.

13. Du ZD, Hijazi ZM, Kleinman CS, et al. Comparison between transcatheter and surgical closure of secundum atrial septal defect in children and adults: results of a multicenter nonrandomized trial. J Am Coll Cardiol 2002;39:1836-44.

14. Majunke N, Bialkowski J, Wilson N, et al. Closure of atrial septal defect with the Amplatzer septal occluder in adults. Am J Cardiol 2009;103:550-4.

15. St Jude Medical. Amplatzer Atrial Septal Occluder Executive Summary. May 24, 2012. Available at: http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/MedicalDevices/MedicalDevicesAdvisoryCommittee/CirculatorySystemDevicesPanel/UCM304944.pdf. Accessed November 2, 2013.

16. Moore J, Hegde S, El-Said H, et al. Transcatheter device closure of atrial septal defects. A safety review. JACC Cardiovasc Interv 2013;6:433-42.

17. Divekar A, Gaamanngwe T, Shaikh N, et al. Cardiac perforation after device closure of atrial septal defects with the Amplatzer septal occluder. J Am Coll Cardiol 2005;45:1213-8.

18. Yared K, Baggish AL, Solis J, et al. Advances in cardiovascular imaging. Circ Cardiovasc Imaging 2009;2:141-9.

19. Schubert S, Peters B, Abdul-Khaliq H, et al. Left ventricular conditioning in the elderly patient to prevent congestive heart failure after transcatheter closure of atrial septal defect. Catheter Cardiovasc Interv 2005;64:333-9.

20. Lock JE, Block PC, McKay RG, Baim DS, Keane JF. Transcatheter closure of ventricular septal defects. Circulation 1988;78:361-8.

21. Carminati M, Butera G, Chessa M, et al. Transcatheter closure of congenital ventricular septal defects: results of the European Registry. Eur Heart J 2007;28:2361-8.

22. Butera G, Carminati M, Chessa M, et al. Transcatheter closure of perimembranous ventricular septal defects: early and long-term results. J Am Coll Cardiol 2007;50:1189.

23. Holzer R, Balzer D, Cao QL, et al. Device closure of muscular ventricular septal defects using the Amplatzer muscular ventricular septal defect occluder: immediate and mid-term results of a U.S. registry. J Am Coll Cardiol 2004;43:1257-63.

24. Knauth AL, Lock JE, Perry SB, et al. Transcatheter device closure of congenital and post-operative residual ventricular septal defects. Circulation 2004;110:501-7.

25. Al-Kashkari W, Balan P, Kavinsky CJ, et al. Percutaneous device closure of congenital and iatrogenic ventricular septal defects in adults. Catheter Cardiovasc Interv 2011;77:260-7.

26. El Said HG, Bratincsak A, Gordon BM, Moore JW. Closure of perimembranous ventricular septal defects with aneurysmal tissue using the amplazter duct occluder I: Lessons learned and medium-term follow-up. Catheter Cardiovasc Interv 2012;80:895-903.

27. Velasco-Sanchez D, Tzikas A, Ibrahim R, Miro J. Transcatheter closure of perimembranous ventricular septal defects: initial human experience with the Amplatzer membranous VSD occluder 2. Catheter Cardiovasc Interv 2013;82:474-9.

28. Yang J, Yang L, Wan Y. Transcatheter device closure of perimembranous ventricular septal defects: mid-term outcomes. Eur Heart J 2010;31: 2238-45.

29. Pass RH, Hijazi Z, Hsu DT, Lewis V, Hellenbrand WE. Multicenter USA Amplatzer patent ductus arteriosus occlusion device trial: initial and one-year results. J Am Coll Cardiol 2004;44:513-9.

30. Warnes CA, Williams RG, Bashore TM, et al. ACC/AHA 2008 Guidelines for the management of adults with congenital heart disease: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (writing committee to develop guidelines on the management of adults with congenital heart disease). Circulation 2008;118:e714.

31. Krisnanda C, Menahem S, Lane GK. Intravascular stent implantation for the management of pulmonary artery stenosis. Heart Lung Circ 2013;22: 56-70.

32. Law MA, Shamszad P, Nugent AW, et al. Pulmonary artery stents: long-term follow up. Catheter Cardiovasc Interv 2010;75:757-64.

33. Stapleton GE, Hamzeh R, Mullins CE, et al. Simultaneous stent implantation to treat bifurcation stenoses in the pulmonary arteries: initial results and long-term follow-up. Catheter Cardiovasc Interv 2009;73:557-63.

34. Mitropoulos FA, Laks H, Kapadia N, et al. Intraoperative pulmonary artery stenting: an alternative technique for the management of pulmonary artery stenosis. Ann Thorac Surg 2007;84:1338-41.

35. Roche SL, Silversides C. Hypertension, obesity and coronary artery disease in the survivors of congenital heart disease. Can J Cardiol 2013;29:841-8.

36. Roifman I, Therrien J, Ionescu-Ittu R, et al. Coarctation of the aorta and coronary disease. Fact or fiction? Circulation 2012;126:16-21.

37. Singer MI, Rowen M, Dorsey TJ. Transluminal aortic balloon angioplasty for coarctation of the aorta in the newborn. Am Heart J 1982;103: 131-2.

38. Golden AB, Hellenbrand WE. Coarctation of the aorta: stenting in children and adults. Catheter Cardiovasc Interv 2007;69:289-99.

39. Carr JA. The results of catheter-based therapy compared with surgical repair of adult aortic coarctation. J Am Coll Cardiol 2006;47:1101-7.

40. Forbes TJ, Kim DW, Du W, et al. Comparison of surgical, stent, and balloon angioplasty treatment of native coarctation of the aorta: an observational study by the CCISC (Congenital Cardiovascular Interventional Study Consortium). J Am Coll Cardiol 2011;58:2664-74.

41. Rodes-Cabau J, Miro J, Dancea A, et al. Comparison of surgical and transcatheter treatment for native coarctation of the aorta in patients $>$ or $=$ 1 year old. The Quebec Native Coarctation of the Aorta study. Am Heart J 2007;154:186-92.

42. O'Laughlin MP, Perry SB, Lock JE, Mullins CE. Use of endovascular stents in congenital heart disease. Circulation 1991;83:1923-39.

43. Rosenthal E. Coarctation of the aorta from fetus to adult: curable condition or life long disease process? Heart 2005;91:1495-502.

44. Chakrabarti S, Kenny D, Morgan G, et al. Balloon expandable stent implantation for native and recurrent coarctation of the aorta—prospective computed tomography assessment of stent integrity, aneurysm formation and stenosis relief. Heart 2010;96:1212-6.

45. Sadiq M, Rehman A, Qureshi A, Qureshi S. Covered stents in the management of native coarctation of the aorta − intermediate and long-term follow-up. Catheter Cardiovasc Interv 2013;82:511-8.

46. Tzifa A, Ewert P, Brzezinzka-Rajszys G, et al. Covered Cheatham-Platinum stents for aortic coarctation: early and intermediate-term results. J Am Coll Cardiol 2006;47:1457-63.

47. Butera G, Heles M, MacDonald ST, Carminati M. Aortic coarctation complicated by wall aneurysm: the role of covered stents. Catheter Cardiovasc Interv 2011;78:926-32.

48. Tanous D, Collins N, Dehghani P, Benson LN, Horlick EM. Covered stents in the management of coarctation of the aorta in the adult: initial results and 1-year angiographic and hemodynamic follow-up. Int J Cardiol 2010;140:287-95.

49. Ringel RE, Vincent J, Jenkins KJ, et al. Acute outcome of stent therapy for coarctation of the aorta: results of the coarctation of the aorta stent trial. Catheter Cardiovasc Interv 2013;82:503-10.

50. Goldstein BH, Hirsch R, Zussman ME, et al. Percutaneous balloon-expandable covered stent implantation for treatment of traumatic aortic injury in children and adolescents. Am J Cardiol 2012;110:1541-5.

51. Krasemann T, Bano M, Rosenthal E, Qureshi SA. Results of stent implantation for native and recurrent coarctation of the aorta- follow-up of up to 13 years. Catheter Cardiovasc Interv 2011;78:405-12.

52. Schranz D, Zartner P, Michel-Behnke I, Akinturk H. Bioabsorbable metal stents for percutaneous treatment of critical recoarctation of the aorta in a newborn. Catheter Cardiovasc Interv 2006;67:671-3.

53. Sandhu SK, Lloyd TR, Crowley DC, Beekman RH. Effectiveness of balloon valvuloplasty in the young adult with congenital aortic stenosis. Cathet Cardiovasc Diagn 1995;36:122-7.

54. Brown DW, Dipilato AE, Chong EC, Lock JE, McElhinney DB. Aortic valve reinterventions after balloon aortic valvuloplasty for congenital aortic stenosis intermediate and late follow-up. J Am Coll Cardiol 2010;56:1740-9.

55. Maskatia SA, Ing FF, Justino H, et al. Twenty-five year experience with balloon aortic valvuloplasty for congenital aortic stenosis. Am J Cardiol 2011;108:1024-8.

56. Chen CR, Cheng TO, Huang T, et al. Percutaneous balloon valvuloplasty for pulmonic stenosis in adolescents and adults. N Engl J Med 1996;335:21-5.

57. Fawzy ME, Hassan W, Fadel BM, et al. Long-term results (up to 17 years) of pulmonary balloon valvuloplasty in adults and its effects on concomitant severe infundibular stenosis and tricuspid regurgitation. Am Heart J 2007;153:433-8.

58. Kaul UA, Singh B, Tyagi S, et al. Long-term results after balloon pulmonary valvuloplasty in adults. Am Heart J 1993;126:1152-5.

59. Dancea A, Justino H, Martucci G. Catheter intervention for congenital heart disease at risk of circulatory failure. Can J Cardiol 2013;29:786-95.

60. Boudjemline Y, Brugada G, Van-Aerschot I, et al. Outcomes and safety of transcatheter pulmonary valve replacement in patients with large patched right ventricular outflow tracts. Arch Cardiovasc Dis 2012;105: 404-13.

61. Momenah TS, Oakley RE, Al Najashi K, et al. Extended application of percutaneous pulmonary valve implantation. J Am Coll Cardiol 2009;53: 1859-63.

62. Baumgartner H, Bonhoeffer P, De Groot NM, et al. ESC Guidelines for the management of grown-up congenital heart disease (new version 2010). Eur Heart J 2010;31:2915-57.

63. McElhinney DB, Hellenbrand WE, Zahn EM, et al. Short- and medium-term outcomes after transcatheter pulmonary valve placement in the expanded multicenter US melody valve trial. Circulation 2010;122: 507-16.

64. Sridharan S, Coats L, Khambadkone S, et al. Images in cardiovascular medicine. Transcatheter right ventricular outflow tract intervention: the risk to the coronary circulation. Circulation 2006;113:e394.

65. Nordmeyer J, Lurz P, Khambadkone S, et al. Pre-stenting with a bare metal stent before percutaneous pulmonary valve implantation: acute and one year outcomes. Heart 2011;97:118-23.

66. Rodes-Cabau J, Houde C, Perron J, et al. Delayed improvement in valve haemodynamic performance after percutaneous pulmonary valve implantation. Ann Thorac Surg 2008;85:1787-8.

67. Eicken A, Ewert P, Hager A, et al. Percutaneous pulmonary valve implantation: two-centre experience with more than 100 patients. Eur Heart J 2011;32:1260-5.

68. Lurz P, Coats L, Khambadkone S, et al. Percutaneous pulmonary valve implantation: impact of evolving technology and learning curve on clinical outcome. Circulation 2008;117:1964-72.

69. Butera G, Milanesi O, Spadoni I, et al. Melody transcatheter pulmonary valve implantation. Results from the registry of the Italian society of pediatric cardiology. Catheter Cardiovasc Interv 2013;81:310-6.

70. Boone RH, Webb JG, Horlick E, et al. Transcatheter pulmonary valve implantation using the Edwards SAPIEN transcatheter heart valve. Catheter Cardiovasc Interv 2010;75:286-94.

71. Kenny D, Hijazi ZM, Kar S, et al. Percutaneous implantation of the Edwards SAPIEN transcatheter heart valve for conduit failure in the pulmonary position: early phase 1 results from an international multicenter clinical trial. J Am Coll Cardiol 2011;58:2248-56.

72. Haas NA, Moyisch A, Neudorf U, et al. Percutaneous implantation of the Edwards Sapien pulmonic valve: initial results in the first 22 patients. Clin Res Cardiol 2013;102:119-28.

73. Odemis E, Guzeltas A, Saygi M, et al. Percutaneous pulmonary valve implantation using Edwards Sapien transcatheter heart valve in different types of conduits: initial results of a single centre experience. Congenit Heart Dis 2013;8:411-7.

74. Guccione P, Milanesi O, Hijazi ZM, Pongiglione G. Transcatheter pulmonary valve implantation in native pulmonary outflow tract using the Edwards Sapien transcatheter heart valve. Eur J Cardiothorac Surg 2012;41:1192-4.

75. Bertels RA, Blom NA, Schalij MJ. Edwards SAPIEN transcatheter heart valve in native pulmonary position. Heart 2010;96:661.

76. Gillespie MJ, Dori Y, Harris MA, et al. Bilateral branch pulmonary artery Melody Valve implantation for treatment of complex right ventricular outflow tract dysfunction in a high risk patient. Circ Catheter Interv 2011;4:e21-3.

77. Kang I, Redington AN, Benson LN, et al. Differential regurgitation in branch pulmonary arteries after repair of tetralogy of Fallot. Circulation 2003;107:2938-43.

78. Amahzoune B, Szymansky C, Fabiani J, Zegdi R. A new endovascular size reducer for large pulmonary outflow tract. Eur J Cardiothorac Surg 2010;37:730-2.

79. Boudjemline Y, Laborde F, Pineau E, et al. Expandable right ventricular-to-pulmonary artery conduit: an animal study. Pediatr Res 2006;59: 773-7.

80. Coats L, Khambadkone S, Derrick G, et al. Physiological and clinical consequences of relief of right ventricular outflow tract obstruction late after repair of congenital heart defects. Circulation 2006;113:2037-44.

81. Abdullah I, Ramirez FB, McElhinney DB, et al. Modification of a stented bovine jugular vein conduit (Melody Valve) for surgical mitral valve replacement. Ann Thorac Surg 2012;94:e97-8.

82. Roberts PA, Boudjemline Y, Cheatham JP, et al. Percutaneous tricuspid valve replacement in congenital and acquired heart disease. J Am Coll Cardiol 2011;58:117-22.

83. Van Garsse MD, Ter Bekke RM, van Ommen VG. Percutaneous transcatheter valve-in-valve implantation in a stenosed tricuspid valve bioprosthesis. Circulation 2011;123:e219-2.

84. Dave AS, Aboulhosn J, Child JS, Shivkumar K. Trans-conduit puncture for catheter ablation of atrial tachycardia in a patient with extra-cardiac Fontan palliation. Heart Rhthym 2010;7:413-6.

85. Aboulhosn J, Child JS. The adult with a Fontan operation. Curr Cardiol Rep 2007;9:331-5.

86. Mavroudis C, Deal BJ, Backer CL, et al. Maxwell Chamberlain Memorial Paper for congenital heart surgery. 111 Fontan conversions with arrhythmia surgery: surgical lessons and outcomes. Ann Thorac Surg 2007;84:1457-65.

87. Ebeid MR, Gaymes CH. Catheter conversion of classic glenn to bidirectional glenn with closure of left central shunt years after surgical attempts. Catheter Cardiovasc Interv 2013;82:E688-93.

88. Butcher CJ, Plymen CM, Walker F. A novel and unique treatment for right ventricular inflow obstruction in a patient with a Bjork modification of the Fontan palliation before pregnancy. Cardiol Young 2010;20: 337-9.

89. Girona J, Marti G, Betrian P, Gran F, Casaldaliga J. Percutaneous embolization of vascular fistulas using coils or Amplatzer Vascular plugs. Rev Esp Cardiol 2009;62:765-73.

90. Park SC, Neches WH, Mathews RA, et al. Haemodynamic function after the Mustard operation for transposition of the great arteries. Am J Cardiol 1983;51:1514-9.

91. Bu'Lock FA, Tometzki A, Kitchiner DJ, et al. Balloon expandable stents for systemic venous pathway stenosis late after Mustard's operation. Heart 1998;79:225-9.

92. Ward CJ, Mullins CE, Nihill MR, Grifka RG, Vick GW. Use of intravascular stents in systemic venous and systemic venous baffle obstructions. Short-term follow-up results. Circulation 1995;91:2948-54.

Supplementary Material

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Review Article

Innovative interventional catheterization techniques for congenital heart disease

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Abstract: Since 1929, when the first cardiac catheterization was safely performed in a human by Dr. Werner Forssmann (on himself), there has been a rapid progression of cardiac catheterization techniques and technologies. Today, these advances allow us to treat a wide variety of patients with congenital heart disease using minimally invasive techniques; from fetus to infants to adults, and from simple to complex congenital cardiac lesions. In this article, we will explore some of the exciting advances in cardiac catheterization for the treatment of congenital heart disease, including transcatheter valve implantation, hybrid procedures, biodegradable technologies, and magnetic resonance imaging (MRI)-guided catheterization. Additionally, we will discuss innovations in imaging in the catheterization laboratory, including 3D rotational angiography (3DRA), fusion imaging, and 3D printing, which help to make innovative interventional approaches possible.

Keywords: Innovation; congenital heart disease; cardiac catheterization

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Transcatheter valve implantation

The first report of successful transcatheter pulmonary valve implantation was in 2000 (1). After a successful multi-center United States Investigational Device Exemption trial, the Melody™ Transcatheter Pulmonary Valve (Medtronic, Inc., Minneapolis, Minnesota, USA) became the first FDA approved transcatheter pulmonary valve in 2010 (2,3). Results from the United States Post-Approval Study and several international Melody valve implantation registries, led to the quick adoption of this therapy in patients with congenital heart disease as these valves exhibited excellent reduction in both right ventricular outflow tract stenosis and insufficiency (4-6). The initial indication for Melody valve implantation was for use in dysfunctional right ventricle-to-pulmonary artery conduits. However, off-label use of the device quickly expanded to dysfunctional bioprosthetic pulmonary valves (now an on-label use of the Melody valve), as well as implantation in non-pulmonary positions, including the mitral valve, tricuspid valve, and aortic valve, as well as implantation in the bilateral branch pulmonary arteries (7-10).

While the Melody valve, and its delivery system, were specifically designed for use in the pulmonary position, the Edwards Sapien valve (Edwards Lifesciences, Irvine, CA, USA) originally designed as a transcatheter aortic valve, also expanded its market into the pulmonary space (11). The next generation device, Edwards Sapien XT valve (Edwards Lifesciences, Irvine, CA, USA) received FDA approval in 2016 for the use in dysfunctional right ventricle to pulmonary artery conduits. The COMPASSION Trial (COngenital Multicenter trial of Pulmonic vAlve regurgitation Studying the SAPIEN InterventIONal THV COMPASSION Trial) is completing data collection and the COMPASSION Post-Approval Study is currently underway. A newer version of the Sapien valve, the S3 valve,

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has also been implanted successfully in the pulmonary position and non-pulmonary prosthetic valves (12-14).

A recent meta-analysis of implanted transcatheter pulmonary valves, including both Melody and Sapien valves, confirms what has been shown in multiple smaller studies: a very high rate of implantation success (96.2%) in over 1,000 reported implants in the literature (15). Further, after accounting for the practice of pre-stenting conduits, which has drastically lowered the incidence of stent fracture in the Melody valve population, re-intervention rates were quite low (2.9 per 100 patient years, compared to 6.9 per 100 patient years in patients without pre-stenting).

Despite the excellent success of transcatheter pulmonary valve therapies, patients with dysfunctional conduits or bioprosthetic valves comprise the minority of patients with right ventricular outflow tract dysfunction. It is estimated that the currently available therapies will only effectively treat ~15% of patients with severe pulmonary insufficiency (16). Of the remaining 85% of patients, the majority have severe pulmonary regurgitation secondary to surgical right ventricular outflow tract patch augmentation, typically in the setting of Tetralogy of Fallot. Over time, chronic pulmonary regurgitation leads to right ventricular dilation, decreased exercise tolerance, and increased risk for arrhythmia and sudden cardiac death (17-21). These patients, however, often have severe dilation of the outflow tract making pulmonary valve replacement with currently available transcatheter valves not feasible and therefore making surgical pulmonary valve replacement the only option. Now with the availability of larger diameter S3 valves, as well as several creative ways to reduce the size of the right ventricular outflow tract to allow for the safe implantation of currently available transcatheter valves (22,23), treatment of so-called "native" outflow tracts is possible but remains limited. Therefore, this patient population represents a significant unmet need in the field of congenital heart disease.

Several newer valves are currently being developed to expand our ability to treat patients with severe pulmonary insufficiency and right ventricular outflow tracts too large for currently approved devices. The first of such devices, which is now better known as the Medtronic Harmony™ Transcatheter Pulmonary Valve (Medtronic, Inc.), was successfully implanted in 2010 (16). This self-expanding nitinol covered stent with a porcine pericardial valve sewn at the center has shown promising results in animal models, with improved right ventricular size on follow-up volumetric imaging (24). More recently, the Harmony early feasibility study showed a high rate of implantation success (95%) with few procedural complications (25). Furthermore, 100% of patients had mild or less pulmonary regurgitation at 6-month follow-up, compared to 95% with severe and 5% with moderate pulmonary regurgitation at baseline (25). The Pivotal Trial for the Harmony valve is currently underway in the United States with successful implantation in the first patient in September 2017. Other devices being implanted outside the United States include the Venus P valve (Venus Medtech, Shanghai, China) (26-29), as well as the self-expanding device by the TaeWoong Medical Company (Gyeonggi-do, Republic of Korea) (30). All devices have shown promising early results but further longitudinal study is necessary to understand how each of these devices will change the landscape of pulmonary valve replacement.

Transcatheter valve implantation—conclusions

Transcatheter valve implantation is one of the fastest growing areas of innovation in our field. Current devices have allowed us to treat a large number of patients who previously required surgical re-operations and future technologies promise to grow the patient population that we can serve. A critical next step will be refining when we intervene, particularly in the setting of chronic pulmonary regurgitation, and understanding if earlier intervention improves long-term patient outcomes, especially compared to surgical valve replacement.

Hybrid procedures

A "hybrid procedure" refers to any procedure where interventional catheterization and surgical techniques are used in tandem. In congenital heart disease, hybrid procedures are often synonymous with the hybrid stage I palliation for infants with hypoplastic left heart syndrome (HLHS), however hybrid procedures are utilized in many other situations extending beyond infants with HLHS. In fact, in the era of increasingly complex interventions on increasingly high-risk patients, hybrid procedures offer many potential advantages over traditional interventional catheterization and surgical techniques because, during hybrid procedures, we are able to combine the best parts of each specialty. Often, performing a procedure with a hybrid approach allows for more direct access with larger bore equipment in smaller patients while avoiding cardiopulmonary bypass. More importantly, hybrid

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procedures are an example of using cross-discipline innovation, collaboration, and group-thought to solve complex problems.

The first "hybrid" procedure was described in 1972 (31). Although never referred to as a hybrid procedure, what we would now refer to as hybrid techniques were utilized to facilitate patent ductus arteriosus closure. Interestingly, the authors comment that they were "impressed by the simplicity and quickness of the procedure," which is often a main advantage of hybrid procedures over more traditional surgical and transcatheter techniques (31). Since that time, hybrid procedures have been used for a myriad of purposes (*Figure 1*). Here we will highlight two of these hybrid procedures; the hybrid approaches for hypoplastic left heart syndrome and pulmonary atresia with intact ventricular septum.

Common Current Uses of Hybrid Procedures in Congenital Heart Disease
Muscular ventricular septal defect closure
Intra-operative pulmonary artery stent placement
Transcatheter pulmonary valve implantation (esp. small children and large native outflow tracts)
Hypoplastic left heart syndrome
Pulmonary atresia with intact ventricular septum
Any procedure where small patient size may prohibit a transcatheter approach

Figure 1 Common current uses of hybrid procedures in congenital heart disease.

HLHS

Probably the most commonly discussed hybrid procedure in the field of pediatric cardiology is the use of a hybrid procedure for patients with HLHS. This alternative to the standard surgical Norwood palliation involves stenting of the ductus arteriosus, bilateral pulmonary artery band placement, and atrial septostomy, and was first described in 1993 (32,33). Now commonly referred to as the hybrid stage I palliation, or the hybrid Norwood, the procedure has undergone some modifications with time but the three main objectives of the hybrid stage I palliation for infants with HLHS are the same as the surgical approach: create unobstructed pulmonary return across the atrial septum, create unobstructed systemic arterial blood flow, and create restricted pulmonary blood flow (*Figure 2*).

From a technical standpoint, the hybrid stage I palliation can be completed by a surgeon and interventional pediatric cardiologist with minimal additional equipment or training. Several techniques have been developed to help ease the learning curve associated with the procedure, like the appropriate tightness when placing the pulmonary artery bands (34). Some centers across the country have adopted a strategy of using the hybrid Norwood in all single ventricle patients, while other centers use the hybrid Norwood only in high-risk patients, or patients felt to be at a higher risk of morbidity or mortality after the surgical Norwood palliation (35-42). In these high-risk patients, avoiding cardiopulmonary bypass during the neonatal period may

Objective	Surgical Norwood	Hybrid Norwood
Unobstructed return of pulmonary venous blood	Atrial septectomy	Atrial septostomy, atrial septoplasty, or atrial septal stent implantation
Unobstructed systemic arterial blood flow	Aortic arch reconstruction	Ductus arteriosus stent implantation
Restricted pulmonary blood flow	Systemic-pulmonary artery stent	Pulmonary artery band placement

Figure 2 Comparison of the surgical and hybrid Norwood palliation for patients with hypoplastic left heart syndrome.

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lower mortality and morbidity during the staged single ventricle palliation (43-48). Our center is currently examining the impact of utilizing the hybrid approach in high-risk single ventricle patients when compared to a similar high-risk cohort prior to the advent of the hybrid procedure.

Importantly, the hybrid stage I palliation has also been used successfully in the non-single ventricle population. For example, in patients with factors which might place them at higher risk of morbidity or mortality after major complex congenital heart repair during infancy, the stage I hybrid palliation can be used to stabilize the circulation and post-pone definitive anatomic repair until later in childhood (49,50).

There are some anatomic and potential pathophysiologic complications uniquely associated with the hybrid stage I palliation, including recurrent atrial septal restriction, reverse coarctation of the aorta, and pulmonary artery stenosis. Additionally, several studies comparing the hybrid to standard surgical Norwood approaches using computational flow modeling have found some important differences in systemic and cerebral oxygenation as well as ventricular mechanics which may favor the standard surgical approach (51,52). Therefore, as with any novel approach to a complex problem, careful and longitudinal analysis will be important as we identify which patients will most benefit from the hybrid palliation.

Pulmonary atresia with intact ventricular septum

A subset of patients with pulmonary atresia with an intact ventricular septum will be anatomically suitable to undergo a biventricular repair. This involves opening the right ventricular outflow tract, typically in the neonatal period. Traditionally, this could be done via a surgical approach (pulmonary valvotomy) or via a transcatheter approach (percutaneous pulmonary valve perforation and balloon valvuloplasty). The hybrid procedure in this lesion is a great example of how taking advantage of the benefits from each approach facilitates a procedure while minimizing procedural complications and long-term deleterious effects.

The hybrid approach to pulmonary atresia with intact ventricular septum typically involves periventricular access via a midline sternotomy with needle perforation of the atretic pulmonary valve followed by balloon pulmonary valvuloplasty (53,54). In many patients, a systemic-pulmonary artery shunt is performed due to persistent (typically muscular) subvalvar right ventricular outflow tract obstruction. Fortunately, this shunt can be placed without the use of cardiopulmonary bypass. Surgical exposure to the right ventricle allows for direct access to the pulmonary valve with much lower risk of right ventricular outflow tract perforation, a risk of the transcatheter approach to pulmonary valve perforation. Combining the use of transcatheter techniques, the entire procedure can be performed without cardiopulmonary bypass with nearly identical high procedural success, low procedural complication rates, and mid-term outcomes compared to the surgical approach (53). Proponents of the transcatheter approach frequently site the need for a midline sternotomy as a major downfall of the hybrid approach. However, up to 76% of patients (range, 33–76%) who undergo the transcatheter approach ultimately require a midline sternotomy either to augment pulmonary blood flow (typically with placement of a systemic-pulmonary artery shunt) in the setting of post-procedure hypoxia, or due to inadvertent perforation of the right ventricular outflow tract (55-61). A comparison of the various approaches for right ventricular decompression in patients with pulmonary atresia with intact ventricular septum is detailed in *Figure 3*.

Hybrid procedures—conclusions

As we continue to develop less invasive ways to treat complex congenital heart disease, hybrid procedures will undoubtedly continue to help shape the interventional landscape. We must continue to both push the boundaries of these procedures, while continuing to study the outcomes to assure we are providing acute results better than standard transcatheter and surgical approaches alone, or acute results equivalent to standard approaches with better overall long-term patient outcomes. For some types of hybrid procedures, like intra-operative pulmonary artery stent placement, fairly long-term patient follow-up is available (62). Only by directly comparing hybrid approaches to other standard approaches will we be able to choose the best options for our patients.

Biodegradable technologies

Through years of innovation, interventional pediatric cardiologists have been afforded a wide array of devices to palliate and treat patients with congenital heart disease. These include stents of various diameters, lengths, and

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	Surgery	Transcatheter	Hybrid
Procedural Success	100%	75-95%	100%
Procedural Complications	58.8%	15-75%	57.1%
Procedural mortality	0%	0-16.7%	0%
Re-operation (within 2 years)	47.1%	62-77%	28.6%
Eventual biventricular circulation	82.3%	58-87%	85.7%
Cardiopulmonary bypass duration (minutes)[1]	80 (69-108)	0	0

Figure 3 Comparison of the various approaches for right ventricular decompression in pulmonary atresia with an intact ventricular septum. Adapted from Zampi, *et al.* (34). [1], data presented as median (interquartile range).

physical properties, coils and vascular occlusion devices, and devices designed to close atrial septal defects, ventricular septal defects, and the patent ductus arteriosus. However, a significant drawback of all these devices is their permanence. Outside of surgical excision, these devices are implanted permanently. For some patients, there are potential benefits to permanent implantation. For example, left pulmonary artery stenosis secondary to compression by the aorta likely will require a permanent stent to maintain patency. But a major consideration for the majority of patients with congenital heart disease undergoing cardiac catheterization procedures early in life is somatic growth. A stent placed in the aorta or pulmonary artery at 8 years of age will undoubtedly require further dilation in adulthood. And besides somatic growth, many heart lesions would be much better treated with a temporary implant. For example, at the current time closure of a patent ductus arteriosus or atrial septal defect requires implantation of a device (coil, vascular occlusive device, septal occlude, etc.) which generally results in immediate and complete occlusion. But in a relatively short time period, endothelialization forms a permanent "natural" covering over the defect. At this point, the implanted device, which really served as a scaffold to facilitate the endothelialization process, is an unnecessary remnant of the procedure. So how can we get the excellent results we expect from our current medical devices but limit the negative consequences related to their permanence? One possible solution may come in the form of biodegradable technology. Biodegradable materials have been used for years in medicine (for example, absorbable sutures), however, more recently, there has been tremendous effort by several research teams to develop these materials for use in patients with congenital heart disease. This includes development of vascular stents and occlusion devices, which can be applied across a wide variety of cardiovascular diseases.

Grossly, current biodegradable materials can be broken into two major categories based on their composition: bioabsorbable polymers and biocorrodible metals (63). Each material has advantages and limitations and each may have an important role in various devices. Polymers, for example poly L-lactic acid, break down by hydrolysis. The material strength and rate of bioabsorption can be altered by engineering the composition of the individual monomers and how they are inter-connected (63,64). Because bioabsorption occurs by hydrolysis and the monomers are commonly occurring and/or inert substances, these are likely to be very safe. One drawback, especially from the perspective of the interventional cardiologists, is that these materials are completely radiolucent unless modified. In contrast, biocorrodible materials, like zinc or magnesium, break down by biocorrosion. Biocorrosion is potentially inflammatory or toxic at the cellular or tissue level, although some research indicates Zinc may actually suppress inflammation at the cellular level. For the development of stents, this may be beneficial in lowering rates of neointimal proliferation, which is problematic for current small and medium diameter bare metal stents (65,66). Being metallic, there are radio-opaque and may have more similar physical properties, including radial strength and deployment characteristics, to currently commercially approved medical devices.

Many biodegradable stents and occlusion devices are in various stages of development with potential applications within the congenital heart disease space (63,65,67). The first commercially approved bioabsorbable stent became

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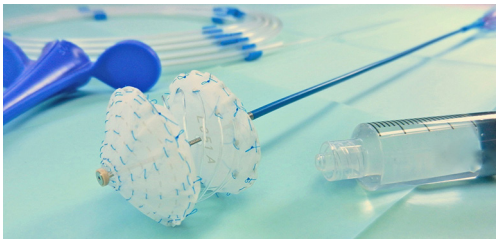

Figure 4 Careg bioresorbable septal occluder (image courtesy of Careg AG).

available in the United States in July 2016. The Absorb GT1 Bioresorbable Vascular Scaffold (BVS) stent (Abbott Vascular, Abbott Park, IL, USA), showed promise for use in coronary artery disease during the initial ABSORB trials (68). This bioabsorbable polymer stent made of poly L-lactic acid, was compared directly to a commercially available bare metal coronary stent through a series of first in man, then prospective and randomized clinical trials (68). Unfortunately, the stent is no longer commercially available. Although the company cites low sales, the device was removed from the market in mid 2017 due to a higher incidence of late stent thrombosis, in addition to evidence of higher rates of target lesion failure during long-term follow-up from the ABSORB III clinical trial (69). Although this is certainly a major set-back for biodegradable technologies, hopefully this early failure does not hinder future research and development of what will surely be an important part of the pediatric interventionalists' armamentarium in the near future. Most recently, in Europe a new device for atrial septal defect closure has received CE mark. The Carag bioresorbable septal occluder (CBSO) (Carag AG) was approved for use across Europe in mid-September 2017 (*Figure 4*). With time, we hope that this device and other devices of its kind will continue to improve the care we provide to patients with congenital heart disease.

Biodegradable technologies—conclusions

Biodegradable technologies represent an important merger between materials scientists and clinicians as we strive to improve the care we deliver with both excellent short-term, and long-term outcomes for our patients. In congenital heart disease, accounting for growth potential is crucially important as we perform interventions on increasingly small children and strive to minimize re-interventions on devices implanted during childhood.

Magnetic resonance imaging-guided cardiac catheterization

X-ray fluoroscopy has traditionally provided guidance for cardiac catheterization procedures, however fluoroscopy is limited by 2-dimensional projections, limited soft tissue definition, and necessary exposure to ionizing radiation. In patients with congenital heart disease, early and multiple exposures to ionizing radiation over the course of their lives puts them at higher cumulative risk associated with ionizing radiation exposure (70-73). Practices and techniques to minimize radiation exposure in this vulnerable group of pediatric patients, therefore, is of particular focus in pediatric interventional cardiology. One emerging technology that allows for minimal or no radiation exposure is magnetic resonance imaging (MRI)-guided cardiac catheterization.

Cardiac MRI (CMR) provides excellent soft-tissue definition and provides important information about structure, function, and perfusion/flows. However, measurement of intracardiac hemodynamics still requires cardiac catheterization, which is invasive and exposes patients to radiation. The guidance for this catheterization can be modified to include no radiation through the use of real-time CMR. Clinical CMR was first reported as an adjunct to X-ray fluoroscopy in adults over 10 years ago (74) and has continued to evolve since that time, with many small studies evaluating the feasibility and outcomes of radiation free CMR-guided cardiac catheterization. This includes both animal and adult pilot studies for both diagnostic and limited interventional procedures (75-77). In their pilot study comparing X-ray and CMR-guided right heart catheterization in 16 adult patients, Ratnayaka and his colleagues found that CMR-guided catheterization was able to be safely and successfully performed, and had a total procedure time similar to that of X-ray guided catheterization (76). In their patients, CMR-guided catheterization has now become the preferred modality for adult patients referred for a right heart catheterization. They have since published on 50 radiation-free transfemoral CMR-guided right heart catheterizations in children (78). All catheterizations were successful with no complications, and given the short procedure time with a realistic workflow, they hope to be able to offer this technology routinely in the pediatric population in the near future (78).

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Figure 5 Combined fluoroscopy and cardiac MRI suite (Image courtesy of Dr. Elena Grant, Children's National Medical Center).

CMR-guided catheterization requires an elaborate set-up, which has limited its widespread use. A combined fluoroscopy/CMR suite with biplane X-ray fluoroscopy and adjoining CMR rooms, separated by X-ray and radiofrequency shielded doors, are fashioned with special mobile tables that can transfer a patient from the fluoroscopy lab to the MRI scanner while maintaining sterility (*Figure 5*). The other challenge with CMR-guided catheterization is that all equipment used in the MRI room must be MRI compatible, including all catheters, guidewires, and potential devices. At this time, visualization of catheters on MRI is limited to the tip only, where a commercially available balloon tipped catheter is inflated with gadolinium to allow localization of the catheter tip. There are currently no commercially available guidewires to aid manipulation of catheters into specific locations or over which balloons and stents can be delivered, and this remains the biggest hurdle to the expansion of CMR-guided interventional catheterization. The added superiority of real-time MRI imaging, however, has the potential to allow for safer performance of complex interventions. Recently, Ratnayaka *et al.* published their experience with MRI-guided transcatheter cavopulmonary shunt creation in 15 swine (79).

Magnetic resonance imaging-guided cardiac catheterization—conclusions

The ability to offer transcatheter cardiac procedures more safely and without ionizing radiation is particularly relevant for patients with complex congenital heart lesions who require multiple catheterization procedures over their lifetime. Although eliminating exposure to ionizing radiation, and continuing to expand the scope of transcatheter interventions, seems like a pipe dream, it may soon become a reality with CMR-guided catheterization.

Innovative imaging and modeling techniques

No transcatheter intervention would be possible without appropriate imaging to plan, guide, and assess the impact of a procedure. The development and more widespread use of innovative imaging techniques is paramount in the interventional cardiologist's ability to perform increasingly complex interventions on complex anatomy, broadening the scope of procedures that can be performed via a transcatheter rather than surgical approach. Three-dimensional (3D) imaging and advanced visualization techniques have allowed for superior imaging with lower radiation doses and have allowed for the understanding of more complex anatomy and anatomic relationships.

3D rotational angiography (3DRA)

Originally designed for use in interventional neurovascular procedures (80,81), over the last 10 years, angiographic computed tomography (CT), or 3DRA, has become an integral part of the modern day cardiac catheterization lab. This technology uses cross-sectional CT images created from a rotational angiogram to display a volumetric data set. The angiogram is performed over a slow, multiple second injection of dilute contrast (typically 50–60% strength) while a standard C-arm mounted flat panel detector rotates ~190 degrees around the patient. This rotational angiogram provides a robust data set, which can be post-processed into a 3D reconstruction within minutes. The source images obtained are identical to that of a cross-sectional CT scan, therefore in addition to post-processing into a 3D reconstruction, the cross-sectional CT images may also be viewed and are particularly useful for visualizing soft tissue structures, allowing for the operator to appreciate relationships and interactions between vascular/cardiac structures and other soft tissue structures within the chest (82,83).

Respiratory and cardiac motion over the duration of the rotational angiogram make the cardiac applications of this technology understandably more difficult than the neurovascular applications for which they were originally designed. However 3DRA can provide diagnostic quality images in the majority of cases with comparable overall

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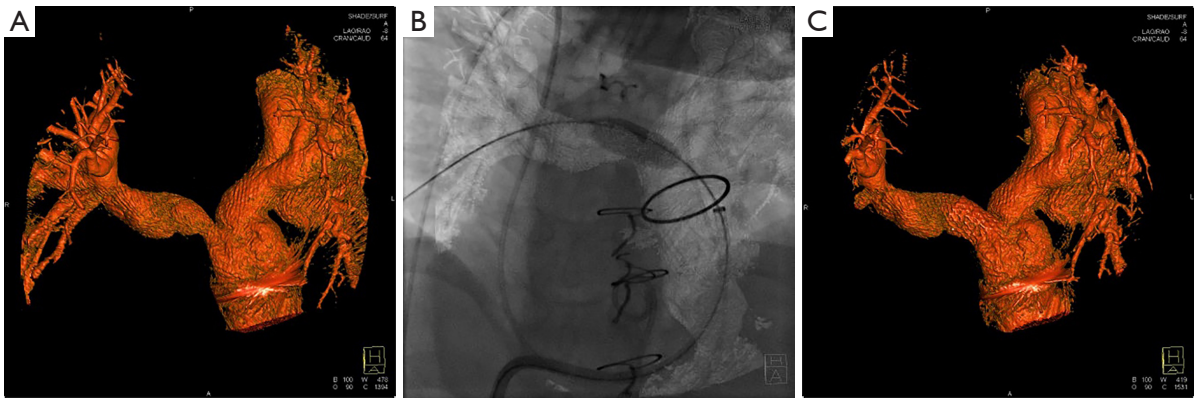

Figure 6 3D reconstruction of branch pulmonary arteries at baseline (A), use of 3D image overlay during stent placement in the right pulmonary artery stenosis (B), and 3D reconstruction post-stent (C).

radiation and contrast doses to standard cineangiography (84-87). The 3D reconstructions are particularly useful in understanding complex pulmonary artery or aortic arch anatomy and the relation of these vascular structures to soft tissue structures such as the airway (82,83), frequently providing additional, clinically relevant data when compared with standard biplane angiography (87). While dependent in part on the structure being visualized, quantitative measurements of structures made by 3DRA are comparable to those by 2D angiography (88). The reconstruction can also be manipulated on the workstation to visualize areas that are difficult or impossible to profile by standard 2D angiographic views and can be more sensitive for detection of some stenotic lesions (88). "Ideal" camera angles for viewing a particular lesion can also be easily identified, standard fluoroscopic C-arms moved to these angles, and the lesion of interest viewed at optimal working 2D angles. This can potentially lower the number of angiograms needed to visualize a lesion, which may result in lower radiation exposure and contrast dose. An overlay of the reconstruction can also be projected on the fluoroscopic image to allow for real time guidance of catheters and interventional equipment and can assist with complex catheter manipulations (*Figure 6*).

3DRA—conclusions

The use of 3DRA in congenital heart disease allows for a more robust understanding of complex anatomic relationships compared to standard biplane angiography. The ability to create and manipulate 3D volumetric data sets in real time allows for facile evaluation of both cardiac and non-cardiac lesions and procedural guidance. These attributes make 3DRA an important adjunctive imaging modality for the treatment of complex congenital heart disease in cardiac catheterization procedures.

Multimodality image fusion

While 3DRA allows for acquisition of a new CT dataset during the catheterization, if a pre-existing cross-sectional dataset derived from CMR or CT scan is available, these images can be fused with live fluoroscopy to provide additional anatomic guidance during a cardiac catheterization. Particularly appealing, the use of X-ray magnetic resonance fusion (XMRF) allows a 3D dataset with soft tissue definition obtained without ionizing radiation to be used to guide a live catheterization. Various methods can be used to fuse these images with fluoroscopy by using internal (bone, airway, artifact, calcium) or external fiducial markers (89,90). Once fused, these overlays can be used similarly to those obtained with 3DRA, and function to guide catheter manipulation, choose optimal working camera angles, and guide interventions. Multiple small studies have shown that use of XMRF can reduce radiation and contrast dose and reduce fluoroscopic time for select interventional procedures (89,91,92)

The multimodality fusion techniques described above have the downside that they do not provide real-time imaging to account for cardiac and respiratory motion and changes in patient position. A newer fusion technique, initially approved for use in 2012, is a software called EchoNavigator (Philips Healthcare, Best, The Netherlands), which allows for fusion of real-time

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echocardiographic images onto live fluoroscopy (93). This technique takes the wide field of view and excellent visualization of bony structures, devices, and catheters provided by fluoroscopy, and couples it with the excellent soft tissue visualization provided by echocardiography (standard 2D or 3D). These images are then displayed in the same orientation as a single fused image viewable by the operator (93). Areas of interest, such as a baffle or paravalvular leak, can be marked on the echo image and then viewed on the fused fluoroscopy image to help with localizing structures not visible by fluoroscopy alone. This modality has found wider use in adult structural heart disease, with multimodality guidance utilized for left atrial appendage occlusion, transcatheter mitral valve repair, and paravalvular leak closure (93-96). It has started to find a place within the realm of congenital heart disease as well, with proposed uses for atrial and ventricular septal defect closure, Fontan fenestration closure, and transseptal puncture (97,98). Compared to a historical control group of patients undergoing atrial septal defect closure, use of EchoNavigator was shown to provide superior procedural guidance compared with standard echocardiography alone in the majority of cases, with lower overall fluoroscopy time and radiation dose (97).

Multimodality image fusion—conclusions

Fusion of CT or MRI derived volumetric data sets, and 2D/3D echocardiographic data sets with fluoroscopy allows for improved understanding of anatomic relationships and enhanced procedural guidance. While the use in congenital heart disease is in its infancy, we anticipate continued growth in this area as we continue to look for ways to lower radiation doses and await application of additional technologies, like 3D TEE, in the pediatric space.

3D printing and 3D modeling

Over the last decade, advances in 3D imaging techniques have allowed the ability to translate cross sectional imaging data into interactive, real-life modeling through the use of 3D printing (99). Also known as rapid prototyping or additive printing, 3D printing has been used since the 1980s. More recent advances in imaging and printing technology have allowed for 3D printing to be more readily accessible (cheaper and faster) and used in dynamic cardiac structures (100). Non-invasive imaging datasets (CT, MRI, and more recently 3D echocardiography) can now be used to create patient-specific 3D printed heart models of complex cardiac anatomy and provides an innovative approach to pre-procedural planning, communication, and patient and trainee education (99,101) (*Figure* 7).

Historically, cross sectional imaging in the form of contrast-enhanced CT images were used most frequently to create 3D models. Free-breathing 3D whole heart MRI has become increasingly popular with complex congenital heart lesions (102). More recently, 3D echocardiography has also been utilized for the creation of 3D printed models. This modality offers a more accessible and cost-effective option and is particularly beneficial when visualization of structures not well seen by cross-sectional imaging, such as the atrial septum and valve leaflets, are the area of interest (103-105). Hybrid imaging, which combines a cross sectional dataset with an ultrasound dataset to take advantage of the best components of multiple modalities, is also evolving and is a promising avenue for production of a complete heart model with imbedded valve leaflets (106,107).

Once created, these models have been used successfully in the understanding of intracardiac and extracardiac lesions including complex intracardiac relationships, aortic arch anomalies, pulmonary artery branches, and aortopulmonary collaterals. These models can then facilitate pre-procedural planning both for transcatheter and surgical interventions. Multiple studies have shown the feasibility and accuracy of 3D printed models for reconstruction of complex cardiac lesions, with excellent correlation (within millimeters) of 3D models to the anatomic details visualized by cross-sectional imaging or by direct visualization in the operating room (104,105,108-110). In interventional cardiology, these models can be used in pre-procedural planning, in order to better understand complex anatomy (104,111-114) and to allow for mock-implants of a device or stent within a 3D printed model to better understand device fit in a particular patient (113,115,116). Additionally, there is the potential for patient specific 3D models to be used for education of patients and families, improving patient satisfaction, and improving communication between providers and between providers and their patients.

While there is endless potential for the use of 3D printing within congenital heart disease, there are a number of limitations. There is currently a lack of a standardized approach to imaging, segmentation, and processing which results in wide variation in the models produced. While the cost and time associated with segmentation and printing

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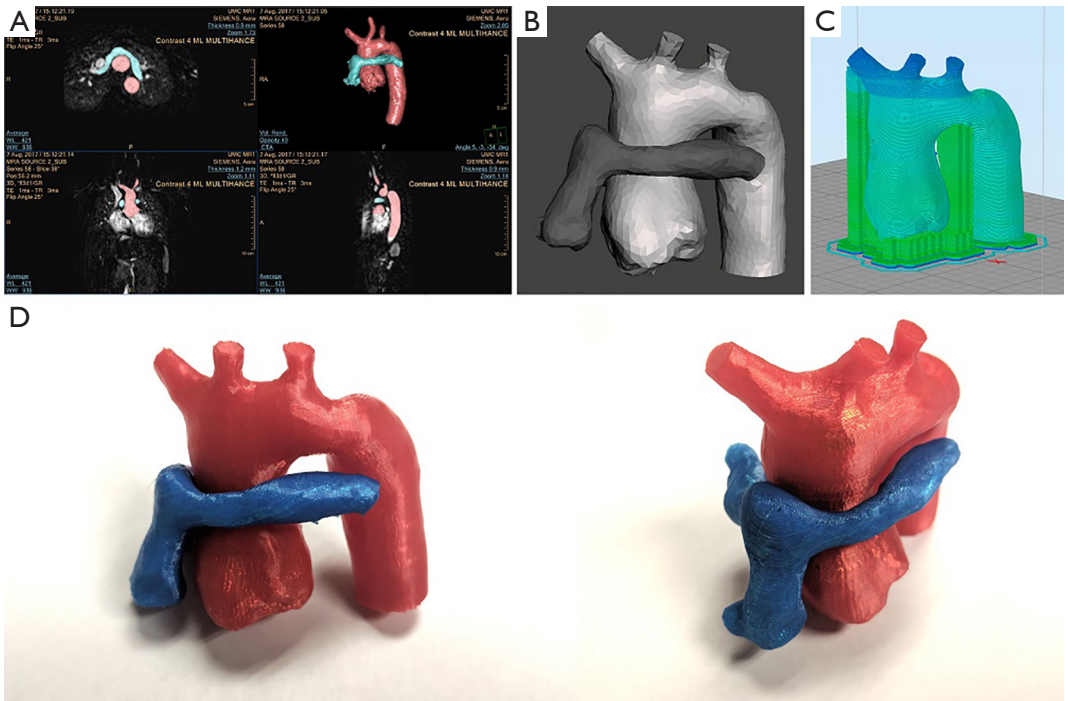

Figure 7 Creation of a 3D model (images courtesy of Dr. Michael Seckeler, Banner University Medical Center). (A) Segmenting of the axial imaging (MR or CT) involves highlighting the areas of interest to generate a virtual 3D model. This is then exported in stereolithography file format. This model was created in a 3-year-old with transposition of the great arteries and coarctation of the aorta, s/p arterial switch procedure, with Lecompte procedure of the pulmonary arteries, now presenting with recurrent coarctation; (B) the 3D model of the aorta and branch pulmonary arteries is further cleaned and smoothed as needed; (C) the model is then sliced to convert the stereolithography format into instructions for the 3D printer to execute. Note the support structures that are generated to allow for printing complex structures; (D) the completed model is printed, in this case with polylactic acid (PLA) to create a hard model. Multiple colors can be used to highlight different structures (aorta shown here in red and pulmonary arteries in blue).

has decreased significantly over the recent years, these are still very real limitations to wide-spread use of the technology (101). In terms of clinical use for direct patient care decisions, more stringent validation of these models across imaging modality and printing materials is necessary before it can be widely used to make crucial, real-time patient decisions (99,100). Cardiac structures are dynamic, and 3D models provide only one look at this changing structure. A more thorough understanding of the phase of the cardiac structure used for a model, and the properties of the materials used for printing will be necessary (99,101).

3D printing and modeling—conclusions

Despite its current limitations, 3D printing is an evolving technology within cardiology which will continue to expand as the technology and materials for printing evolve. The future of 3D printing is the potential for creation of custom implants or prosthesis, including heart valves and devices. At our center, Morrison *et al.*, have already created such a device, an airway splint, for patients with tracheobronchomalacia (117). While a cardiac application is still in development, the ability to print a cardiac device, created to accommodate an individual patient's anatomy is an exciting prospect and the epitome of personalized cardiac medicine.

Conclusions

Innovative techniques in cardiac catheterizations for patients with congenital heart disease are rooted in tremendous advances in both technology and imaging. These advances will continue to broaden our ability to treat patients using less-invasive techniques hopefully leading to

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both excellent immediate procedural success and also long-term improvement in patient outcomes compared to the state-of-the-art approaches of the recent past.

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Footnote

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References

1. Bonhoeffer P, Boudjemline Y, Saliba Z, et al. Percutaneous replacement of pulmonary valve in a right-ventricle to pulmonary-artery prosthetic conduit with valve dysfunction. Lancet 2000;356:1403-5.
2. McElhinney DB, Hellenbrand WE, Zahn EM, et al. Short- and medium-term outcomes after transcatheter pulmonary valve placement in the expanded multicenter US melody valve trial. Circulation 2010;122:507-16.
3. Zahn EM, Hellenbrand WE, Lock JE, et al. Implantation of the melody transcatheter pulmonary valve in patients with a dysfunctional right ventricular outflow tract conduit early results from the u.s. Clinical trial. J Am Coll Cardiol 2009;54:1722-9.
4. Armstrong AK, Balzer DT, Cabalka AK, et al. One-year follow-up of the Melody transcatheter pulmonary valve multicenter post-approval study. JACC Cardiovasc Interv 2014;7:1254-62.
5. Butera G, Milanesi O, Spadoni I, et al. Melody transcatheter pulmonary valve implantation. results from the registry of the Italian Society of Pediatric Cardiology (SICP). Catheter Cardiovasc Interv 2013;81:310-6.
6. Fraisse A, Aldebert P, Malekzadeh-Milani S, et al. Melody (R) transcatheter pulmonary valve implantation: results from a French registry. Arch Cardiovasc Dis 2014;107:607-14.
7. Gillespie MJ, Dori Y, Harris MA, et al. Bilateral branch pulmonary artery melody valve implantation for treatment of complex right ventricular outflow tract dysfunction in a high-risk patient. Circ Cardiovasc Interv 2011;4:e21-3.
8. Gillespie MJ, Rome JJ, Levi DS, et al. Melody valve implant within failed bioprosthetic valves in the pulmonary position: a multicenter experience. Circ Cardiovasc Interv 2012;5:862-70.
9. Meadows JJ, Moore PM, Berman DP, et al. Use and performance of the Melody Transcatheter Pulmonary Valve in native and postsurgical, nonconduit right ventricular outflow tracts. Circ Cardiovasc Interv 2014;7:374-80.
10. Shuto T, Kondo N, Dori Y, et al. Percutaneous transvenous Melody valve-in-ring procedure for mitral valve replacement. J Am Coll Cardiol 2011;58:2475-80.
11. Garay F, Webb J, Hijazi ZM. Percutaneous replacement of pulmonary valve using the Edwards-Cribier percutaneous heart valve: first report in a human patient. Catheter Cardiovasc Interv 2006;67:659-62.
12. Haas NA, Moysich A, Neudorf U, et al. Percutaneous implantation of the Edwards SAPIEN() pulmonic valve: initial results in the first 22 patients. Clin Res Cardiol 2013;102:119-28.
13. Rockefeller T, Shahanavaz S, Zajarias A, et al. Transcatheter implantation of SAPIEN 3 valve in native right ventricular outflow tract for severe pulmonary regurgitation following tetralogy of fallot repair. Catheter Cardiovasc Interv 2016;88:E28-33.
14. Suntharos P, Prieto LR. Percutaneous pulmonary valve implantation in the native right ventricular outflow tract using a 29-mm edwards SAPIEN 3 Valve. World J Pediatr Congenit Heart Surg 2017;8:639-42.
15. Chatterjee A, Bajaj NS, McMahon WS, et al. Transcatheter pulmonary valve implantation: a comprehensive systematic review and meta-analyses of observational studies. J Am Heart Assoc 2017;6. doi: 10.1161/JAHA.117.006432.
16. Schievano S, Taylor AM, Capelli C, et al. First-in-man implantation of a novel percutaneous valve: a new approach to medical device development. EuroIntervention 2010;5:745-50.
17. Bouzas B, Kilner PJ, Gatzoulis MA. Pulmonary regurgitation: not a benign lesion. Eur Heart J 2005;26:433-9.
18. Frigiola A, Redington AN, Cullen S, et al. Pulmonary regurgitation is an important determinant of right ventricular contractile dysfunction in patients with surgically repaired tetralogy of Fallot. Circulation 2004;110:II153-7.

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19. Gatzoulis MA, Balaji S, Webber SA, et al. Risk factors for arrhythmia and sudden cardiac death late after repair of tetralogy of Fallot: a multicentre study. Lancet 2000;356:975-81.
20. Knauth AL, Gauvreau K, Powell AJ, et al. Ventricular size and function assessed by cardiac MRI predict major adverse clinical outcomes late after tetralogy of Fallot repair. Heart 2008;94:211-6.
21. Redington AN. Determinants and assessment of pulmonary regurgitation in tetralogy of Fallot: practice and pitfalls. Cardiol Clin 2006;24:631-9.
22. Phillips AB, Nevin P, Shah A, et al. Development of a novel hybrid strategy for transcatheter pulmonary valve placement in patients following transannular patch repair of tetralogy of fallot. Catheter Cardiovasc Interv 2016;87:403-10.
23. Sosnowski C, Matella T, Fogg L, et al. Hybrid pulmonary artery plication followed by transcatheter pulmonary valve replacement: Comparison with surgical PVR. Catheter Cardiovasc Interv 2016;88:804-10.
24. Schoonbeek RC, Takebayashi S, Aoki C, et al. Implantation of the medtronic harmony transcatheter pulmonary valve improves right ventricular size and function in an ovine model of postoperative chronic pulmonary insufficiency. Circ Cardiovasc Interv 2016;9(10).
25. Bergersen L, Benson LN, Gillespie MJ, et al. Harmony feasibility trial: acute and short-term outcomes with a self-expanding transcatheter pulmonary valve. JACC Cardiovasc Interv 2017;10:1763-73.
26. Cao QL, Kenny D, Zhou D, et al. Early clinical experience with a novel self-expanding percutaneous stent-valve in the native right ventricular outflow tract. Catheter Cardiovasc Interv 2014;84:1131-7.
27. Promphan W, Prachasilchai P, Siripornpitak S, et al. Percutaneous pulmonary valve implantation with the Venus P-valve: clinical experience and early results. Cardiol Young 2016;26:698-710.
28. Garay F, Pan X, Zhang YJ, et al. Early experience with the Venus pvalve for percutaneous pulmonary valve implantation in native outflow tract. Neth Heart J 2017;25:76-81.
29. Husain J, Praichasilchai P, Gilbert Y, et al. Early European experience with the Venus P-valve(R): filling the gap in percutaneous pulmonary valve implantation. EuroIntervention 2016;12:e643-51.
30. Kim GB, Kwon BS, Lim HG. First in human experience of a new self-expandable percutaneous pulmonary valve implantation using knitted nitinol-wire and tri-leaflet porcine pericardial valve in the native right ventricular outflow tract. Catheter Cardiovasc Interv 2017;89:906-9.
31. Bhati BS, Nandakumaran CP, Shatapathy P, et al. Closure of patent ductus arteriosus during open-heart surgery. Surgical experience with different techniques. J Thorac Cardiovasc Surg 1972;63:820-6.
32. Akintuerk H, Michel-Behnke I, Valeske K, et al. Stenting of the arterial duct and banding of the pulmonary arteries: basis for combined Norwood stage I and II repair in hypoplastic left heart. Circulation 2002;105:1099-103.
33. Gibbs JL, Wren C, Watterson KG, et al. Stenting of the arterial duct combined with banding of the pulmonary arteries and atrial septectomy or septostomy: a new approach to palliation for the hypoplastic left heart syndrome. Br Heart J 1993;69:551-5.
34. Zampi JD, Hirsch JC, Goldstein BH, et al. Use of a pressure guidewire to assess pulmonary artery band adequacy in the hybrid stage I procedure for high-risk neonates with hypoplastic left heart syndrome and variants. Congenit Heart Dis 2013;8:149-58.
35. Ashburn DA, McCrindle BW, Tchervenkov CI, et al. Outcomes after the Norwood operation in neonates with critical aortic stenosis or aortic valve atresia. J Thorac Cardiovasc Surg 2003;125:1070-82.
36. Gaynor JW, Mahle WT, Cohen MI, et al. Risk factors for mortality after the Norwood procedure. Eur J Cardiothorac Surg 2002;22:82-9.
37. Hehir DA, Dominguez TE, Ballweg JA, et al. Risk factors for interstage death after stage 1 reconstruction of hypoplastic left heart syndrome and variants. J Thorac Cardiovasc Surg 2008;136:94-9, 99.e1-3.
38. Lim DS, Peeler BB, Matherne GP, et al. Risk-stratified approach to hybrid transcatheter-surgical palliation of hypoplastic left heart syndrome. Pediatr Cardiol 2006;27:91-5.
39. Pizarro C, Derby CD, Baffa JM, et al. Improving the outcome of high-risk neonates with hypoplastic left heart syndrome: hybrid procedure or conventional surgical palliation? Eur J Cardiothorac Surg 2008;33:613-8.
40. Rychik J, Rome JJ, Collins MH, et al. The hypoplastic left heart syndrome with intact atrial septum: atrial morphology, pulmonary vascular histopathology and outcome. J Am Coll Cardiol 1999;34:554-60.
41. Stasik CN, Gelehrter S, Goldberg CS, et al. Current outcomes and risk factors for the Norwood procedure. J Thorac Cardiovasc Surg 2006;131:412-7.
42. Wernovsky G, Kuijpers M, Van Rossem MC, et al. Postoperative course in the cardiac intensive care unit

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following the first stage of Norwood reconstruction. Cardiol Young 2007;17:652-65.
43. Bacha EA, Daves S, Hardin J, et al. Single-ventricle palliation for high-risk neonates: the emergence of an alternative hybrid stage I strategy. J Thorac Cardiovasc Surg 2006;131:163-71.e2.
44. Chen Q, Parry AJ. The current role of hybrid procedures in the stage 1 palliation of patients with hypoplastic left heart syndrome. Eur J Cardiothorac Surg 2009;36:77-83.
45. Galantowicz M, Cheatham JP. Lessons learned from the development of a new hybrid strategy for the management of hypoplastic left heart syndrome. Pediatr Cardiol 2005;26:190-9.
46. Galantowicz M, Cheatham JP, Phillips A, et al. Hybrid approach for hypoplastic left heart syndrome: intermediate results after the learning curve. Ann Thorac Surg 2008;85:2063-70; discussion 2070-1.
47. Gutgesell HP, Lim DS. Hybrid palliation in hypoplastic left heart syndrome. Curr Opin Cardiol 2007;22:55-9.
48. Venugopal PS, Luna KP, Anderson DR, et al. Hybrid procedure as an alternative to surgical palliation of high-risk infants with hypoplastic left heart syndrome and its variants. J Thorac Cardiovasc Surg 2010;139:1211-5.
49. Karani KB, Zafar F, Morales DL, et al. Hybrid stage I palliation in a 1.1 kg, 28-week preterm neonate with posterior malalignment ventricular septal defect, left ventricular outflow tract obstruction, and coarctation of the aorta. World J Pediatr Congenit Heart Surg 2014;5:603-7.
50. Uno Y, Masuoka A, Hotoda K, et al. Hybrid palliation for interrupted aortic arch with small aortic valve. World J Pediatr Congenit Heart Surg 2017;8:332-6.
51. Hsia TY, Cosentino D, Corsini C, et al. Use of mathematical modeling to compare and predict hemodynamic effects between hybrid and surgical Norwood palliations for hypoplastic left heart syndrome. Circulation 2011;124:S204-10.
52. Shimizu S, Kawada T, Une D, et al. Hybrid stage I palliation for hypoplastic left heart syndrome has no advantage on ventricular energetics: a theoretical analysis. Heart Vessels 2016;31:105-13.
53. Zampi JD, Hirsch-Romano JC, Goldstein BH, et al. Hybrid approach for pulmonary atresia with intact ventricular septum: Early single center results and comparison to the standard surgical approach. Catheter Cardiovasc Interv 2014;83:753-61.
54. Zhang H, Li SJ, Li YQ, et al. Hybrid procedure for the neonatal management of pulmonary atresia with intact ventricular septum. J Thorac Cardiovasc Surg 2007;133:1654-6.
55. Agnoletti G, Piechaud JF, Bonhoeffer P, et al. Perforation of the atretic pulmonary valve. Long-term follow-up. J Am Coll Cardiol 2003;41:1399-403.
56. Benson LN, Nykanen D, Collison A. Radiofrequency perforation in the treatment of congenital heart disease. Catheter Cardiovasc Interv 2002;56:72-82.
57. Hasan BS, Bautista-Hernandez V, McElhinney DB, et al. Outcomes of transcatheter approach for initial treatment of pulmonary atresia with intact ventricular septum. Catheter Cardiovasc Interv 2013;81:111-8.
58. Liava'a M, Brooks P, Konstantinov I, et al. Changing trends in the management of pulmonary atresia with intact ventricular septum: the Melbourne experience. Eur J Cardiothorac Surg 2011;40:1406-11.
59. McLean KM, Pearl JM. Pulmonary atresia with intact ventricular septum: initial management. Ann Thorac Surg 2006;82:2214-9; discussion 2219-20.
60. Ovaert C, Qureshi SA, Rosenthal E, et al. Growth of the right ventricle after successful transcatheter pulmonary valvotomy in neonates and infants with pulmonary atresia and intact ventricular septum. J Thorac Cardiovasc Surg 1998;115:1055-62.
61. Qureshi SA. Catheterization in neonates with pulmonary atresia with intact ventricular septum. Catheter Cardiovasc Interv 2006;67:924-31.
62. Zampi JD, Loccoh E, Armstrong AK, et al. Twenty years of experience with intraoperative pulmonary artery stenting. Catheter Cardiovasc Interv 2017;90:398-406.
63. Levi DS, Cheng AL. Biodegradable Implants. In: Da Cruz EM, Ivy D, Jaggers J, editors. Pediatric and Congenital Cardiology, Cardiac Surgery and Intensive Care. London: Springer; 2014:1219-35.
64. Solorio LD, Bocks ML, Hollister SJ. Tailoring the physicochemical and shape memory properties of the biodegradable polymer poly(glycerol dodecanoate) via curing conditions. J Biomed Mater Res A 2017;105:1618-23.
65. Bowen PK, Guillory RJ 2nd, Shearier ER, et al. Metallic zinc exhibits optimal biocompatibility for bioabsorbable endovascular stents. Mater Sci Eng C Mater Biol Appl 2015;56:467-72.
66. Boe BA, Zampi JD, Schumacher KR, et al. The use and outcomes of small, medium and large premounted stents in pediatric and congenital heart disease. Pediatr Cardiol 2016;37:1525-33.
67. Morgan G, Lee KJ, Chaturvedi R, et al. A biodegradable

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device (BioSTAR) for atrial septal defect closure in children. Catheter Cardiovasc Interv 2010;76:241-5.
68. Rizik DG, Hermiller JB, Kereiakes DJ. The ABSORB bioresorbable vascular scaffold: A novel, fully resorbable drug-eluting stent: Current concepts and overview of clinical evidence. Catheter Cardiovasc Interv 2015;86:664-77.
69. Gogas BD, King SB 3rd, Samady H. Bioresorbable polymeric scaffolds for coronary revascularization: Lessons learnt from ABSORB III, ABSORB China, and ABSORB Japan. Glob Cardiol Sci Pract 2015;2015:62.
70. Kleinerman RA. Cancer risks following diagnostic and therapeutic radiation exposure in children. Pediatr Radiol 2006;36 Suppl 2:121-5.
71. Johnson JN, Hornik CP, Li JS, et al. Cumulative radiation exposure and cancer risk estimation in children with heart disease. Circulation 2014;130:161-7.
72. Beels L, Bacher K, De Wolf D, et al. gamma-H2AX foci as a biomarker for patient X-ray exposure in pediatric cardiac catheterization: are we underestimating radiation risks? Circulation 2009;120:1903-9.
73. Ait-Ali L, Andreassi MG, Foffa I, et al. Cumulative patient effective dose and acute radiation-induced chromosomal DNA damage in children with congenital heart disease. Heart 2010;96:269-74.
74. Razavi R, Hill DL, Keevil SF, et al. Cardiac catheterisation guided by MRI in children and adults with congenital heart disease. Lancet 2003;362:1877-82.
75. Krueger JJ, Ewert P, Yilmaz S, et al. Magnetic resonance imaging-guided balloon angioplasty of coarctation of the aorta: a pilot study. Circulation 2006;113:1093-100.
76. Ratnayaka K, Faranesh AZ, Hansen MS, et al. Real-time MRI-guided right heart catheterization in adults using passive catheters. Eur Heart J 2013;34:380-9.
77. Tzifa A, Krombach GA, Kramer N, et al. Magnetic resonance-guided cardiac interventions using magnetic resonance-compatible devices: a preclinical study and first-in-man congenital interventions. Circ Cardiovasc Interv 2010;3:585-92.
78. Ratnayaka K, Kanter JP, Faranesh AZ, et al. Radiation-free CMR diagnostic heart catheterization in children. J Cardiovasc Magn Reson 2017;19:65.
79. Ratnayaka K, Rogers T, Schenke WH, et al. Magnetic resonance imaging-guided transcatheter cavopulmonary shunt. JACC Cardiovasc Interv 2016;9:959-70.
80. Benndorf G, Klucznik RP, Strother CM. Images in cardiovascular medicine. Angiographic computed tomography for imaging of underdeployed intracranial stent. Circulation 2006;114:e499-500.
81. Heran NS, Song JK, Namba K, et al. The utility of DynaCT in neuroendovascular procedures. AJNR Am J Neuroradiol 2006;27:330-2.
82. Borik S, Volodina S, Chaturvedi R, et al. Three-dimensional rotational angiography in the assessment of vascular and airway compression in children after a cavopulmonary anastomosis. Pediatr Cardiol 2015;36:1083-9.
83. Truong UT, Fagan TE, Deterding R, et al. Use of rotational angiography in assessing relationship of the airway to vasculature during cardiac catheterization. Catheter Cardiovasc Interv 2015;86:1068-77.
84. Glatz AC, Zhu X, Gillespie MJ, et al. Use of angiographic CT imaging in the cardiac catheterization laboratory for congenital heart disease. JACC Cardiovasc Imaging 2010;3:1149-57.
85. Loomba RS, Rios R, Buelow M, et al. Comparison of contrast volume, radiation dose, fluoroscopy time, and procedure time in previously published studies of rotational versus conventional coronary angiography. Am J Cardiol 2015;116:43-9.
86. Haddad L, Waller BR, Johnson J, et al. Radiation protocol for three-dimensional rotational angiography to limit procedural radiation exposure in the pediatric cardiac catheterization lab. Congenit Heart Dis 2016;11:637-46.
87. Aldoss O, Fonseca BM, Truong UT, et al. Diagnostic utility of three-dimensional rotational angiography in congenital cardiac catheterization. Pediatr Cardiol 2016;37:1211-21.
88. Berman DP, Khan DM, Gutierrez Y, et al. The use of three-dimensional rotational angiography to assess the pulmonary circulation following cavo-pulmonary connection in patients with single ventricle. Catheter Cardiovasc Interv 2012;80:922-30.
89. Dori Y, Sarmiento M, Glatz AC, et al. X-Ray magnetic resonance fusion to internal markers and utility in congenital heart disease catheterization. Circ Cardiovasc Imaging2011;4:415-24.
90. Gutiérrez LF, Silva R, Ozturk C, et al. Technology preview: X-ray fused with magnetic resonance during invasive cardiovascular procedures. Catheter Cardiovasc Interv 2007;70:773-82.
91. Abu Hazeem AA, Dori Y, Whitehead KK, et al. X-ray magnetic resonance fusion modality may reduce radiation exposure and contrast dose in diagnostic cardiac catheterization of congenital heart disease. Catheter Cardiovasc Interv 2014;84:795-800.

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92. Glöckler M, Halbfabeta J, Koch A, et al. Multimodality 3D-roadmap for cardiovascular interventions in congenital heart disease--a single-center, retrospective analysis of 78 cases. Catheter Cardiovasc Interv 2013;82:436-42.
93. Thaden JJ, Sanon S, Geske JB, et al. Echocardiographic and fluoroscopic fusion imaging for procedural guidance: an overview and early clinical experience. J Am Soc Echocardiogr 2016;29:503-12.
94. Sündermann SH, Biaggi P, Grünenfelder J, et al. Safety and feasibility of novel technology fusing echocardiography and fluoroscopy images during MitraClip interventions. EuroIntervention 2014;9:1210-6.
95. Gafoor S, Schulz P, Heuer L, et al. Use of echonavigator, a novel echocardiography-fluoroscopy overlay system, for transseptal puncture and left atrial appendage occlusion. J Interv Cardiol 2015;28:215-7.
96. Balzer J, Zeus T, Hellhammer K, et al. Initial clinical experience using the EchoNavigator((R))-system during structural heart disease interventions. World J Cardiol 2015;7:562-70.
97. Jone PN, Ross MM, Bracken JA, et al. Feasibility and safety of using a fused echocardiography/fluoroscopy imaging system in patients with congenital heart disease. J Am Soc Echocardiogr 2016;29:513-21.
98. Fagan TE, Truong UT, Jone PN, et al. Multimodality 3-Dimensional image integration for congenital cardiac catheterization. Methodist Debakey Cardiovasc J 2014;10:68-76.
99. Vukicevic M, Mosadegh B, Min JK, et al. Cardiac 3D Printing and its Future Directions. JACC Cardiovasc Imaging 2017;10:171-84.
100. Abudayyeh I, Gordon B, Ansari MM, et al. A practical guide to cardiovascular 3D printing in clinical practice: Overview and examples. J Interv Cardiol 2017. [Epub ahead of print].
101. Cantinotti M, Valverde I, Kutty S. Three-dimensional printed models in congenital heart disease. Int J Cardiovasc Imaging 2017;33:137-44.
102. Monney P, Piccini D, Rutz T, et al. Single centre experience of the application of self navigated 3D whole heart cardiovascular magnetic resonance for the assessment of cardiac anatomy in congenital heart disease. J Cardiovasc Magn Reson 2015;17:55.
103. Gilon D, Cape EG, Handschumacher MD, et al. Effect of three-dimensional valve shape on the hemodynamics of aortic stenosis: three-dimensional echocardiographic stereolithography and patient studies. J Am Coll Cardiol 2002;40:1479-86.
104. Binder TM, Moertl D, Mundigler G, et al. Stereolithographic biomodeling to create tangible hard copies of cardiac structures from echocardiographic data: in vitro and in vivo validation. J Am Coll Cardiol 2000;35:230-7.
105. Olivieri LJ, Krieger A, Loke YH, et al. Three-dimensional printing of intracardiac defects from three-dimensional echocardiographic images: feasibility and relative accuracy. J Am Soc Echocardiogr 2015;28:392-7.
106. Gosnell J, Pietila T, Samuel BP, et al. Integration of computed tomography and three-dimensional echocardiography for hybrid three-dimensional printing in congenital heart disease. J Digit Imaging 2016;29:665-9.
107. Mahmood F, Owais K, Taylor C, et al. Three-dimensional printing of mitral valve using echocardiographic data. JACC Cardiovasc Imaging 2015;8:227-9.
108. Vranicar M, Gregory W, Douglas WI, et al. The use of stereolithographic hand held models for evaluation of congenital anomalies of the great arteries. Stud Health Technol Inform 2008;132:538-43.
109. Schievano S, Migliavacca F, Coats L, et al. Percutaneous pulmonary valve implantation based on rapid prototyping of right ventricular outflow tract and pulmonary trunk from MR data. Radiology 2007;242:490-7.
110. Ngan EM, Rebeyka IM, Ross DB, et al. The rapid prototyping of anatomic models in pulmonary atresia. J Thorac Cardiovasc Surg 2006;132:264-9.
111. Sodian R, Weber S, Markert M, et al. Stereolithographic models for surgical planning in congenital heart surgery. Ann Thorac Surg 2007;83:1854-7.
112. Farooqi KM, Nielsen JC, Uppu SC, et al. Use of 3-dimensional printing to demonstrate complex intracardiac relationships in double-outlet right ventricle for surgical planning. Circ Cardiovasc Imaging 2015;8. doi: 10.1161/CIRCIMAGING.114.003043.
113. Velasco Forte MN, Byrne N, Valverde I, et al. Interventional correction of sinus venosus atrial septal defect and partial anomalous pulmonary venous drainage: procedural planning using 3D Printed Models. JACC Cardiovasc Imaging 2018;11:275-8.
114. Grant EK, Olivieri LJ. The Role of 3-D Heart Models in Planning and Executing Interventional Procedures. Can J Cardiol 2017;33:1074-81.
115. Little SH, Vukicevic M, Avenatti E, et al. 3D printed modeling for patient-specific mitral valve intervention: repair with a clip and a plug. JACC Cardiovasc Interv 2016;9:973-5.
116. Biglino G, Verschueren P, Zegels R, et al. Rapid

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prototyping compliant arterial phantoms for in-vitro studies and device testing. J Cardiovasc Magn Reson 2013;15:2.
117. Morrison RJ, Hollister SJ, Niedner MF, et al. Mitigation of tracheobronchomalacia with 3D-printed personalized medical devices in pediatric patients. Sci Transl Med 2015;7:285ra64.

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SS Rec Summary

ISSUE: Cardiac Catheterization for Congenital Defects

TAB: 10

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93451	000	Right heart catheterization including measurement(s) of	26	0.0339			2.47			98	30	3	5			30			30					
2nd REF	93454	000	Catheter placement in coronary artery(s) for coronary	5	0.1029			4.54			98	30	3	5			30			30					
CURRENT	93530	000	Right heart catheterization, for congenital cardiac anomalies		0.0206			3.97			185	38					95			52					
SVY	93593	000	Right heart catheterization for congenital heart defect(s)	46	0.0362	2.47	2.83	3.99	5.00	10.55	160	40	15	15	12	30	45	60	120	45	0	10	35	60	250
ACC	93593	000	Right heart catheterization for congenital heart defect(s)	4	0.0482	2.50	3.06	3.25	3.31	3.50	106	27	11	9	25	34	39	45	60	20	0	4	5	8	15
AAP	93593	000	Right heart catheterization for congenital heart defect(s) including imaging guidance by	5	0.0940	3.00	5.00	6.50	6.70	7.50	140	35	10	15	30	40	50	60	60	30	0	5	30	100	250
SCAI	93593	000	Right heart catheterization for congenital heart defect(s)	37	0.0344	2.47	2.70	4.00	5.00	10.55	164	44	15	15	12	30	45	60	120	45	2	20	40	60	160
REC	93593	000	Right heart catheterization for congenital heart defect(s) including imaging guidance by		0.0422			3.99			148	40	3	15			45			45					
MPC	36475	000	Endovenous ablation therapy of incompetent vein, extremity,		0.0966			5.30			94	20	4	10			45			15					
MPC	31628	000	Bronchoscopy, rigid or flexible, including fluoroscopic		0.0693			3.55			78	10	3	5			40			20					
MPC	49405	000	Image-guided fluid collection drainage by catheter (eg,		0.0710			4.00			95	25	5	5			40			20					
COMP	49422	000	Removal of tunneled intraperitoneal catheter		0.0592			4.00			111	33	3	10			45			20					

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93459	000	Catheter placement in coronary artery(s) for coronary	8	0.0957			6.35			123	35	3	5			50			30					
2nd REF	93451	000	Right heart catheterization including measurement(s) of	8	0.0339			2.47			98	30	3	5			30			30					
CURRENT	93530	000	Right heart catheterization, for congenital cardiac anomalies		0.0206			3.97			185	38					95			52					
SVY	93594	000	Right heart catheterization for congenital heart defect(s)	45	0.0589	3.00	5.00	6.10	7.25	14.24	184	46	15	15	20	45	60	70	180	48	2	20	30	50	250
ACC	93594	000	Right heart catheterization for congenital heart defect(s)	3	0.0447	3.00	3.38	3.75	4.00	4.25	124	35	10	10	46	48	50	55	60	19	2	4	5	13	20
AAP	93594	000	Right heart catheterization for congenital heart defect(s)	5	0.0818	5.00	7.00	7.00	8.20	8.70	163	40	10	15	50	60	60	60	70	38	2	5	40	75	250
SCAI	93594	000	Right heart catheterization for congenital heart defect(s)	37	0.0556	3.50	5.00	6.10	7.25	14.24	193	55	15	15	20	45	60	75	180	48	2	20	30	50	142
REC	93594	000	Right heart catheterization for congenital heart defect(s)		0.0634			6.10			172	46	3	15			60			48					
MPC	52351	000	Cystourethroscopy, with ureteroscopy and/or		0.0962			5.75			118	33	5	15			45			20					
MPC	37212	000	Transcatheter therapy, venous infusion for thrombolysis, any		0.0893			6.81			128	30	3	5			60			30					
COMP	37248	000	Transluminal balloon angioplasty (except dialysis		0.0950			6.00			109	23	3	5			50			28					
COMP	93457	000	Catheter placement in coronary artery(s) for coronary		0.1015			6.64			123	35	3	5			50			30					

SS Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	AP	AQ	AR	AS	AT
16							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
17	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
46	COMP	36217	000	Selective catheter placement, arterial system; initial third		0.0870			6.29			111	23	3	5			60			20					
47																										
48																										
49							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
50	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
51	1st REF	93458	000	Catheter placement in coronary artery(s) for coronary	11	0.0922			5.60			113	30	3	5			45			30					
52	2nd REF	93454	000	Catheter placement in coronary artery(s) for coronary	9	0.1029			4.54			98	30	3	5			30			30					
53	CURRENT	93799	XXX	Unlisted cardiovascular service or procedure		#DIV/0!						0														
54	SVY	93595	000	Left heart catheterization for congenital heart defect(s)	46	0.0725	2.50	5.25	6.00	7.00	11.05	170	46	15	15	15	32	48	60	180	46	0	10	24	50	250
55	ACC	93595	000	Left heart catheterization for congenital heart defect(s)	4	0.0676	3.50	4.81	5.38	5.76	6.55	131	34	11	9	25	46	57	64	75	20	0	2	4	9	20
56	AAP	93595	000	Left heart catheterization for congenital heart defect(s)	5	0.0781	6.70	7.00	7.00	8.50	9.40	173	40	10	15	45	60	60	60	65	48	4	5	20	75	250
57	SCAI	93595	000	Left heart catheterization for congenital heart defect(s)	37	0.0665	2.50	5.20	5.80	6.80	11.05	180	55	15	15	15	30	45	60	180	50	0	15	25	50	200
58	REC	93595	000	Left heart catheterization for congenital heart defect(s)		0.0781			6.00			158	46	3	15			48			46					
59	MPC	52351	000	Cystourethroscopy, with ureteroscopy and/or		0.0962			5.75			118	33	5	15			45			20					
60	MPC	37212	000	Transcatheter therapy, venous infusion for thrombolysis, any		0.0893			6.81			128	30	3	5			60			30					
61	COMP	37248	000	Transluminal balloon angioplasty (except dialysis		0.0950			6.00			109	23	3	5			50			28					
62	COMP	93453	000	Combined right and left heart catheterization including		0.1009			5.99			113	30	3	5			45			30					
63																										
64							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
65	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
66	1st REF	93460	000	Catheter placement in coronary artery(s) for coronary	13	0.1130			7.10			118	30	3	5			50			30					
67	2nd REF	93461	000	Catheter placement in coronary artery(s) for coronary	8	0.0950			7.85			143	35	3	5			65			35					
68	CURRENT	93533	000	Combined right heart catheterization and transseptal		0.0334			6.69			240	60					120			60					
69	SVY	93596	000	Right and left heart catheterization for congenital	46	0.0858	3.00	6.45	7.91	8.89	13.55	193	50	15	15	8	45	60	89	240	53	0	20	50	79	250
70	ACC	93596	000	Right and left heart catheterization for congenital	4	0.0826	4.10	5.53	6.38	7.06	8.00	132	33	11	9	8	35	59	79	90	20	0	2	4	8	17
71	AAP	93596	000	Right and left heart catheterization for congenital	5	0.0858	8.50	9.00	9.90	10.00	12.00	211	43	10	15	60	60	85	85	90	58	10	20	20	50	250
72	SCAI	93596	000	Right and left heart catheterization for congenital	37	0.0768	3.00	6.35	7.62	8.34	13.55	204	55	15	15	19	45	60	90	240	59	10	30	50	80	175
73	REC	93596	000	Right and left heart catheterization for congenital		0.0902			7.91			181	50	3	15			60			53					
74	MPC	52353	000	Cystourethroscopy, with ureteroscopy and/or		0.1013			7.50			133	33	5	15			60			20					
75	MPC	52356	000	Cystourethroscopy, with ureteroscopy and/or		0.1097			8.00			133	33	5	15			60			20					
76	COMP	33952	000	Extracorporeal membrane oxygenation		0.1103			8.15			138	30	3	15			60			30					

SS Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	AP	AQ	AR	AS	AT
16							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
17	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
77	COMP	93461	000	Catheter placement in coronary artery(s) for coronary		0.0950			7.85			143	35	3	5			65			35					
78																										
79							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
80	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
81	1st REF	93461	000	Catheter placement in coronary artery(s) for coronary	16	0.0950			7.85			143	35	3	5			65			35					
82	2nd REF	93460	000	Catheter placement in coronary artery(s) for coronary	9	0.1130			7.10			118	30	3	5			50			30					
83	CURRENT	93532	000	Combined right heart catheterization and transseptal		0.0417			9.99			295	60					175			60					
84	SVY	93597	000	Right and left heart catheterization for congenital	46	0.0704	3.50	7.81	8.88	10.00	15.70	228	55	15	15	30	60	83	99	300	60	2	23	50	79	250
85	ACC	93597	000	Right and left heart catheterization for congenital	3	0.0750	4.50	5.70	6.90	7.20	7.50	150	40	10	10	58	64	70	80	90	20	2	4	5	8	11
86	AAP	93597	000	Right and left heart catheterization for congenital	5	0.0771	9.00	10.00	10.00	13.50	15.70	224	44	10	15	60	90	95	100	120	60	10	15	50	70	250
87	SCAI	93597	000	Right and left heart catheterization for congenital	38	0.0694	3.50	7.85	8.65	10.00	15.55	232	60	19	15	30	60	78	113	300	60	15	30	50	80	250
88	REC	93597	000	Right and left heart catheterization for congenital		0.0871			9.99			216	55	3	15			83			60					
89	XWALK	92924	000	Percutaneous transluminal coronary atherectomy, with		0.1249			11.74			143	23	1	5			84			30					
90	MPC	52356	000	Cystourethroscopy, with ureteroscopy and/or		0.1097			8.00			133	33	5	15			60			20					
91	MPC	36905	000	Percutaneous transluminal mechanical thrombectomy		0.1057			9.00			126	22	4	5			75			20					
92	COMP	92920	000	Percutaneous transluminal coronary angioplasty; single		0.1265			9.85			127	23	1	5			68			30					
93	COMP	37241	000	Vascular embolization or occlusion, inclusive of all		0.0851			8.75			142	14	3	5			90			30					
94	COMP	92920	000	Percutaneous transluminal coronary angioplasty; single		0.1265			9.85			127	23	1	5			68			30					
95																										
96																										
97							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
98	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
99	1st REF	93567	ZZZ	Injection procedure during cardiac catheterization	15	0.0647			0.97			15						15								
100	2nd REF	36227	ZZZ	Selective catheter placement, external carotid artery,	12	0.1393			2.09			15						15								
101	CURRENT	93561	ZZZ	Indicator dilution studies such as dye or thermodilution,		0.0633			0.95			15						15								
102	CURRENT	93562	ZZZ	Indicator dilution studies such as dye or thermodilution,		0.0642			0.77			12						12								
103	SVY	93598	ZZZ	Cardiac output measurement(s),	46	0.1000	0.20	1.00	2.00	3.00	13.00	20				5	12	20	45	300	0	0	5	10	30	300
104	ACC	93598	ZZZ	Cardiac output measurement(s),	4	0.1569	1.00	1.75	2.04	2.18	2.50	13				7	10	13	23	45	0	0	4	5	79	300
105	AAP	93598	ZZZ	Cardiac output measurement(s),	5	0.0333	0.97	1.00	1.50	5.00	13.00	45				5	30	45	60	60	0	0	5	25	25	60
106	SCAI	93598	ZZZ	Cardiac output measurement(s),	37	0.1000	0.20	1.00	2.00	3.00	8.50	20				5	12	20	45	300	0	0	5	10	30	200
107	REC	93598	ZZZ	Cardiac output measurement(s),		0.0875			1.75			20						20								

SS Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	AP	AQ	AR	AS	AT
16							RVW					Total	PRE-TIME			INTRA-TIME					IMMD	SURVEY EXPERIENCE				
17	Source	CPT	Global	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST	MIN	25th	MED	75th	MAX
108	Xwalk Code	36483	ZZZ	Endovenous ablation therapy of incompetent vein, extremity,		0.0875			1.75			20						20								
109	MPC	37253	ZZZ	Intravascular ultrasound (noncoronary vessel) during		0.0709			1.44			21						20			1					
110	MPC	36227	ZZZ	Selective catheter placement, external carotid artery,		0.1393			2.09			15						15								
111	COMP	99292	ZZZ	Critical care, evaluation and management of the critically ill		0.0750			2.25			30						30								
112	COMP	20931	ZZZ	Allograft, structural, for spine surgery only (List separately in		0.0905			1.81			20						20								

SS Rec Summary

ISSUE: Cardiac Catheterization for Congenital Defects

TAB: 10

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IWMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93451	000	Right heart catheterization including measurement(s) of	26	0.0339			2.47			98	30	3	5			30			30					
2nd REF	93454	000	Catheter placement in coronary artery(s) for coronary	5	0.1029			4.54			98	30	3	5			30			30					
CURRENT	93530	000	Right heart catheterization, for congenital cardiac anomalies		0.0206			3.97			185	38					95			52					
SVY	93593	000	Right heart catheterization for congenital heart defect(s)	46	0.0362	2.47	2.83	3.99	5.00	10.55	160	40	15	15	12	30	45	60	120	45	0	10	35	60	250
ACC	93593	000	Right heart catheterization for congenital heart defect(s)	4	0.0482	2.50	3.06	3.25	3.31	3.50	106	27	11	9	25	34	39	45	60	20	0	4	5	8	15
AAP	93593	000	Right heart catheterization for congenital heart defect(s)	5	0.0940	3.00	5.00	6.50	6.70	7.50	140	35	10	15	30	40	50	60	60	30	0	5	30	100	250
SCAI	93593	000	Right heart catheterization for congenital heart defect(s)	37	0.0344	2.47	2.70	4.00	5.00	10.55	164	44	15	15	12	30	45	60	120	45	2	20	40	60	160
REC	93593	000	Right heart catheterization for congenital heart defect(s) including imaging guidance by		0.0422			3.99			148	40	3	15			45			45					
MPC	36475	000	Endovenous ablation therapy of incompetent vein,		0.0966			5.30			94	20	4	10			45			15					
MPC	31628	000	Bronchoscopy, rigid or flexible, including fluoroscopic		0.0693			3.55			78	10	3	5			40			20					
MPC	49405	000	Image-guided fluid collection drainage by catheter (eg,		0.0710			4.00			95	25	5	5			40			20					
COMP	49422	000	Removal of tunneled intraperitoneal catheter		0.0592			4.00			111	33	3	10			45			20					

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IWMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93459	000	Catheter placement in coronary artery(s) for coronary	8	0.0957			6.35			123	35	3	5			50			30					
2nd REF	93451	000	Right heart catheterization including measurement(s) of	8	0.0339			2.47			98	30	3	5			30			30					
CURRENT	93530	000	Right heart catheterization, for congenital cardiac anomalies		0.0206			3.97			185	38					95			52					
SVY	93594	000	Right heart catheterization for congenital heart defect(s)	45	0.0589	3.00	5.00	6.10	7.25	14.24	184	46	15	15	20	45	60	70	180	48	2	20	30	50	250
ACC	93594	000	Right heart catheterization for congenital heart defect(s)	3	0.0447	3.00	3.38	3.75	4.00	4.25	124	35	10	10	46	48	50	55	60	19	2	4	5	13	20
AAP	93594	000	Right heart catheterization for congenital heart defect(s)	5	0.0818	5.00	7.00	7.00	8.20	8.70	163	40	10	15	50	60	60	60	70	38	2	5	40	75	250
SCAI	93594	000	Right heart catheterization for congenital heart defect(s)	37	0.0556	3.50	5.00	6.10	7.25	14.24	193	55	15	15	20	45	60	75	180	48	2	20	30	50	142
REC	93594	000	Right heart catheterization for congenital heart defect(s)		0.0634			6.10			172	46	3	15			60			48					
MPC	52351	000	Cystourethroscopy, with ureteroscopy and/or		0.0962			5.75			118	33	5	15			45			20					
MPC	37212	000	Transcatheter therapy, venous infusion for thrombolysis, any		0.0893			6.81			128	30	3	5			60			30					
COMP	37248	000	Transluminal balloon angioplasty (except dialysis		0.0950			6.00			109	23	3	5			50			28					
COMP	93457	000	Catheter placement in coronary artery(s) for coronary		0.1015			6.64			123	35	3	5			50			30					
COMP	36217	000	Selective catheter placement, arterial system; initial third		0.0870			6.29			111	23	3	5			60			20					

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IWMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93458	000	Catheter placement in coronary artery(s) for coronary	11	0.0922			5.60			113	30	3	5			45			30					
2nd REF	93454	000	Catheter placement in coronary artery(s) for coronary	9	0.1029			4.54			98	30	3	5			30			30					
CURRENT	93799	XXX	Unlisted cardiovascular service or procedure		#DIV/0!						0														
SVY	93595	000	Left heart catheterization for congenital heart defect(s)	46	0.0725	2.50	5.25	6.00	7.00	11.05	170	46	15	15	15	32	48	60	180	46	0	10	24	50	250
ACC	93595	000	Left heart catheterization for congenital heart defect(s)	4	0.0676	3.50	4.81	5.38	5.76	6.55	131	34	11	9	25	46	57	64	75	20	0	2	4	9	20
AAP	93595	000	Left heart catheterization for congenital heart defect(s)	5	0.0781	6.70	7.00	7.00	8.50	9.40	173	40	10	15	45	60	60	60	65	48	4	5	20	75	250
SCAI	93595	000	Left heart catheterization for congenital heart defect(s)	37	0.0665	2.50	5.20	5.80	6.80	11.05	180	55	15	15	15	30	45	60	180	50	0	15	25	50	200
REC	93595	000	Left heart catheterization for congenital heart defect(s)		0.0781			6.00			158	46	3	15			48			46					
MPC	52351	000	Cystourethroscopy, with ureteroscopy and/or		0.0962			5.75			118	33	5	15			45			20					
MPC	37212	000	Transcatheter therapy, venous infusion for thrombolysis, any		0.0893			6.81			128	30	3	5			60			30					
COMP	37248	000	Transluminal balloon angioplasty (except dialysis		0.0950			6.00			109	23	3	5			50			28					
COMP	93453	000	Combined right and left heart catheterization including		0.1009			5.99			113	30	3	5			45			30					

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IWMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93460	000	Catheter placement in coronary artery(s) for coronary	13	0.1130			7.10			118	30	3	5			50			30					
2nd REF	93461	000	Catheter placement in coronary artery(s) for coronary	8	0.0950			7.85			143	35	3	5			65			35					
CURRENT	93533	000	Combined right heart catheterization and transseptal		0.0334			6.69			240	60					120			60					
SVY	93596	000	Right and left heart catheterization for congenital	46	0.0858	3.00	6.45	7.91	8.89	13.55	193	50	15	15	8	45	60	89	240	53	0	20	50	79	250
ACC	93596	000	Right and left heart catheterization for congenital	4	0.0826	4.10	5.53	6.38	7.06	8.00	132	33	11	9	8	35	59	79	90	20	0	2	4	8	17
AAP	93596	000	Right and left heart catheterization for congenital	5	0.0858	8.50	9.00	9.90	10.00	12.00	211	43	10	15	60	60	85	85	90	58	10	20	20	50	250
SCAI	93596	000	Right and left heart catheterization for congenital	37	0.0768	3.00	6.35	7.62	8.34	13.55	204	55	15	15	19	45	60	90	240	59	10	30	50	80	175
REC	93596	000	Right and left heart catheterization for congenital		0.0902			7.91			181	50	3	15			60			53					
MPC	52353	000	Cystourethroscopy, with ureteroscopy and/or		0.1013			7.50			133	33	5	15			60			20					
MPC	52356	000	Cystourethroscopy, with ureteroscopy and/or		0.1097			8.00			133	33	5	15			60			20					
COMP	33952	000	Extracorporeal membrane oxygenation		0.1103			8.15			138	30	3	15			60			30					
COMP	93461	000	Catheter placement in coronary artery(s) for coronary		0.0950			7.85			143	35	3	5			65			35					

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IWMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93461	000	Catheter placement in coronary artery(s) for coronary	16	0.0950			7.85			143	35	3	5			65			35					
2nd REF	93460	000	Catheter placement in coronary artery(s) for coronary	9	0.1130			7.10			118	30	3	5			50			30					
CURRENT	93532	000	Combined right heart catheterization and transseptal		0.0417			9.99			295	60					175			60					
SVY	93597	000	Right and left heart catheterization for congenital	46	0.0704	3.50	7.81	8.88	10.00	15.70	228	55	15	15	30	60	83	99	300	60	2	23	50	79	250
ACC	93597	000	Right and left heart catheterization for congenital	3	0.0750	4.50	5.70	6.90	7.20	7.50	150	40	10	10	58	64	70	80	90	20	2	4	5	8	11
AAP	93597	000	Right and left heart catheterization for congenital	5	0.0771	9.00	10.00	10.00	13.50	15.70	224	44	10	15	60	90	95	100	120	60	10	15	50	70	250
SCAI	93597	000	Right and left heart catheterization for congenital	38	0.0694	3.50	7.85	8.65	10.00	15.55	232	60	19	15	30	60	78	113	300	60	15	30	50	80	250
REC	93597	000	Right and left heart catheterization for congenital		0.0871			9.99			216	55	3	15			83			60					
XWALK	92924	000	Percutaneous transluminal coronary atherectomy, with		0.1249			11.74			143	23	1	5			84			30					
MPC	52356	000	Cystourethroscopy, with ureteroscopy and/or		0.1097			8.00			133	33	5	15			60			20					
MPC	36905	000	Percutaneous transluminal mechanical thrombectomy		0.1057			9.00			126	22	4	5			75			20					
COMP	92920	000	Percutaneous transluminal coronary angioplasty; single		0.1265			9.85			127	23	1	5			68			30					
COMP	37241	000	Vascular embolization or occlusion, inclusive of all		0.0851			8.75			142	14	3	5			90			30					
COMP	92920	000	Percutaneous transluminal coronary angioplasty; single		0.1265			9.85			127	23	1	5			68			30					

Source	CPT	Global	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IWMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	93567	ZZZ	Injection procedure during cardiac catheterization	15	0.0647			0.97			15						15								
2nd REF	36227	ZZZ	Selective catheter placement, external carotid artery,	12	0.1393			2.09			15						15								
CURRENT	93561	ZZZ	Indicator dilution studies such as dye or thermodilution,		0.0633			0.95			15						15								
CURRENT	93562	ZZZ	Indicator dilution studies such as dye or thermodilution,		0.0642			0.77			12						12								
SVY	93598	ZZZ	Cardiac output measurement(s),	46	0.1000	0.20	1.00	2.00	3.00	13.00	20				5	12	20	45	300	0	0	5	10	30	300
ACC	93598	ZZZ	Cardiac output measurement(s),	4	0.1569	1.00	1.75	2.04	2.18	2.50	13				7	10	13	23	45	0	0	4	5	79	300
AAP	93598	ZZZ	Cardiac output measurement(s),	5	0.0333	0.97	1.00	1.50	5.00	13.00	45				5	30	45	60	60	0	0	5	25	25	60
SCAI	93598	ZZZ	Cardiac output measurement(s),	37	0.1000	0.20	1.00	2.00	3.00	8.50	20				5	12	20	45	300	0	0	5	10	30	200
REC	93598	ZZZ	Cardiac output measurement(s),		0.0875			1.75			20						20								
Xwalk Code	36483	ZZZ	Endovenous ablation therapy of incompetent vein,		0.0875			1.75			20						20								
MPC	37253	ZZZ	Intravascular ultrasound (noncoronary vessel) during		0.0709			1.44			21						20			1					
MPC	36227	ZZZ	Selective catheter placement, external carotid artery,		0.1393			2.09			15						15								
COMP	99292	ZZZ	Critical care, evaluation and management of the critically ill		0.0750			2.25			30						30								
COMP	20931	ZZZ	Allograft, structural, for spine surgery only (List separately in		0.0905			1.81			20						20								

August 25, 2020

Scott Manaker, MD
AMA/RVS Update PE Subcommittee
American Medical Association
330 N. Wabash Ave.
Chicago, IL 60611

RE: Tab 10 Practice Expense

Dear Dr. Manaker:

Tab 10 on the October 2020 RUC agenda addresses five physician work codes and one add-on code for cardiac catheterization for congenital defects. These services are provided exclusively in the facility setting. As such, we recommend no direct practice expense inputs for Tab 10.

Thank you for your consideration of this information as you prepare for the meeting. Please contact Claudia Vasquez at cvasquez@acc.org if you have any questions.

Sincerely,

Richard Wright, MD
ACC RUC Advisor

Edward Toggart, MD
SCAI RUC Advisor

Steve Krug, MD
AAP RUC Advisor

AMA/Specialty Society RVS Update Committee Summary of Recommendations

January 2023

Hyperthermic Intraperitoneal Chemotherapy (HIPEC) – Tab 15

In September 2022, the CPT Editorial Panel created two time-based add-on Category I codes 96547 *Intraoperative hyperthermic intraperitoneal chemotherapy (HIPEC) procedure, including separate incision(s) and closure, when performed; first 60 minutes (List separately in addition to code for primary procedure)* and 96548 *Intraoperative hyperthermic intraperitoneal chemotherapy (HIPEC) procedure, including separate incision(s) and closure, when performed; each additional 30 minutes (List separately in addition to code for primary procedure)*. HIPEC was previously reported with code 96549 *Unlisted chemotherapy procedure*, however, the unlisted code is not specific and does not account for the variable time required for this intraoperative add-on procedure. The CPT Editorial Panel also made editorial revisions to code 96446 to indicate chemotherapy administration via an implanted port or catheter and added a parenthetical related to the two new codes.

CPT codes 96547 and 96548 were surveyed for the January 2023 RUC meeting. In preparation for the survey, the specialty societies noted that the work involved with these add-on codes includes not just the chemotherapy dwell time, but also work that is exclusive to the primary service, such as additional equipment setup, incisions and closures, plus dwell time/solution manipulation. Given this information, the specialty societies requested, and the Research Subcommittee agreed, to customize the ZZZ survey template to add additional instructions that defined each service period and added fields to collect pre- and post-time. The survey template revisions were created in tandem with the specialty societies to ensure that the survey times and work of the new add-on codes were accurate and did not overlap with any potential work of the primary procedure.

The survey was sent to a random sample of surgical oncologists from two specialty societies collecting a total of 36 responses. While reviewing the survey data, it was clear to the specialty societies that the instructions were not sufficient as the survey data reflected time estimates that far exceed the time specified in these new time-based code descriptors. The RUC agreed that the survey respondents may not have fully understood the survey instructions as the data demonstrates a bi-modal distribution with half of the respondents indicating that the survey time was more than the descriptor time (ie, 60 minutes) and the other half indicated a time within the stated descriptor time. The RUC also indicated that the CPT descriptor did not clearly define the work included in the stated time and noted the descriptor should be clarified via the CPT process. After thorough review, the specialty societies indicated, and the RUC agreed, that the survey results for both CPT codes 96547 and 96548 were inaccurate and that the codes should be resurveyed within the 2025 CPT cycle with a targeted survey tool that has been reviewed and approved by the Research Subcommittee. **Therefore, the RUC recommends contractor pricing for CPT codes 96547 and 96548. The RUC also recommends that CPT codes 96547 and 96548 be referred to the CPT editorial Panel for revision in the 2025 CPT cycle. The specialty societies will resurvey within the 2025 CPT cycle and work with the Research Subcommittee to draft a targeted survey.**

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Referral to CPT
During the discussions, the RUC determined that the CPT descriptor did not clearly define the work included in the stated descriptor time (ie, 60 minutes) and recommended that the two new codes be referred to the CPT Editorial Panel for further clarification. The RUC noted that new codes related to tumor resection prior to HIPEC were being brought to the Panel by the specialty societies within the 2025 CPT cycle and those new base codes would further clarify the two new time-based add-on codes in the re-survey during the 2025 cycle.

Practice Expense
The RUC recommends no direct practice expense inputs for CPT codes 96547 and 96548 as they are facility-only services.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Radiology **Radiation Oncology** **Hyperthermia** *77600* *Hyperthermia, externally generated; superficial (ie, heating to a depth of 4 cm or less)* *77605* *deep (ie, heating to depths greater than 4 cm)* (For intraoperative hyperthermic intraperitoneal chemotherapy [HIPEC], see 96547, 96548) **Medicine** **Hydration, Therapeutic, Prophylactic, Diagnostic Injections and Infusions, and Chemotherapy and Other Highly Complex Drug or Highly Complex Biologic Agent Administration** **Chemotherapy and Other Highly Complex Drug or Highly Complex Biologic Agent Administration** **Other Injection and Infusion Services**				
(e)96446	-	Chemotherapy administration into the peritoneal cavity via ~~indwelling~~implanted port or catheter (For intraoperative hyperthermic intraperitoneal chemotherapy [HIPEC], see 96547, 96548)	XXX	0.37 (No Change)
✚●96547	S1	Intraoperative hyperthermic intraperitoneal chemotherapy (HIPEC) procedure, including separate incision(s) and closure, when performed; first 60 minutes (List separately in addition to code for primary procedure)	ZZZ	Contractor Price

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+●96548	S2	each additional 30 minutes (List separately in addition to code for primary procedure) (Use 96547, 96548 in conjunction with 38100, 38101, 38102, 38120, 43611, 43620, 43621, 43622, 43631, 43632, 43633, 43634, 44010, 44015, 44110, 44111, 44120, 44121, 44125, 44130, 44139, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44155, 44156, 44157, 44158, 44160, 44202, 44203, 44204, 44207, 44213, 44227, 47001, 47100, 48140, 48145, 48152, 48155, 49000, 49010, 49203, 49204, 49205, 49320, 58200, 58210, 58575, 58940, 58943, 58950, 58951, 58952, 58953, 58954, 58956, 58957, 58958, 58960)	ZZZ	Contractor Price

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December 12, 2022

Ezekial Silva, III, MD
Chair, AMA/Specialty Society RVS Update Committee
AMA Plaza
330 N Wabash Avenue
Chicago, IL 60611

Subject: Tab 15, Hyperthermic Intraperitoneal Chemotherapy (HIPEC)

Dear Dr. Silva,

The AMA CPT Editorial Panel recently approved two new add-on time-based codes to report intraoperative hyperthermic intraperitoneal chemotherapy (HIPEC):

+96547 Intraoperative hyperthermic intraperitoneal chemotherapy (HIPEC) procedure, including separate incision(s) and closure, when performed; first 60 minutes (List separately in addition to code for primary procedure)

+96548 Intraoperative hyperthermic intraperitoneal chemotherapy (HIPEC) procedure, including separate incision(s) and closure, when performed; each additional 30 minutes (List separately in addition to code for primary procedure)

The undersigned societies submitted a request to the Research Subcommittee for a revision to the ZZZ survey instructions. Specifically, we requested the addition of a description of what survey respondents should consider for the additional intraservice time related to the new codes so that work and time related to the index procedure was not included. The standard ZZZ survey only states " *Code related to another service and is always included in the global period of the other service (Note: Physician work is associated with intra-service time and in some instances the pre- and post-service time)*"

We suggested that providing a definition of work in the survey was critical to assure proper valuation of these add-on codes. In this specific instance, if such information is not provided in the survey, it is possible that respondents may only consider the drug dwell and manipulation time, which can vary from 30 minutes to 180 minutes. However, the actual work involved also includes work that is exclusive of the primary procedure, such as additional equipment setup, incisions and closures, separate consent, separate discussion with pharmacy and perfusion staff. A mock-up of our suggested revisions to the ZZZ survey were provided to the Research Subcommittee (please see Attachment A).

After much discussion, the Research Subcommittee determined that:

1. Some of the additional work related to the HIPEC procedure is performed during the preservice period and postservice period of the index procedure. This is to say that not all additional work is performed during the intraservice period of the index procedure.
2. A ZZZ RUC survey that includes separate preservice and postservice time components would be more appropriate.
3. The terminology used to describe possible additional preservice and postservice work should follow standard terminology used in global code surveys.

Based on the feedback and instructions from the Research Subcommittee, the society advisors worked with RUC staff to draft revised instructions that were approved and used for surveying both codes 96547 and 96548 (please see Attachment B).

Unfortunately, these instructions resulted in time estimates that significantly exceeded the time in the new time-based codes. As shown on the RUC Summary Excel file, the surveyed total time for code 96547 is 113 minutes. It is clear that surgeons responding to the survey did not understand the restrictions and correct reporting of time-based codes and did not understand that the reference codes which were not time-based did not include additional preservice and postservice work. In addition, code 96548 (additional 30 minutes of intraservice time) should not have allowed for additional preservice and postservice time—another important, but missed point of an add-on time-based code.

In summary, we believe that the survey design was unintentionally confusing and resulted in flawed data that cannot be used to make a recommendation for these two new codes.

We are recommending contractor-pricing for 96547 and 96548 for 2024.

Further, there is a CPT code change application related to tumor excision and destruction procedures that is on the agenda for the February 2023 CPT Editorial Panel meeting. These tumor excision and destruction codes are in some cases used in conjunction with 96547 and 96548, if patient factors at the time of excision are favorable for the additional use of HIPEC. If the proposed codes are approved, then we could resurvey these two add-on codes in conjunction with the new index procedure codes after working with the Research Subcommittee on a survey instrument that is not confusing.

We appreciate that the RUC is reluctant to recommend contractor pricing and resurvey codes. However, we believe for this specific tab of unique add-on time-based procedure codes, this approach will allow the most accurate review of 96547 and 96548.

Thank you for considering our recommendations.

Sincerely,

Charles Mabry, MD, FACS
ACS RUC Advisor

Jon Hathaway, MD, PhD, FACS
ACOG, RUC Advisor

Attachment A: Society Requested Edits to ZZZ RUC Survey

It is very important to consider the global period when you are comparing the survey code to the reference services. A service paid on a global basis includes the provision of the service

ZZZ Code related to another service and is always included in the global period of the other service ~~(Note: Physician work is associated with intra-service time and in some instances the pre- and post-service time)~~

Question 1

Which of the reference services on the attached list is most similar to the survey code descriptor and typical patient/service described on the cover of this questionnaire?

Reference CPT code: [ ]

Background for Question 2: Surgery (ZZZ global add-on procedure)

A code with a ZZZ global is always related to another primary service and is always included in the global period of the other service.

Intra-service time

The intra-service time for a ZZZ global procedure code includes only the additional time on the day of the procedure that is not included in the separately reportable primary procedure and **may include**: communication with other professionals and the patient /family about the add-on procedure; set-up of equipment and supplies for the add-on procedure; separate incisions and closure that are not part of the primary procedure; time to perform the add-on procedure; and postoperative documentation of the add-on procedure.

When estimating time in Question 2, **do not** consider any time that is related to the primary procedure.

Question 2

How much of your own time is required per patient treated for each of the following steps in patient care related to this procedure? It is important to be as precise as possible. For example, indicate 3 or 6 minutes instead of rounding to 5 minutes or indicate 14 or 17 minutes instead of rounding to 15 minutes. Indicate your time for the survey code on the front cover. ***(Refer to definitions.)***

Day of procedure	**Survey code**
Intra-service time:	_____ minutes

Attachment B: Research Subcommittee Approved Edits to ZZZ RUC Survey

ZZZ Code related to another service and is always included in the global period of the other service (Note: Physician work is associated with intra-service time and in some instances the pre- and post-service time)

Question 1

Which of the reference services on the attached list is most similar to the survey code descriptor and typical patient/service described on the cover of this questionnaire?

Reference CPT code: ☐

Background for Question 2: Surgery (ZZZ global period)

Pre-service period
Pre-operative work, *if applicable,* may include additional work **not included in the primary procedure**, such as breaking scrub, preparing needed equipment for the additional procedure, and dressing and scrubbing for the additional procedure.

Intra-service period
The intra-service period includes all "skin-to-skin" work that is a necessary part of the **additional** procedure.

Post-service period
Post-operative work, *if applicable,* may include additional documentation of the **additional** procedure.

Question 2

How much of your own time is required per patient treated for each of the following steps in patient care related to this procedure? It is important to be as precise as possible. For example, indicate 3 or 6 minutes instead of rounding to 5 minutes or indicate 14 or 17 minutes instead of rounding to 15 minutes. Indicate your time for the survey code on the front cover. ***(Refer to definitions above.)***

Note: Do not include time for work related to the primary procedure that is separately reportable.

Day of procedure	**Survey code**
Pre-service time (*if applicable*):	_____ minutes
Intra-service "skin-to-skin" time:	_____ minutes
Post-service time (*if applicable*):	_____ minutes

AMA/Specialty Society RVS Update Committee Summary of Recommendations
High Volume Growth

January 2023

Hyperbaric Oxygen Under Pressure (PE Only) – Tab 16

Code G0277 *Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval* was identified via the high volume growth screen for codes with Medicare utilization of 10,000 or more that have increased by at least 100% from 2015 through 2022. At the September 2022 Relativity Assessment Workgroup meeting, the specialty societies proposed to review the direct practice expense inputs for the January 2023 RUC meeting.

In January 2023, the Practice Expense Subcommittee reviewed G0277 and had no modifications to the direct practice expense inputs submitted by the specialty societies. The PE Subcommittee accepted compelling evidence there has been a change in the dominant specialty providing this service and a change in clinical staff type. Previously this service was primarily performed by general surgery, internal medicine, and undersea and hyperbaric medicine, whereas now family medicine is the top specialty. It is now typical for a single staff person (L047C *RN/respiratory therapist*) to perform all tasks rather than divide activities among two staff (an RN/LPN/MA and an RN/respiratory therapist). Additionally, as of 2016, the National Board of Diving and Hyperbaric Medical Technology no longer allows certified nursing assistants and certified medical assistants to be eligible to take the certified hyperbaric technologist examination, and as such, there has been a change in the clinical staff type. The PE Subcommittee agreed with the specialty societies to update the clinical staff type to reflect solely L047C *RN/Respiratory Therapist.*

The PE Subcommittee reviewed how hyperbaric oxygen therapy is administered. Typically, there is one patient in one hyperbaric chamber for two hours. There are no patients who utilize the chamber for only 30 minutes; two hours is typical, and it is relatively uncommon to use it for longer. Therefore, the direct practice expense inputs reflect that typical service. All the inputs submitted are prorated for four units typically being performed (30 minutes each, totaling 2 hours). For example, the supplies have all been divided into quarters such as SM025 *specula tips, otoscope,* which is listed as 0.50 and equates to two specula tips that are used before and after treatment. **The RUC recommends the direct practice expense inputs as submitted by the specialty societies.**

RUC Referral to CPT
The RUC noted that CMS created G0277 in 2015 to describe the direct practice expense inputs associated with CPT code 99183 *Physician or other qualified health care professional attendance and supervision of hyperbaric oxygen therapy, per session.* In the Final Rule for 2015, CMS commented that CPT code 99183 is used for both professional attendance and supervision and the actual treatment delivery. Stakeholders pointed out that although CMS included the PE inputs for treatment delivery in CPT code 99183, the descriptor describes only attendance and supervision. CMS noted that under the Outpatient Prospective Payment System (OPPS), the treatment is reported using separate treatment code C1300 *Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval*. Therefore, CMS created code G0277 to report the treatment delivery and to maintain consistency with the OPPS coding. CMS used a timed 30-minute code, which can be used across settings. To value G0277, CMS used the RUC recommended direct PE inputs for 99183 and adjusted them to align with the 30-minute treatment interval.

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

The RUC recommends that CPT code 99183 be referred to CPT by the June 2023 deadline for the September 2023 CPT meeting, for revision to be time-based as well as modified to appropriately describe the treatment delivery, attendance and supervision. Then, subsequently, allow for the deletion of G0277.

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
G0277	Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval	XXX	0.00 (PE Only)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

NONFACILITY DIRECT PE INPUTS **CPT CODE(S): G0277__**

SPECIALTY SOCIETY(IES): AAFP& UHMS__

PRESENTER(S): Megan Adamson, MD, Brad Fox, MD, Helen Gelly, MD, Kaye Moseley, RRT, Mike White, MD__

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
G0277	Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval	XXX

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
G0277	A patient with longstanding hypertension and insulin-dependent diabetes develops a deep-to-bone foot ulcer that has not improved after 30 consecutive days of standard wound therapy. The patient is referred for adjunctive hyperbaric oxygen therapy.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

Acting as an expert panel, the specialty societies' advisors used the current, CMS direct practice expense inputs as a basis for their recommendation. The expert committee noted that four units of code G0277 are typically provided to the same patient on the same date, reflecting the fact that hyperbaric oxygen therapy typically takes two hours. The expert committee accounted for this utilization in its recommendations. For example, the RUC standard for clinical active CA009 (Greet patient etc.) is 3 minutes; spread over 4 units, this translates to 0.75 minutes per unit.

Most of the changes related to clinical staff time are simply an attempt to reflect that the specialties now believe it is typical for a single staff person (RN/respiratory therapist) to do everything rather than divide activities among two staff (an RN/LPN/MA and an RN/respiratory therapist). This change is driven, in part, by the fact that, in 2016, the National Board of Diving & Hyperbaric Medical Technology (NBDHMT) discontinued certified nursing assistants and certified medical assistants as eligible to sit for the certified hyperbaric technologist examination. (See attached memo from NBDHMT.)

The most significant change in the amount of clinical staff time concerns clinical activity CA018 (Assist physician or other qualified healthcare professional---directly related to physician work time (100%)). The specialties' understanding is that CMS originally assumed two patients received treatment at the same time; the specialties now believe it's typical for only one patient to receive treatment. Since G0277 is a 30-minute interval and line of sight must be maintained at all times, the specialties believe the clinical staff time in the intra-service of the service period should be 30 minutes rather than 15 minutes. Additionally, since this time is not directly tied to physician time, the specialties believe it's more appropriately labeled as clinical activity CA021 (Perform procedure/service---NOT directly related to physician work time).

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

The specialties are using the current direct PE inputs for code G0277 as the point of reference.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   This code is **not** typically reported with an E/M service, either in the non-facility setting or more generally.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

   Family medicine is the primary specialty in the non-facility setting and provides the service 17% of the time in that setting. This is **not** different than for the global.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

   When hyperbaric oxygen therapy was presented to the RUC in 2014, it was presented by emergency medicine, internal medicine, general surgery, and undersea/hyperbaric medicine. As noted above, family medicine is the primary specialty providing G0277 in the non-facility setting today. Accordingly, there is evidence that previous practice expense inputs were based on one specialty, but in actuality that service is currently provided primarily by physicians from a different specialty according to utilization data. This fulfills one of the practice expense compelling evidence guidelines.

   Additionally, as noted above, in 2016, the NBDHMT discontinued certified nursing assistants and certified medical assistants as eligible to sit for the certified hyperbaric technologist examination. This has necessitated a change in the clinical staff type for some activities, which is another practice expense compelling evidence guideline.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

   No

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

   The RUC standard for clinical activity CA024 (Clean room/equipment by clinical staff) is 3 minutes. The specialties are effectively recommending 12 minutes (3 minutes x 4 units of G0277). Cleaning a

hyperbaric oxygen chamber is more extensive than cleaning the typical room/equipment for the following reasons:

- All bedding is removed.
- All surfaces inside and outside the chamber are cleaned; this includes inserting a staff person into the chamber for cleaning.
- Gases within the chamber are exchanged.
- Air break assembly is exchanged.
- New bedding is applied.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

(not applicable)

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

CMS currently allocates 1 minute for clinical activity, *obtain vital signs* (CA010), for this code, which translates to 4 minutes for the typical session, since the median units of service billed on the same date is 4. G0277 typically involves obtaining the patient's temperature, blood pressure, pulse, and respiration as well as a pain score and blood sugar reading (since the typical patient has insulin dependent diabetes). The RUC standard for 4-6 vital signs is 5 minutes; spread over four units of G0277, that translates to 1.25 minutes per unit.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

(not applicable)

    b. Service period (includes pre, intra and post):

The technician escorts the patient from the front to get a change of clothing, takes vital signs, grounds the patient, closes the door, and starts the treatment; line of sight must be maintained at all times. Post-end of treatment, the reverse takes place.

    c. Post-service period:

(not applicable)

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

After vital signs/blood sugars are taken, the patient is positioned on the stretcher, the grounding cable is applied, and the circuit tested. The patient's positioning is checked to ensure proper offloading of affected areas. Hearing aids, dentures, any external devices such as insulin pumps or NPWT are removed and capped. Water bottle is given to help clear ears during compression as well as a urinal/bedpan if needed. Socks that are given to protect feet between bathroom and stretcher are

removed. The patient is pushed into the chamber and the door is closed. TV or other entertainment is started, and volume is adjusted to comfort. Compression starts. During the treatment, the chamber operator monitors the patient for confinement anxiety, ease of breathing/pain, and patient comfort. The operator must be available chamber-side to monitor the compression of the chamber to deal with issues such as otic barotrauma. If there is a problem clearing, the compression must stop, maneuvers instituted, and an attempt to continue made. If this is successful, the treatment continues, if not, then the physician is informed to make a clinical decision. Once the patient gets to pressure, observation must be maintained to monitor for complications associated with oxygen toxicity, such as seizures or flash pulmonary edema. Air breaks, which are typically given every 20 – 30 minutes during the treatment for 5 minutes, must start and stop on time, and the air supply must be started and stopped at each interval with free-flowing masks in order not to decrease the ambient oxygen concentration. The technician is responsible for informing the patient of the impending air break, as well as starting the flow of air, and then shutting the air off at the air break. Documentation in real time of the start and stop times is done throughout the treatment. During the ascent (the end of the treatment), the patient needs to be closely monitored for any complications of expanding gas such as pneumothorax. Once the patient reaches surface, the door is opened, the water bottle/urinal etc. are extracted and the patient is assisted into the upright position for final vital signs and a period of observation to monitor for oxygen toxicity. The clinical staff must be chamber-side with a line of sight during the entire treatment.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.
(not applicable)

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):
(not applicable)

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.
(not applicable)

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:
(not applicable)

18. Are you recommending a PE supply pack for this recommendation? Yes or No.

If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

Yes, we are recommending inclusion of a minimum multi-specialty visit pack (SA048).

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, minimum multi-specialty visit	**SA048**	**pack**		**5.02**
paper, exam table		foot	7	
gloves, non-sterile		pair	2	
gown, patient		item	1	
pillow case		item	1	
cover, thermometer probe		item	1	

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

(not applicable)

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

(not applicable)

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

No

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

EQ362 HBOT air break breathing apparatus demand system (hoses, masks, penetrator, and demand valve) – Default formula

EQ131 hyperbaric chamber – Default formula

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

G0277

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

According to the final rule on the 2015 Medicare physician fee schedule (see attached), CMS valued G0277 using the RUC recommended direct PE inputs for CPT code 99183 and adjusted them to align with the 30-minute treatment interval specified in the code descriptor. Per the RUC database, CMS has assigned 36 minutes of equipment time to both pieces of equipment. The specialties are applying the default equipment time formula to both pieces of equipment, which increases the time in each case from 36 minutes to 39.75.

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

	A	B	D	E	F	I	J	K	L
1	**RUC Practice Expense Spreadsheet**					**CURRENT**		**RECOMMENDED**	
2						**G0277**		**G0277**	
3		***RUC Collaboration Website***				Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval		Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable): January 9, 2023** **Tab: 16** **Specialty: AAFP & UHMS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**				
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 145.09**	**$ -**	**$ 156.05**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	L037D			**26.0**	**0.0**	**41.3**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**
10			L047C	RN/Respiratory Therapist	0.585	**0.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**6.0**	**0.0**	**0.0**	**0.0**
12			L047C	RN/Respiratory Therapist	0.585	**20.0**	**0.0**	**41.3**	**0.0**
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**
14			L047C	RN/Respiratory Therapist	0.585	**0.0**	**0.0**	**0.0**	**0.0**
15		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 14.43**	**$ -**	**$ 24.13**	**$ -**
16		**PRE-SERVICE PERIOD**							
17		**Start: Following visit when decision for surgery/procedure made**							
18	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455				
19	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455				
20	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455				
21	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455				
22	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455				
23	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455				
24	CA007	Review patient clinical extant information and questionnaire	L037D	RN/LPN/MTA	0.455				
25	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455				
26			L037D	RN/LPN/MTA	0.455				
29		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455				
32		**End: When patient enters office/facility for surgery/procedure**							
33		**SERVICE PERIOD**							
34		**Start: When patient enters office/facility for surgery/procedure:**							
35		**Pre-Service (of service period)**							
36	CA009	Greet patient, provide gowning, ensure appropriate medical records	L037D	RN/LPN/MTA	0.455	1		0	
37	CA009	Greet patient, provide gowning, ensure appropriate medical records	L047C	RN/Respiratory Therapist	0.585			0.75	
38	CA010	Obtain vital signs	L037D	RN/LPN/MTA	0.455	1		0	
39	CA010	Obtain vital signs	L047C	RN/Respiratory Therapist	0.585			1.25	
40	CA011	Provide education/obtain consent	L047C	RN/Respiratory Therapist	0.585	1		1	
41	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455	0.25		0	
42	CA012	Review requisition, assess for special needs	L047C	RN/Respiratory Therapist	0.585			0.25	
43	CA013	Prepare room, equipment and supplies	L047C	RN/Respiratory Therapist	0.585	1		1.5	
44	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455	0.5		0	
45	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455				
46	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455				
47	CA016	Prepare, set-up and start IV, initial positioning and monitoring of	L047C	RN/Respiratory Therapist	0.585	1		1	
48	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455				
49			L037D	RN/LPN/MTA	0.455				
52		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455				
55		**Intra-service (of service period)**							
56	CA018	Assist physician or other qualified healthcare professional---directly	L047C	RN/Respiratory Therapist	0.585	15		0	
57	CA019	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455				
58	CA020	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455				
59	CA021	Perform procedure/service---NOT directly related to physician work time	L047C	RN/Respiratory Therapist	0.585			30	
62			L037D	RN/LPN/MTA	0.455				
63		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455				
66		**Post-Service (of service period)**							
67	CA022	Monitor patient following procedure/service, multitasking 1:4	L047C	RN/Respiratory Therapist	0.585	1		0	
68	CA023	Monitor patient following procedure/service, no multitasking	L047C	RN/Respiratory Therapist	0.585			1	
69	CA024	Clean room/equipment by clinical staff	L037D	RN/LPN/MTA	0.455	3		0	
70	CA024	Clean room/equipment by clinical staff	L047C	RN/Respiratory Therapist	0.585			3	
71	CA025	Clean scope	L037D	RN/LPN/MTA	0.455				
72	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455				
73	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D	RN/LPN/MTA	0.455				
74	CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D	RN/LPN/MTA	0.455				
75	CA029	Check dressings, catheters, wounds	L047C	RN/Respiratory Therapist	0.585	1		1	
76	CA030	Technologist QC's images in PACS, checking for all images,	L037D	RN/LPN/MTA	0.455				
77	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455				
78	CA032	Scan exam documents into PACS. Complete exam in RIS system to	L037D	RN/LPN/MTA	0.455				
79	CA033	Perform regulatory mandated quality assurance activity (service period)	L037D	RN/LPN/MTA	0.455	0.25		0	
80	CA033	Perform regulatory mandated quality assurance activity (service period)	L047C	RN/Respiratory Therapist	0.585			0.25	
81	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG file, etc.)	L047C	RN/Respiratory Therapist	0.585			0.25	
82	CA035	Review home care instructions, coordinate visits/prescriptions	L037D	RN/LPN/MTA	0.455				
83	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**		**n/a**	
84			L037D	RN/LPN/MTA	0.455				
87		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455				
90		**End: Patient leaves office/facility**							
91		**POST-SERVICE PERIOD**							
92		**Start: Patient leaves office/facility**							
93	CA037	Conduct patient communications	L037D	RN/LPN/MTA	0.455				
94	CA038	Coordinate post-procedure services	L037D	RN/LPN/MTA	0.455				
95		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**
96		99211 16 minutes	16						
97		99212 27 minutes	27						
98		99213 36 minutes	36						
99		99214 53 minutes	53						
100		99215 63 minutes	63						
101	CA039	Post-operative visits (total time)	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**
102			L037D	RN/LPN/MTA	0.455				
105		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455				
108		**End: with last office visit before end of global period**							

	A	B	D	E	F	I	J	K	L
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10			L047C	RN/Respiratory Therapist	0.585	**0.0**	**0.0**	**0.0**	**0.0**
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**6.0**	**0.0**	**0.0**	**0.0**
12			L047C	RN/Respiratory Therapist	0.585	**20.0**	**0.0**	**41.3**	**0.0**
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L037D	RN/LPN/MTA	0.455	**0.0**	**0.0**	**0.0**	**0.0**
109	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**					
110		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 122.19**	**$ -**	**$ 122.57**	**$ -**
111	SA048	pack, minimum multi-specialty visit	5.02	pack				0.25	
112	SB004	cover, thermometer probe	0.22	item		0.25		0	
113	SB022	gloves, non-sterile	0.3	pair		0.50		0	
114	SB006	drape, non-sterile, sheet 40in x 60in	0.13	item				0.25	
115	SD077	gas, air	0.025	cu ft		7.50		7.50	
116	SD084	gas, oxygen	0.01	liter		11900		11900	
117	SJ063	urinal	3.4	item		0.25		0.25	
118	SJ069	test strip, glucose (blood test)	1.42	item		1		0.50	
119	SL088	lint-free cloth	0.26	item		1		1	
120	SM013	disinfectant, surface (Envirocide, Sanizide)	0.18	oz		0.25		0.25	
121	SM025	specula tips, otoscope	0.45	item		0.50		0.50	
122									
123									
125	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**				
126		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 8.47**	**$ -**	**$ 9.35**	**$ -**
127	EQ362	HBOT air break breathing apparatus demand system (hoses, masks, penetrator, and demand valve)	986	Default	0.002193252	36		39.75	
128	EQ131	hyperbaric chamber	114249.471	Default	0.233012198	36		39.75	
129									
130									
131									
132									

AMA/Specialty Society RVS Update Committee Summary of Recommendations
**** CMS/Other Source – Medicare Utilization over 20,000****

January 2023

Telehealth Consultation – ED or Initial Inpatient – Tab 17

In September 2022, the Relativity Assessment Workgroup identified G0425 *Telehealth consultation, emergency department or initial inpatient, typically 30 minutes communicating with the patient via telehealth* as a CMS/Other source code with Medicare utilization over 20,000. The RUC recommended G0425 be surveyed for January 2023. At the October 3, 2022, Research Subcommittee meeting, there was a discussion regarding which vignettes were being developed for these services and about adding the associated subsequent visit codes (G0406, G0407 and G0408) as part of the family. Subsequently, the specialty societies submitted a change in level of interest from level 1 (survey) to level 2 (comment only). Therefore, no specialty surveyed these services. The specialty societies noted concerns in surveying these services, such as difficulty defining the typical patient, discrepancy of time in the G-code descriptors with the new E/M definitions, and a lack of involvement from the dominant specialties after the addition of subsequent codes G0406-G0408. **The RUC will not offer a recommendation on codes G0425, G0426 or G0427 as no specialty society expressed an interest in surveying and/or developing a recommendation to the RUC.**

Flag for Relativity Assessment Workgroup
The RUC agreed that the CPT/RUC Telemedicine Office Visits Workgroup is working on addressing services performed via audio-visual and audio only. **The RUC determined that CMS should replace these G codes once the CPT 2025 telemedicine codes are available. The RUC recommends that the Relativity Assessment Workgroup review G0425-G0427 in April 2029 after three years of data are available. If there is no action on these services for CPT 2025, the RAW should review them in two years (April 2025).**

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
G0425	Telehealth consultation, emergency department or initial inpatient, typically 30 minutes communicating with the patient via telehealth	XXX	*No Recommendation*
(f)G0426	Telehealth consultation, emergency department or initial inpatient, typically 50 minutes communicating with the patient via telehealth	XXX	*No Recommendation*
(f)G0427	Telehealth consultation, emergency department or initial inpatient, typically 70 minutes or more communicating with the patient via telehealth	XXX	*No Recommendation*

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Ezequiel Silva III, MD, Chairman
AMA/ Specialty Society RVS Update Committee (RUC)
American Medical Association
330 N. Wabash Avenue, Suite 39300
Chicago, IL 60611-5585

Submitted electronically to Sherry.Smith@ama-assn.org

Re: Tab 17 Telehealth Consultation – ED or Inpatient (G0425, G0426, G0427, G0406, G0407, G0408)

Dear Dr. Silva,

The AAN and ANA are resubmitting our LOI for CMS codes G0425, G0426, and G0427 to a level II, see attached LOI documents. G0425 was included on the CMS Requests and Relativity Assessment LOI for January 2023. G0426 and G0427 were identified as other codes in the family at that time. Additionally, the undersigned societies respectfully request that codes G0425, G0426, G0427, G0406, G0407, and G0408 be referred back to the appropriate subcommittees, such as the Relativity Assessment Workgroup and the Administrative and Research Subcommittees, for re-consideration of the various issues raised during the October 3rd Research Subcommittee call, prior to a survey.

For background, G0425 was identified at the April 2022 RAW on the screen of CMS/Other codes with 2020 Medicare utilization data over 20,000 (actual volume, 29,891). The workgroup requested an action plan for the September 2022 meeting. In the action plan submitted for the September RAW meeting, the AAN, ACP, and ANA recommended the code be re-reviewed in 2025 by the RAW in order to obtain additional utilization data. The societies attributed the utilization increase to the COVID-19 pandemic and that it was premature to review at this time. The recommendation of the RAW was to survey G0425 for the January 2023 meeting. The code was placed on the LOI for the January meeting, with the AAN and ANA indicating a level 1 interest to survey G0425 and identified G0426 and G0427 as part of the code family.

Subsequently, the AAN and ANA have identified several concerns with conducting a survey of these CMS created codes which are outlined below:

- **Typical patient/vignette:** In drafting vignettes for the Research Subcommittee, the societies struggled to define the typical patient. There is no typical medical specialty: the most frequent user is Neurology (G0425, 41%). In addition, there is no typical diagnostic code. Cerebral infarct is the top diagnosis but only at 13%. We are waiting to receive additional data to help us understand code use. Specifically, we have requested a list of codes with the G0 (zero) modifier which is supposed to be specific to telestroke. It is our understanding that G0425 is used to report telestroke in some instances, however even within neurology, this is not reflective of all utilization, nor is it representative of use outside of neurology. The societies proposed generic vignettes for the Research Subcommittee (attached for reference) which could be more representative of utilization. The vignettes were modeled after those used in the recent survey of the hospital inpatient /observation care codes. There was a robust discussion of the Research Subcommittee with the final recommendation that the society should revise the vignettes to be representative of a neurological patient, perhaps with stroke symptoms and should not include

any indication of medical decision making. The societies continue to be concerned that this will not be representative of the full utilization and contribute to poor survey response.

- **Discrepancy of time in code description, E/M definitions since creation of codes:** G0425, G0426, G0427 were created in the CY 2010 MPFS and the RVUs for the services were cross-walked to the initial hospital care services 99221, 99222 and 99223, with no mention of medical decision making; strictly time. The current codes descriptors for G0425/G0426/ G0427 specifies the time as "typically [30/50/70] minutes communicating with the patient via telehealth." We believe this wording of time in the descriptor is problematic particularly because of the now out of date concept of E/M time rooted in the time with the patient. This specification is particularly problematic for stroke services because a large proportion of the work can be on imaging review, discussion with providers, and arranging transfer. The codes were created by CMS at the time when Medicare coverage of consultation codes was discontinued, and key components were not based on time, rather MDM. During the Research call the specialty societies raised concerns with survey respondent confusion if the initial hospital care codes were chosen as a key reference service as the definition of time has changed since creation (typical vs. total time) and would contribute to inaccurate survey data. Research Subcommittee members strongly emphasized that as the G codes were created in 2010 under the previous E/M guidelines and MDM rules, the societies would need to utilize an old survey template which referred to typical time. The societies have significant concerns with this and believe that such modification or reversion to an older survey tool should be reviewed and approved by the Administrative Subcommittee. We believe more time is necessary to revise the survey tool to adaquately educate survey respondents on the differences in these codes prior to beginning the survey. We feel launching a survey without resolving many of these issues would be a mistake.

G code description	**Existing CPT code description**	**Updated (2023) CPT code description**
G0425: Telehealth consultation, emergency department or initial inpatient, **typically 30 minutes communicating with the patient via telehealth**	99221: Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A detailed or comprehensive history; A detailed or comprehensive examination; and Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of low severity.	**Initial hospital inpatient or observation care,** per day, for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and straightforward or low level medical decision making. **When using total time on the date of the encounter for code selection, 40 minutes must be met or exceeded.**

	Typically, 30 minutes are spent at the bedside and on the patient's hospital floor or unit.	
G0426: Telehealth consultation, emergency department or initial inpatient, **typically 50 minutes communicating with the patient via telehealth**	99222: Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of moderate severity. **Typically, 50 minutes are spent at the bedside and on the patient's hospital floor or unit.**	Initial hospital inpatient or observation care, per day, for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. **When using total time on the date of the encounter for code selection, 55 minutes must be met or exceeded.**
G0427: Telehealth consultation, emergency department or initial inpatient, **typically 70 minutes communicating with the patient via telehealth**	Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring	Initial hospital inpatient or observation care, per day, for the evaluation and management of a patient, which requires a medically appropriate history and/or examination and high level of medical decision making. **When using total time on the date of the encounter for code selection, 75 minutes must be met or exceeded.**

	admission are of high severity. **Typically, 70 minutes are spent at the bedside and on the patient's hospital floor or unit.**	

- **Addition of G0406, G0407, G0408:** The societies were made aware of an oversight that codes G0406-G0408 (the subsequent visit counterparts to G0425-G0427) were not included on the original RAW screen which identified G0425. (2020 utilization: G0406, 42,225; G0407, 58,714; G0408, 40,924). Following the Research subcommittee call, the societies were notified that several reviewers felt the subsequent codes should also be surveyed. Initial 2021 Medicare specialty mix data shows additional specialty utilization, including psychiatry, and a difference between the primary users of the initial vs. the subsequent codes. The top users of the subsequent codes G0406/G0407/G0408 are nurse practitioners, family medicine, and psychiatry. The top diagnoses are pressure ulcer, diabetes, and COVID-19. This further complicates our lack of understanding of how the services are being utilized and what a typical patient and encounter might look like. As there is no equivalent follow-up emergency department visit code, we are further unsure how to evaluate this service.

For the reasons stated above, AAN and ANA are resubmitting our LOIs for CMS codes G0425, G0426, and G0427 to a level II, see attached LOI documents, and instead request the code set be referred to the relevant RUC Subcommittees and Workgroup to resolve these outstanding issues. As the APA did not indicate a level 1 interest in the original LOI, they are now included in ongoing discussions, but do not have an LOI response to withdraw. Finally, as these are CMS codes, we believe CMS should participate in discussions prior to a survey as the agency might consider modifications to these codes that mirror the new E/M services and could eliminate some of the issues with these HCPCS Level II codes.

Please let us know if you have any questions or additional information is requested.

Sincerely,

American Academy of Neurology

American Nurses Association

American Psychiatric Association

AMA/Specialty Society RVS Update Committee Summary of Recommendations
High Volume Growth

January 2023

Ocular Surface Amniotic Membrane Placement / Reconstruction – Tab 18

CPT code 65778 *Placement of amniotic membrane on the ocular surface; without sutures* was identified by the Relativity Assessment Workgroup (RAW) via the high-volume growth screen for codes with Medicare utilization of 10,000 or more that has increased by at least 100% from 2015 through 2022. At the September 2022 RAW meeting, the specialty societies indicated their plan to survey CPT codes 65778, 65779 and 65780 for the January 2023 RUC meeting.

65778 *Placement of amniotic membrane on the ocular surface; without sutures*
The RUC reviewed the survey results from 66 ophthalmologists and optometrists and determined that the survey 25th percentile work RVU of 0.84 appropriately accounts for the work required to perform this service. The RUC recommends 17 minutes pre-service evaluation time, 1 minute positioning time, 5 minutes scrub/dress/wait time, 5 minutes intra-service time and 5 minutes post-time. The specialty societies reduced the survey respondents positioning time from 4 minutes to 1 minute to match the pre-time package.

CPT code 65778 describes placement of a self-retaining amniotic membrane graft on the cornea and conjunctiva. It is used to reduce inflammation and promote epithelial healing typically in patients with persistent corneal epithelial defects that are unresponsive to conservative therapy. Essentially it is a large, uncomfortable, thick, device somewhat like a hard contact lens, with a membrane that is placed on the eye and remains on the eye for an extended period.

This service is typically not performed on the same day as an office visit Evaluation and Management (E/M) service (16%) or an eye E/M visit (28%). The reasons that this service is typically not performed on the same day are because amniotic memory devices are expensive and have a relatively short shelf life. Many practices order them on a case-by-case basis for rapidly progressive diseases, and patients are asked to schedule a return visit for placement and re-evaluation. At that time, aggressive conservative therapy is typically initiated. When the patient returns, a re-evaluation is performed. If conservative therapy is working, the physician does not place the membrane and it is returned to the supplier. In that case the physician reports an office E/M or an eye visit E/M service.

The RUC agreed with the specialty societies that this service has not changed since it was last valued in 2015. However, the previous valuation was based on a crosswalk and marked not to use to validate physician work for other services in the RUC database. Therefore, the RUC determined that the current survey 25th percentile work RVU of 0.84 based on a valid survey, is most appropriate to value this service. The RUC compared the surveyed code to the top key reference code 65222 *Removal of foreign body, external eye; corneal, with slit lamp* (work RVU = 0.84, 7 minutes intra-service time and 15 minutes total time) and determined the amount of physician work is the same although the surveyed code

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requires more than twice the amount of physician time. The RUC reviewed the second top key reference service 65800 *Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous* (work RVU = 1.53, 5 minutes intra-service time and 28 minutes total time) and agreed that while the surveyed code has identical intra-service time to 65800, this reference code is a more intense procedure and is accurately valued higher.

For additional support, the RUC referenced CPT code 20527 *Injection, enzyme (eg, collagenase), palmar fascial cord (ie, Dupuytren's contracture)* (work RVU = 1.00, 5 minutes intra-service time and 18 minutes total time), which has identical intra-service time, analogous total time, and provides appropriate relativity to the surveyed code. Additionally, code 36005 *Injection procedure for extremity venography (including introduction of needle or intracatheter)* (work RVU = 0.95, 5 minutes intra-service time and 25 minute total time) and code 51720 *Bladder instillation of anticarcinogenic agent (including retention time)* (work RVU = 0.87, 5 minutes intra-service time and 19 minutes total time) have identical intra-service time, similar total time, and require slightly more work than CPT code 65778. **The RUC recommends a work RVU of 0.84 for CPT code 65778.**

65779 *Placement of amniotic membrane on the ocular surface; single layer, sutured*
The RUC reviewed the survey results from 34 ophthalmologists and determined that the survey 25th percentile work RVU of 1.75 appropriately accounts for the work required to perform this service. The RUC recommends 13 minutes pre-service evaluation time, 1 minute positioning time, 5 minutes scrub/dress/wait time, 20 minutes intra-service time and 7 minutes post-time. The specialty societies reduced the survey respondent's evaluation time from 27 to 13 minutes and positioning time from 5 minutes to 1 minute to match the pre-time package.

CPT code 65779 is a 000-day global code that describes preparation of the ocular surface and suturing amniotic membrane graft in place to control inflammation and promote corneal healing. This service is typically performed in the facility setting and is not typically reported with an E/M or eye E/M. The specialty society noted that although the procedure and instrumentation have not changed since the last valuation in 2015, the reduction in intra-service time is related to gradual familiarization with the process of suturing the delicate amniotic membrane in place. The RUC notes that the decrease in physician time is aligned with the recommended decrease in work RVU.

The RUC compared the surveyed code to the top key reference code 12016 *Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 cm to 20.0 cm* (work RVU = 2.68, 30 minutes intra-service time and 47 minutes total time) and determined that although the surveyed code requires only one minute less total time, it requires one-third less intra-service time and requires less intensity, complexity and physician work. The RUC reviewed the second top key reference service 12015 *Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 7.6 cm to 12.5 cm* (work RVU = 1.98, 25 minutes intra-service time and 37 minutes total time) and determined that the surveyed code requires more pre-service time but less intra-service time and is overall less intense and complex. The specialty societies indicated and the RUC agreed that the only change since the last valuation has been the speed with which the physicians can suture the delicate amniotic membrane without damaging it. Therefore, there was no compelling evidence to increase above the survey 25th percentile. **The RUC recommends a work RVU of 1.75 for CPT code 65779.**

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65780 ***Ocular surface reconstruction; amniotic membrane transplantation, multiple layers***
The RUC reviewed the survey results from 47 ophthalmologists and determined that a work RVU of 7.03, a direct crosswalk from CPT code 29822 *Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])* (work RVU = 7.03, 30 minutes intra-service time and 191 minutes total time) appropriately accounts for the physician work required to perform this service. The RUC recommends 13 minutes pre-service evaluation time, 1 minute positioning time, 6 minutes scrub/dress/wait time, 35 minutes intra-service time, 10 minutes immediate post-time, a half 99238 discharge day management, 1-99212 and 4-99213 post-operative office visits. The specialty societies reduced the survey respondents' evaluation time from 19 to 13 minutes and reduced the positioning time from 5 minutes to 1 minute to match the pre-time package.

CPT code 65780 is a 090-day global period service that is typically performed in the facility setting describing a debridement of severely compromised ocular surface and thinned cornea with multiple layers of amniotic membrane transplantation to reinforce the cornea and promote epithelial healing. This service is not typically reported with an office E/M or eye visit E/M and has not changed since it was last valued in 2015. The specialty societies attribute the reduction in intra-service time to improved instrumentation and packaging and increased experience with handling the fragile membrane without damaging it.

The first post-operative 99212 visit is typically performed the day after surgery to check vision, pressure, incision and graft integrity, and pain. At every subsequent 99213 post-operative visit, in addition to vision and pressure measurements and an interval history, a careful slit lamp examination through the amniotic membrane graft is required to assess the degree of surface inflammation, suture integrity and exposure, corneal thickness, evidence of progressive corneal melting or infiltration, and epithelial healing. Each of these findings is used to assess the appropriate topical medication regimen until the next visit. This typically consists of a combination of topical corticosteroids, antibiotics, NSAIDS, and lubricants, all of which require dosing adjustments until the next visit. In addition, the sutures begin loosening within a week after surgery, contributing to patient discomfort and increasing the risk of infection. Non-absorbable nylon is typically used as it produces less inflammation than absorbable materials. These sutures need to be removed as they loosen, typically 2 or 3 of the more superficial sutures at each of the early post-operative visits, and then more of the deeper sutures as they loosen and migrate to the surface. The time required for the examination, the level of medical decision making associated with medication adjustments, and the need to remove sutures, warrant a level 3 visit at each of the four post-operative visits after the one post-operative 99212 visit.

The RUC compared the surveyed code to the top key reference service 66185 *Revision of aqueous shunt to extraocular equatorial plate reservoir; with graft* (work RVU = 10.58, 65 minutes intra-service time, 4-99213 and 3-99212 post-operative visits) and the second top key reference service 66184 *Revision of aqueous shunt to extraocular equatorial plate reservoir; without graft* (work RVU = 9.58, 60 minutes intra-service time, 4-99213 and 3-99212 post-operative visits). Both key reference services require substantially longer intra-service time than the surveyed code and more post-operative visits to manage a filtering bleb. The RUC determined since the surveyed service requires less physician work, less time and fewer post-operative visits, it should be valued lower. Thus, the RUC recommend CPT code 65780 be crosswalked to 29822, which requires the same physician work and almost identical total time of 192 and 191 minutes. The reduction in work value is consistent with the decrease in intra-service time and the change in post-operative visits that have occurred over time while maintaining the intensity and complexity of this service.

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For additional support, the RUC referenced CPT code 29881 *Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed* (work RVU = 7.03, 40 minutes intra-service time and 194 minutes total time) and noted that 29881 requires the same physician work and similar total time as the surveyed code. The RUC concluded that CPT code 65780 should be valued based on a direct work RVU crosswalk to CPT code 29822 and agreed the crosswalk value below the survey 25th percentile was appropriate. **The RUC recommends a work RVU of 7.03 for CPT code 65780.**

Practice Expense
The Practice Expense Subcommittee reviewed the direct practice expense inputs and made no modifications. The specialty societies submitted updated paid invoices for supply items SD247 *human amniotic membrane allograft* and SD248 *human amniotic membrane allograft mounted on a non-absorbable self-retaining ring*. **The RUC recommends the direct practice expense inputs as submitted by the specialty society.**

Work Neutrality
The RUC's recommendation for this CPT code will result in an overall work savings that should be redistributed back to the Medicare conversion factor.

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
65778	Placement of amniotic membrane on the ocular surface; without sutures	000	0.84
(f)65779	single layer, sutured (Do not report 65778, 65779 in conjunction with 65430, 65435, 65780) (For placement of amniotic membrane using tissue glue, use 66999)	000	1.75
(f)65780	Ocular surface reconstruction; amniotic membrane transplantation, multiple layers (For placement of amniotic membrane without reconstruction using no sutures or single layer suture technique, see 65778, 65779)	090	7.03

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:65778 Tracking Number Original Specialty Recommended RVU: **1.00**
Presented Recommended RVU: **1.00**
Global Period: 000 Current Work RVU: **1.00** RUC Recommended RVU: **0.84**

CPT Descriptor: Placement of amniotic membrane on the ocular surface; without sutures

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 27-year-old male presents with progressive loss of vision, severe pain, and light sensitivity in his right eye immediately after a chemical burn injury. Examination revealed severe ocular inflammation and a large corneal epithelial defect. Topical and systemic medications failed to relieve his symptoms from lack of corneal healing after one week. A self-retaining amniotic membrane device was placed on the corneal surface.

Percentage of Survey Respondents who found Vignette to be Typical: 83%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: The patient's prior history and physical exam H&P are reviewed, with particular attention to the status of the corneal epithelium, adequacy of aqueous tear production, meibomian gland status, lid position and blink rate, and bulbar and forniceal conjunctiva. An interim history is obtained with detailed documentation of the patient's ability to instill topical lubricants, steroids, antibiotics, and/or NSAIDs as prescribed at the prior visit. An examination for current adequacy of the conjunctival fornices and a slit lamp examination of the anterior segment, documenting status of the tear film aqueous and lipid components and breakup time, lid margins, lid closure and blink rate, the status of the corneal epithelium and presence of any stromal thinning or infiltration, is performed. These findings are compared to those of the prior visit to determine whether any epithelial defect and stromal thinning are healing, stable, or progressing. Similar comparisons are made regarding the status of the tear film, conjunctival fornices, and lids. A determination is made, based on a discussion with the patient regarding their ability to maintain the intensive topical drop regiment (typically 6 or more instillations per day), as to whether continued aggressive topical therapy can ensure continued healing and maintenance of a stable corneal epithelium. Medical necessity for placement of an amniotic membrane is made based on a determination that continued conservative therapy will be inadequate. The details of the procedure is discussed with the patient, including risks, benefits, alternatives, and a description of expected postoperative discomfort. The patient's questions are answered, and informed consent is obtained. The operative eye is marked. The patient is positioned on the operating room table, and topical anesthesia is administered.

Description of Intra-Service Work: The amniotic membrane device is removed from its packaging and rinsed and hydrated with a balanced salt solution. The device is inserted into the conjunctival fornix and then centered over the corneal surface. The patient is positioned at the slit lamp to check the centration of the device. Topical antibiotics are applied.

Description of Post-Service Work: The outcome of the procedure is discussed with the patient. Instructions on activity limitations and follow-up are given and explained. A note is placed in the patient's medical record, and an operative report is completed. Correspondence for the referring doctor is prepared. Prescriptions are written for postoperative medications.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	David Glasser, MD; Ankoor Shah, MD; Brad Fouraker, MD; Charles Fitzpatrick, OD					
Specialty Society(ies):	American Academy of Ophthalmology; American Optometric Association					
CPT Code:	65778					
Sample Size:	2550	**Resp N:**	66			
Description of Sample:	Random sample of American Academy of Ophthalmology and American Optometric Association members					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	2.00	**5.00**	10.00	80.00	
Survey RVW:	0.50	0.84	**1.18**	1.75	45.00	
Pre-Service Evaluation Time:			**17.00**			
Pre-Service Positioning Time:			**4.00**			
Pre-Service Scrub, Dress, Wait Time:			**5.00**			
Intra-Service Time:	1.00	3.00	**5.00**	10.00	30.00	
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

6-NF Proc w local/topical anes care req wait time

CPT Code:	65778	**Recommended Physician Work RVU: 0.84**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**17.00**	**17.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**5.00**	**5.00**	**0.00**
Intra-Service Time:		**5.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

N/A Survey Code is Non-Facility

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
65222	000	0.84	**CMS Time File**

CPT Descriptor Removal of foreign body, external eye; corneal, with slit lamp

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
65800	000	1.53	**RUC Time**

CPT Descriptor Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36620	000	1.00	**RUC Time**	537,935

CPT Descriptor 1 Arterial catheterization or cannulation for sampling, monitoring or transfusion (separate procedure); percutaneous

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
23350	000	1.00	**RUC Time**	28,129

CPT Descriptor 2 Injection procedure for shoulder arthrography or enhanced CT/MRI shoulder arthrography

Other Reference CPT Code	Global	Work RVU	Time Source
20527	000	1.00	**RUC Time**

CPT Descriptor Injection, enzyme (eg, collagenase), palmar fascial cord (ie, Dupuytren's contracture)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 23 **% of respondents:** 34.8 **%**

Number of respondents who choose 2nd Key Reference Code: 9 **% of respondents:** 13.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 65778	Top Key Reference CPT Code: 65222	2nd Key Reference CPT Code: **65800**
Median Pre-Service Time	23.00	5.00	18.00
Median Intra-Service Time	5.00	7.00	5.00
Median Immediate Post-service Time	5.00	3.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**33.00**	**15.00**	**28.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	13%	39%	43%	4%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	26%	74%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	30%	43%	26%
Physical effort required	9%	61%	30%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	22%	35%	43%

Survey Code Compared to 2nd Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	0%	56%	44%

Mental Effort and Judgment	**Less**	**Identical**	**More**
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	0%	100%

Technical Skill/Physical Effort	**Less**	**Identical**	**More**
Technical skill required	22%	44%	33%
Physical effort required	11%	33%	56%

Psychological Stress	**Less**	**Identical**	**More**
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	11%	56%	33%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

CPT 65778, *Placement of amniotic membrane on the ocular surface; without sutures* is a 000-day global CPT code identified by a screen for high claims volume growth. It describes placement of a self-retaining amniotic membrane graft on the cornea and conjunctiva. It is used to reduce inflammation and promote epithelial healing, typically in patients with persistent corneal epithelial defects unresponsive to conservative therapy.

CPT 65778 is in a section of CPT labeled "Other Procedures," which is a holding area for services that do not fit elsewhere. Other than CPT 65778 and 65780, which are being valued at this meeting as part of the family, the other codes in that section (CPT 65760 through 65785) are unrelated to amniotic membrane transplantation to the ocular surface. The two most similar sounding procedures in the "Other Procedures" section, neither of which are in the family, are CPT 65781, *Ocular surface reconstruction; limbal stem cell allograft (eg, cadaveric or living donor)*, and CPT 65782, *Ocular surface reconstruction; limbal conjunctival autograft (includes obtaining graft)*. These procedures are very infrequently performed (41 and 245 claims respectively in 2020) and have not been increasing in volume. Although those two codes also describe ocular surface reconstruction, the underlying pathology is much more severe than in those treated with CPT 65780. The anatomic distribution of the pathology is much wider and includes limbal stem cell failure which typically does not respond to amniotic membrane transplantation.

CPT 65778 is typically performed in a non-facility setting (97.3% of 2020 claims). It is not typically performed on the same day as an office visit. However, 44% of cases are done with a same-day office visit, either an evaluation or management (CPT 99212-99215) or eye visit (CPT 92012, 92014) service. Reasons for this include:

1. Because the amniotic membrane device is expensive and has a relatively short shelf life, many practices order it on a case-by-case basis and patients are asked to schedule a return visit for placement. Aggressive conservative topical eyedrop therapy is initiated or continued in the interim. When the patient returns, a re-evaluation is performed. If the decision is made to continue conservative therapy, the membrane is returned to the supplier for credit and the physician bills an E/M or eye visit service. However, if after assessment, the membrane is needed, the device is inserted, and CPT 65778 is reported.

2. Larger practices may be able to stock the membrane and report an office visit and membrane placement on the same day.

3. Because ocular surface diseases treatable with amniotic membrane are often bilateral but asymmetric, other cases are likely being reported with a same-day office visit and the -25 modifier for management of disease in the fellow eye.

The indications for the procedure and the procedure itself have not changed since it was last valued in 2015.

A survey of CPT 65778 sent to a random sample of American Academy of Ophthalmology and American Optometric Association members had 41 and 25 respondents, respectively, with 88% of the ophthalmologists and 76% of the optometrists (83% combined) indicating the vignette to be typical. The code's current work value is 1.00 RVU with an IST of 5 minutes.

The survey median work RVUs were 1.30 (MD), 1.00 (OD), and 1.18 (combined). The 25th percentile work values were 0.84 (MD), 0.85 (OD), and 0.84 (combined) RVU. The median IST was 5 minutes (MD), 10 minutes (OD), and 5 minutes (combined).

The primary key reference service (KRS) was the same for both MDs and ODs. Chosen by 35% of all respondents, it was CPT 65222, *Removal of foreign body, external eye; corneal, with slit lamp* (RUC 2011), with a WRVU of 0.84, an IST of 7 minutes, and a total time of 15 minutes. The second KRS differed between the

groups, in part because ODs are not licensed to perform some of the reference services in many states. Chosen by 20% of MDs and 14% of the combined group, the second KRS was CPT 65800, *Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous* (RUC 2010), with a WRVU of 1.53, an IST of 5 minutes, and a total time of 28 minutes. The second KRS for optometrists, chosen by 3 OD respondents (12% of ODs), was CPT 11102, *Tangential biopsy of skin (eg, shave, scoop, saucerize, curette); single lesion*, (RUC 2017), with 0.66 work RVU, a 6-minute IST, and 18 minutes total time.

Most ophthalmologists ranked the surveyed code identical in overall intensity and complexity to the primary KRS, while most optometrists ranked the surveyed code higher. Ophthalmologists ranked the surveyed code and primary KRS identical on the mental effort and psychological stress submeasures while optometrists ranked the surveyed code higher. Both groups ranked the surveyed and reference codes identical on the remaining submeasures.

The expert panel of members from AAO and AOA, which is familiar with the procedure and the RUC process, reviewed the survey findings.

Other than the median IST and secondary KRS intensity/complexity rankings, the findings between the groups were remarkably similar. Because the median IST for the combined data (5 minutes) was the lower of the two individual data set values (MD: 5 minutes, OD: 10 minutes) the panel chose to use the combined data in developing a work value recommendation.

The primary KRS was chosen by only 35% of respondents and has a longer IST than the survey median. The secondary KRS has an identical IST to the survey median but was chosen by only 14% of respondents and has a work value greater than the present value of CPT 65778. The panel therefore decided not to use the KRS to develop a work value recommendation.

The panel agreed with the survey median IST of 5 minutes, which is unchanged from the current value.

We chose non-facility pre-service package 6 (procedure with local/topical anesthesia care requiring wait time for anesthesia to take effect), as topical anesthesia is required before insertion of the large self-retaining graft.

The package contains 17 minutes of pre-service evaluation time, matching the survey median. Because a same-day office visit is not typically performed with the procedure, we did not reduce this time (2020 claims data: 44% same-day office visit). The 17 minutes is necessary to perform an interval history and examination, assess response to therapy, determine if the procedure is medically necessary, and obtain informed consent, as detailed in the description of pre-service work.

The panel reduced the survey median positioning time from 4 minutes to 1 minute to match the package time. We included the survey median scrub/dress/wait time of 5 minutes, matching the package time. The pre-service time is 23 minutes, identical to its current value.

We included the survey median immediate post-service time of 5 minutes, also identical to its current value.

The total time for the service is 33 minutes with an IST of 5 minutes.

The physician work associated with CPT 65778 has not changed since the code was last valued in 2015. The indications for the procedure, the risks, intensity and complexity, and time required to perform the procedure are unchanged. This is a commonly performed procedure. There has been no additional learning curve or increase in speed or ease of performing it since the last valuation. The only thing that has changed is the cost of the membrane, which has decreased from approximately $1100 to $875, which is reflected in the PE

recommendations and will result in substantial savings. Because the procedure is unchanged, **the panel recommends that the work value of 1.00 RVU be maintained.** This is between the survey 25th percentile and median values of 0.84 and 1.18 RVU.

A search of the RUC database for 000-day codes with 5-minute ISTs valued within the past 10 years revealed a paucity of potential crosswalks, and no exact matches for both IST and total time. The recommended work value of 1.00 RVU is supported by CPT 20527, *Injection, enzyme (eg, collagenase), palmar fascial cord (ie, Dupuytren's contracture)*, (RUC 2011) with a work value of 1.00 RVU, an identical 5-minute IST, and a shorter total time of 18 minutes. The RUC used a direct crosswalk to CPT 20527 to value CPT 65778 in 2015, noting that the "identical intra-service time and analogous total time, provides appropriate relativity to the surveyed code."

There is additional support for this value from CPT 11981, *Insertion, drug-delivery implant (ie, bioresorbable, biodegradable, non-biodegradable)*, (RUC 2018), with 1.14 WRVU, 5 minutes IST, and 30 minutes total time; and from CPT 67500, *Retrobulbar injection; medication (separate procedure, does not include supply of medication),* (RUC 2017), with 1.18 WRVU, 5 minutes IST, and 33 minutes total time. These two codes have identical ISTs, similar or identical total times, and higher work values than the panel recommendation for CPT 65778.

We recommend maintaining the work value of CPT 65778 at 1.00 WRVU, with times of 23/5/5 and a total time of 33 minutes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 65778

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Ophthalmology How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 105000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate

Specialty Ophthalmology Frequency 59325 Percentage 56.50 %

Specialty Optometry Frequency 45570 Percentage 43.40 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 44,738 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. RUC Database

Specialty Ophthalmology Frequency 22996 Percentage 51.40 %

Specialty Optometry Frequency 21117 Percentage 47.20 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Eye procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 65778

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:65779 Tracking Number Original Specialty Recommended RVU: **1.75**
Presented Recommended RVU: **1.75**
Global Period: 000 Current Work RVU: **2.50** RUC Recommended RVU: **1.75**

CPT Descriptor: Placement of amniotic membrane on the ocular surface; single layer, sutured

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old female presents with decreased vision, photophobia, and irritation in her right eye for three weeks. She was originally diagnosed with bacterial keratitis and treated with topical antibiotics. During the current examination, a nonhealing corneal epithelial defect was observed without evidence of infection. Frequent lubrication and a bandage contact lens were applied for five days with no improvement. An amniotic membrane for healing is applied and sutured in place.

Percentage of Survey Respondents who found Vignette to be Typical: 85%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: The preoperative work-up, including the patient's medical history, physical examination findings, and laboratory study results, is reviewed. The details of the procedure are explained to the patient and risks, benefits, and alternatives are described. The patient’s questions are answered. Informed consent is obtained. The operative eye is marked. The patient is positioned on the operating room table, and a surgical time-out is performed. Topical anesthetic is placed in the eye. The surgeon scrubs and gowns. The eye is prepped and draped in the usual sterile fashion. A plastic adhesive drape is applied and incised. A lid speculum is inserted. The operating microscope is swung into position and adjusted.

Description of Intra-Service Work: Necrotic epithelium is removed with microsponges and forceps. An amniotic membrane graft is trimmed to the appropriate size and peeled from the carrier paper. The smooth basement membrane surface is distinguished from the sticky stromal surface with a microsponge. The membrane is placed in a single layer to cover the damaged area so that the basement membrane surface is up. The graft is secured with 8-16 interrupted or running 10-0 nylon sutures. The suture ends are trimmed and the knots are buried. Topical antibiotics are applied. The lid speculum and drapes are removed. The eye is patched.

Description of Post-Service Work: The outcome of the procedure is discussed with the patient. Instructions on activity limitations and follow-up are given and explained. A note is placed in the patient's medical record, and an operative report is completed. Correspondence for the referring doctor is prepared. Prescriptions are written for postoperative medications.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023					
Presenter(s):	David Glasser, MD (pre facilitation); Ankoor Shah, MD					
Specialty Society(ies):	American Academy of Ophthalmology					
CPT Code:	65779					
Sample Size:	1550	**Resp N:**	34			
Description of Sample:	Random sample of members of the American Academy of Ophthalmology					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate	0.00	0.00	**1.00**	4.00	75.00	
Survey RVW:	0.90	1.75	**2.38**	3.00	51.00	
Pre-Service Evaluation Time:			**27.00**			
Pre-Service Positioning Time:			**5.00**			
Pre-Service Scrub, Dress, Wait Time:			**5.00**			
Intra-Service Time:	6.00	15.00	**20.00**	30.00	45.00	
Immediate Post Service-Time:	**7.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

1-FAC Straightforw Pat/Procedure(no sedate/anesth

CPT Code:	65779	**Recommended Physician Work RVU: 1.75**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**13.00**	**13.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**5.00**	**6.00**	**-1.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

7A Local/Simple Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**7.00**	**18.00**	**-11.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
12016	000	2.68	**RUC Time**

CPT Descriptor Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 cm to 20.0 cm

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
12015	000	1.98	**RUC Time**

CPT Descriptor Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 7.6 cm to 12.5 cm

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
62323	000	1.80	**RUC Time**	565,221

CPT Descriptor 1 Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36514	000	1.81	**RUC Time**	25,754

CPT Descriptor 2 Therapeutic apheresis; for plasma pheresis

Other Reference CPT Code	Global	Work RVU	Time Source
64489	000	1.80	**RUC Time**

CPT Descriptor Transversus abdominis plane (TAP) block (abdominal plane block, rectus sheath block) bilateral; by continuous infusions (includes imaging guidance, when performed)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 15 **% of respondents:** 44.1 **%**

Number of respondents who choose 2nd Key Reference Code: 9 **% of respondents:** 26.4 **%**

TIME ESTIMATES (Median)

	CPT Code: 65779	Top Key Reference CPT Code: 12016	2nd Key Reference CPT Code: **12015**
Median Pre-Service Time	19.00	11.00	7.00
Median Intra-Service Time	20.00	30.00	25.00
Median Immediate Post-service Time	7.00	6.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**46.00**	**47.00**	**33.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	7%	20%	73%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	13%	87%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	13%	87%
Physical effort required	7%	14%	79%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	13%	87%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	11%	33%	22%	33%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	11%	22%	67%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	33%	67%
Physical effort required	0%	67%	33%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	33%	67%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

CPT 65779, *Placement of amniotic membrane on the ocular surface; single layer, sutured* is a 000-day global CPT code describing preparation of the ocular surface and suturing an amniotic membrane graft in place to control inflammation and promote corneal epithelial healing.

This service is being valued as part of a family with CPT 65778, *Placement of amniotic membrane on the ocular surface; without sutures,* which was identified by a screen for high claims volume growth, and CPT 65780, *Ocular surface reconstruction; amniotic membrane transplantation, multiple layers*. Claims for CPT 65779 remain in the 500-800 range and have not been growing.

These codes are all in a section of CPT labeled "Other Procedures," which is a holding area for services that do not fit elsewhere. The codes in that section (CPT 65760 through 65785), other than CPT 65778 and 65780, are unrelated to amniotic membrane transplantation to the ocular surface. The two most similar sounding procedures in the "Other Procedures" section, neither of which are in the family, are CPT 65781, *Ocular surface reconstruction; limbal stem cell allograft (eg, cadaveric or living donor)*, and CPT 65782, *Ocular surface reconstruction; limbal conjunctival autograft (includes obtaining graft)*. These procedures are very infrequently performed (41 and 245 claims respectively in 2020) and have not been increasing in volume. Although those two codes also describe ocular surface reconstruction, the underlying pathology is much more severe than in those treated with CPT 65780. The anatomic distribution of the pathology is much wider and includes limbal stem cell failure which typically does not respond to amniotic membrane transplantation.

CPT 65779 is typically performed in a facility (75% of 2021 claims). It is not typically performed on the same day as an office visit. The indications for the procedure and the procedure itself have not changed since it was last valued in 2015.

A survey of CPT 65779 sent to a random sample of American Academy of Ophthalmology members had 34 respondents. The expert panel of members from AAO, which is familiar with the procedure and the RUC process, reviewed the survey findings.

Because a significant number of respondents reported that they had not performed the procedure within the past year, we analyzed the data for performers and non-performers separately, in addition to the combined data. Both groups found the vignette typical (83% and 91%) and chose the same top two key reference services. Performers of the surgery reported a notably longer median pre-service evaluation time (38 vs 20 minutes). Performers and non-performers reported minimally different 25th percentile work values (1.80 vs. 1.84 RVU) and median ISTs (20 vs. 18 minutes) respectively. We based our analysis on the combined data sets, which includes the lower time values reported by non-performers.

The code's current work value is 2.50 RVU with an IST of 30 minutes. The survey median WRVU was 2.38 and the 25th percentile was 1.75. The combined data 25th percentile work value, 1.75 RVU, was notably lower than the 25th percentile value for either the performers (1.80 RVU) or non-performers (1.84 RVU) of the procedure. The raw data was double-checked to confirm that these are the correct values. The apparent anomaly is due to the non-Gaussian distribution of the data. The correct 25th percentile work value for the combined group is 1.75 RVU. The median IST was 20 minutes.

The primary key reference service (KRS), chosen by 44% of respondents, was CPT 12016, *Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 cm to 20.0 cm* (RUC 2010), with a WRVU of 2.68, an IST of 30 minutes, and a total time of 47 minutes.

The second KRS, chosen by 26% of respondents, was CPT 12015, *Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 7.6 cm to 12.5 cm* (RUC 2010), with a WRVU of 1.98, an IST of 21 minutes, and a total time of 33 minutes.

Seventy-three percent of respondents ranked the surveyed code as much greater than, and 20% ranked it greater than the primary KRS on the overall intensity and complexity measure, with similar majorities ranking the surveyed code higher on each of the submeasures. The majority of those respondents who chose the second KRS ranked the surveyed code higher than the reference code on the overall intensity and complexity measure and each of the submeasures except physical effort, where the majority ranked them as identical. This is consistent with the greater risk of a poor outcome associated with the indications for sutured amniotic membrane transplantation and the finer manipulations required to suture the single thin membrane compared with suturing skin.

The panel agreed with the survey median IST of 20 minutes. This is a reduction from the current value of 30 minutes. Although the procedure and instrumentation have not changed since the last valuation in 2015, the reduction in time is likely related to gradual familiarization of providers over time with the process of suturing the delicate amniotic membrane in place.

We chose pre-service package 1 (straightforward patient, straightforward procedure) and reduced the median survey pre-evaluation time from 27 to 13 minutes to match the package time. This time is needed at the bedside in the preop area to review the past history, exam, and laboratory results, discuss the procedure with the patient, and obtain informed consent. We reduced the survey positioning time from 5 minutes to 1 minute to match the package and kept the survey median scrub/dress/wait time of 5 minutes, which matches the package time. We used the survey post-service time median of 7 minutes, which is less than the 18 minutes of post-service time package 7A (local anesthesia, straightforward procedure).

Our recommended total time for the procedure is 46 minutes, with an IST of 20 minutes.

The work value of the primary KRS is greater than the current value of the code, and there is no compelling evidence for an increase in physician work. The secondary KRS IST is within 1 minute of the survey median. The shorter total time, lower intensity/complexity rankings, and work value of 1.98 RVU do offer relative support for a value between the survey 25th percentile and median work value. However, only 26% of respondents chose it.

A RUC database search for 000-day global codes with 20-minute ISTs and 60-70 minutes total times valued since 2012 returned 5 codes with work values ranging from 1.81 to 6.45 RVU, all above the survey's 25th percentile. A similar search using a total time of 40-50 minutes (assuming no discharge day management time) returned 9 results with work values ranging from 1.48 to 2.60.

The panel recommends the survey 25th percentile work value of 1.75 RVU. This reduction from the current work value of 2.50 RVU (30%) is proportional to the 33% decrease in IST. The indications for the procedure and the procedure itself have not changed since it was last valued. The only change has been the speed with which physicians can suture the delicate amniotic graft without damaging it.

The recommended work value of 1.75 RVU is supported by MPC code 36514, *Therapeutic apheresis; for plasma pheresis*, (RUC 2017) with 1.81 work RVU, an identical IST of 20 minutes, and a total time of 64 minutes.

This value is further supported by CPT 64489, *Transversus abdominis plane (TAP) block (abdominal plane block, rectus sheath block) bilateral; by continuous infusions (includes imaging guidance, when performed)* (RUC 2014), with 1.80 work RVU, an identical IST of 20 minutes, and a total time of 45 minutes, almost identical to the total time if the discharge day management services were not included. There is further support from CPT 64646, *Chemodenervation of trunk muscle(s); 1-5 muscle(s)* (RUC 2013), also with 1.80 work RVU, an IST of 20 minutes, and a total time of 40 minutes.

We recommend a work value of 1.75 RVU for CPT 65779, the survey 25th percentile work value, with times of 19/20/7 and a total time of 65 minutes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 65779

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Ophthalmology How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 1600
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate

Specialty Ophthalmology Frequency 1600 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 621
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. RUC Database

Specialty Ophthalmology Frequency 621 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Eye procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 65779

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:65780 Tracking Number Original Specialty Recommended RVU: **7.03**
Presented Recommended RVU: **7.03**
Global Period: 090 Current Work RVU: **7.81** RUC Recommended RVU: **7.03**

CPT Descriptor: Ocular surface reconstruction; amniotic membrane transplantation, multiple layers

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 48-year-old female with neurotrophic keratopathy presents with a persistent corneal epithelial defect that has failed to heal after treatment with lubricants and a bandage contact lens. There is significant corneal thinning with a high risk of perforation.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 17% , In the ASC 68%, In the office 15%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 100% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: The preoperative work-up, including the patient's medical history, physical examination findings, and laboratory study results, is reviewed. The procedure is explained, the patient's questions are answered, and informed consent is obtained. The operative eye is marked. The patient is positioned on the operating room table, and a surgical time-out is performed. Local (peribulbar or retrobulbar) anesthesia is administered. A surgical scrub is performed, and sterile gloves and gown are donned. The eye is prepped and draped. A plastic adhesive drape is applied and incised. A lid speculum is inserted. The operating microscope is swung into position and adjusted.

Description of Intra-Service Work: Micro-tip cellulose sponges and 0.12-mm tooth forceps are used to debride necrotic corneal epithelium. The preserved human amniotic membrane is first removed from the storage medium and peeled from the nitrocellulose filter paper on which it is supplied. A piece of membrane is trimmed with scissors to fit the area of corneal thinning. The smooth basement membrane surface is distinguished from the sticky stromal surface by touching it with a micro-tip sponge. The membrane is placed with the basement membrane surface up and anchored into place with multiple interrupted 10-0 nylon sutures. The suture ends are trimmed and rotated flush with or below the surface of the corneal epithelium. Two to four additional pieces of amniotic membrane are trimmed to fit the area of thinning, placed basement membrane surface up, and anchored into place with additional interrupted 10-0 nylon sutures until the area of thinning is flush with the surrounding normal-thickness cornea. All the knots are buried. The lid speculum and drapes are removed. A bandage contact lens is placed with a topical antibiotic-steroid.

Description of Post-Service Work: The outcome of the procedure is discussed with the patient and the patient's family. Instructions on activity limitations and follow-up are given and explained. A note is placed in the patient's medical record, and an operative report is completed. Correspondence for the referring doctor is prepared. Prescriptions are written for postoperative medications.

Post-operative visit (99212). The first postoperative visit is typically performed the day after surgery. Check vision, pressure, incision and graft integrity, and pain.

Post-operative visits (99213). At every one of the subsequent 4 postoperative visits, in addition to vision and pressure measurements and an interval history, a careful slit lamp examination through the amniotic membrane graft is required to assess the degree of surface inflammation, suture integrity and exposure, corneal thickness, evidence of progressive corneal

melting or infiltration, and epithelial healing. Each of these findings is used to assess the appropriate topical medication regimen until the next visit. This typically consists of a combination of topical corticosteroids, antibiotics, NSAIDS, and lubricants, all of which need to have dosing adjusted until the next visit. In addition, the sutures begin loosening within a week after surgery, contributing to patient discomfort and increasing the risk of infection. Non-absorbable nylon is typically used as it produces less inflammation than absorbable materials. These sutures need to be removed as they loosen, typically 2 or 3 of the more superficial sutures at each of the early postoperative visits, and then more of the deeper sutures as they loosen and migrate to the surface.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2023		
Presenter(s):	David Glasser, MD (pre-facilitation); Ankoor Shah, MD; Brad Fouraker, MD		
Specialty Society(ies):	American Academy of Ophthalmology; American Uveitis Society		
CPT Code:	65780		
Sample Size:	1550	**Resp N:**	47
Description of Sample:	Random sample of American Academy of Ophthalmology and American Uveitis Society physician members		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**2.00**	5.00	50.00
Survey RVW:	3.00	8.10	**10.00**	10.73	38.00
Pre-Service Evaluation Time:			**25.00**		
Pre-Service Positioning Time:			**5.00**		
Pre-Service Scrub, Dress, Wait Time:			**6.00**		
Intra-Service Time:	5.00	20.00	**35.00**	45.00	90.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**108.00**	99211x **0.00** 12x **1.00** 13x **4.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

1-FAC Straightforw Pat/Procedure(no sedate/anesth

CPT Code:	65780	**Recommended Physician Work RVU: 7.03**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**13.00**	**13.00**	**0.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**6.00**	**0.00**
Intra-Service Time:		**35.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

7A Local/Simple Procedure

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**18.00**	**-8.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	0.00	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	0.00	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	19.00	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	108.00	99211x **0.00** 12x **1.00** 13x **4.00** 14x **0.00** 15x **0.00**
Prolonged Services:	0.00	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	0.00	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
66185	090	10.58	**RUC Time**

CPT Descriptor Revision of aqueous shunt to extraocular equatorial plate reservoir; with graft

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
66184	090	9.58	**RUC Time**

CPT Descriptor Revision of aqueous shunt to extraocular equatorial plate reservoir; with graft

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
25071	090	5.91	**RUC Time**	1,236

CPT Descriptor 1 Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; 3 cm or greater

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
64708	090	6.36	**RUC Time**	5,462

CPT Descriptor 2 Neuroplasty, major peripheral nerve, arm or leg, open; other than specified

Other Reference CPT Code	Global	Work RVU	Time Source
29822	090	7.03	**RUC Time**

CPT Descriptor Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 10 **% of respondents:** 21.2 **%**

Number of respondents who choose 2nd Key Reference Code: 9 **% of respondents:** 19.1 **%**

TIME ESTIMATES (Median)

	CPT Code: 65780	Top Key Reference CPT Code: 66185	2nd Key Reference CPT Code: **66184**
Median Pre-Service Time	20.00	25.00	25.00
Median Intra-Service Time	35.00	65.00	60.00
Median Immediate Post-service Time	10.00	10.00	10.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	19.0	19.00	19.00
Median Office Visit Time	108.0	140.00	140.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**192.00**	**259.00**	**254.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	20%	70%	10%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	20%	80%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	20%	20%	60%
Physical effort required	10%	50%	40%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	50%	50%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	56%	33%	11%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	11%	44%	44%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	22%	44%	33%
Physical effort required	0%	56%	44%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	44%	66%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

65780, *Ocular surface reconstruction; amniotic membrane transplantation, multiple layers,* is a 090-day global CPT code describing a debridement of a severely compromised ocular surface and thinned cornea with multiple-layer amniotic membrane transplantation to reinforce the cornea and promote epithelial healing.

This service is being valued as part of a family with CPT 65778, *Placement of amniotic membrane on the ocular surface; without sutures,* which was identified by a screen for high claims volume growth, and CPT 65779, *Placement of amniotic membrane on the ocular surface; single layer, sutured*. Although CPT 65780 differs significantly from the other two procedures in extent, indications, and global period, we chose to value it with the other amniotic membrane transplantation codes as was done when these were last valued in in 2015. Claims volume for this service has been flat or gradually declining, independent of the COVID effect in 2020.

These codes are all in a section of CPT labeled "Other Procedures," which is a holding area for services that do not fit elsewhere. The codes in that section (CPT 65760 through 65785), other than CPT 65779 and 65780, are unrelated to amniotic membrane transplantation to the ocular surface. The two most similar sounding procedures in the "Other Procedures" section, neither of which are in the family, are CPT 65781, *Ocular surface reconstruction; limbal stem cell allograft (eg, cadaveric or living donor)*, and CPT 65782, *Ocular surface reconstruction; limbal conjunctival autograft (includes obtaining graft)*. These procedures are very infrequently performed (41 and 245 claims respectively in 2020) and have not been increasing in volume. Although those two codes also describe ocular surface reconstruction, the underlying pathology is much more severe than in those treated with CPT 65780. The anatomic distribution of the pathology is much wider and includes limbal stem cell failure which typically does not respond to amniotic membrane transplantation.

CPT 65780 is typically performed in a facility (96% of 2021 claims) and is not typically performed on the same day as an office visit: 25% when performed in a facility, 3% when performed in the office. The service is often performed with other procedures subject to the MPPR. Claims volume is low (approximately 1,500-2,000) and there are no specific billed-together CPT codes in the RUC database. However, most of these billed-together procedures are for closure of the lacrimal punctae or closure of the lids (tarsorrhaphy) to increase ocular lubrication and eye drop retention and to protect the ocular surface.

A survey of CPT 65780 sent to a random sample of American Academy of Ophthalmology members had 47 respondents, with 91% indicating the vignette to be typical.

The expert panel of members from AAO, which is familiar with the procedure and the RUC process, reviewed the survey findings. Because a significant number of respondents reported that they had not performed the procedure within the past year, we analyzed the data for performers and non-performers separately, in addition to the combined data. Performers reported higher work values, longer times, and more postop visits than non-performers. Both groups chose the same top key reference services. There were 30 responses from performers of the surgery, which would satisfy the minimum required for a valid RUC survey. Although that data set might support a higher work value, we based our analysis and recommendation on the combined data set which includes the shorter times and lower work values reported by non-performers.

The code's current work value is 7.81 RVU with an IST of 50 minutes. The survey median WRVU was 10.00 and the 25th percentile was 8.10. The median IST was 35 minutes. The survey showed four 99213 and one 99212 postoperative visits.

The top key reference service (KRS), chosen by 21% of respondents, was CPT 66185, *Revision of aqueous shunt to extraocular equatorial plate reservoir; with graft*, (RUC 2014), with a WRVU of 10.58, an IST of 65 minutes, and four level 3 and three level 2 postoperative visits. The second reference service, chosen by 19% of respondents, was CPT 66184, *Revision of aqueous shunt to extraocular equatorial plate reservoir; without graft* (RUC 2014), with a WRVU of 9.58, an IST of 60 minutes, and four level 3 and three level 2 postoperative visits.

Both have substantially longer ISTs than the surveyed code and more postoperative visits to manage a filtering bleb. Most respondents ranked the surveyed code higher or much higher on overall intensity/complexity, mental effort and judgment and technical skill, and of similar physical effort and psychological stress than the first KRS. A plurality ranked the surveyed code identical to the second KRS on the overall intensity/complexity measure and submeasures.

The survey median IST of 35 minutes is markedly less than the IST for either KRS. It appeared that respondents chose reference services based on the type of ocular surface surgery being performed and the work values, without considering time. The panel concluded that the KRS values were not appropriate for a work value recommendation.

The panel agreed with the survey median IST of 35 minutes, a reduction from the current value of 50 minutes. The indications for the procedure and the procedure itself have not changed since it was last valued in 2015. The panel attributes the reduction in IST to improved instrumentation and packaging and an increased ability to handle the fragile membrane without damaging it.

The panel agreed with the surveyed number and level of postoperative visits: one 99212 and four 99213. These are unstable eyes with inflammation and surface thinning at risk of perforation which must be followed frequently. Five postoperative visits are two fewer than the seven currently included in the service. However, the four level 3 visits are two more than are currently included in the service.

The first postoperative visit is typically performed the day after surgery. It is a level 2 visit, and is performed to check vision, pressure, incision and graft integrity, and pain.

At every one of the subsequent 4 postoperative visits, in addition to vision and pressure measurements and an interval history, a careful slit lamp examination through the amniotic membrane graft is required to assess the degree of surface inflammation, suture integrity and exposure, corneal thickness, evidence of progressive corneal melting or infiltration, and epithelial healing. Each of these findings is used to assess the appropriate topical medication regimen until the next visit. This typically consists of a combination of topical corticosteroids, antibiotics, NSAIDS, and lubricants, all of which need to have dosing adjusted until the next visit. In addition, the sutures begin loosening within a week after surgery, contributing to patient discomfort and increasing the risk of infection. Non-absorbable nylon is typically used as it produces less inflammation than absorbable materials. These sutures need to be removed as they loosen, typically 2 or 3 of the more superficial sutures at each of the early postoperative visits, and then more of the deeper sutures as they loosen and migrate to the surface. The time required for the examination, the level of medical decision making associated with medication adjustments, and the need to remove sutures, warrant a level 3 visit at each of the 4 postoperative visits after the one-day postop level 2 visit.

We chose pre-service package 1 (straightforward patient, straightforward procedure) and reduced the median survey pre-evaluation time from 25 to 13 minutes to match the package time. We reduced the survey positioning time from 5 to 1 minute to match the package and kept the survey median scrub/dress/wait time of 6 minutes, which matches the package time. We used the survey post-service time median of 10 minutes, which is less than the 18 minutes of post-service time package 7A (local anesthesia, straightforward procedure), and one-half of a 99238 visit for discharge day management as is RUC protocol for outpatient procedures. Total time for the procedure is 192 minutes, with an IST of 35 minutes.

We rejected the survey 25th percentile work value of 8.10 as it is greater than the present value of 7.81; there is no compelling evidence for an increase in work value, and the surveyed IST of 35 minutes is less than the current value of 50 minutes.

We searched the RUC database for a crosswalk. There are eighteen 090-day global codes with an IST of 30-40 minutes which have been reviewed since 2010. None have an IST of 35 minutes.

We had to go back to RUC reviews from 2009 and 2005 to find two 090-day global codes with ISTs of 35 minutes. These are CPT 15115, *Epidermal autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children* (RUC 2005) with 11.28 work RVU and 356 minutes total time; and CPT 21555, *Excision, tumor, soft tissue of neck or anterior thorax, subcutaneous; less than 3 cm* (RUC 2009) with 3.96 work RVU and 138 minutes total time. Neither is a good crosswalk. The work value of CPT 15115 is too high, and the work value of CPT 21555 is lower than the value of the necessary postop visits alone.

We were unable to value the service with a building block method as there are no existing ophthalmic procedures that could serve as valid components.

We were able to find a few services with 30- and 40-minute ISTs that bracket the survey IST, and which the panel believes offer a more accurate representation of physician work. The best of these are:

- CPT 29822, *Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies]),* (RUC 2020), with an IST of 30 minutes; and
- CPT 29881, *Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when perfor*med (RUC 2011), with an IST of 40 minutes.

These share a work value of 7.03 RVU. Total times are 191 and 194 minutes, almost identical to our recommended total time of 192 minutes. The better crosswalk is CPT 29822, which was valued in 2020 and carries the shorter IST of the two. CPT 29881 offers additional support by bracketing the surveyed code's IST.

At a work value of 7.03 RVU, CPT 65780 would have an IWPUT of 0.041 and a WPUT of 0.037, almost identical to the current values. The reduction in work value is consistent with and proportional to the decrease in IST and postop visits that have occurred over time. Maintaining the IWPUT and WPUT would acknowledge that the intensity and complexity of the work has not changed.

We recommend a work value of 7.03 RVU for CPT 65780, with times of 20/35/10 and a total time of 192 minutes.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and

accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 65780

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Ophthalmology How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 4400
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Estimate

Specialty Ophthalmology Frequency 4400 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,500
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. RUC Database

Specialty Ophthalmology Frequency 1500 Percentage 100.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? No

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Berenson-Eggers Type of Service (BETOS) Assignment
Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Procedures

BETOS Sub-classification:
Eye procedure

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 65780

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

SS Rec Summary

ISSUE: Amniotic Membrane Placement/Reconstruction

TAB: 18

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	65222	Removal of foreign body, external eye; corneal, with	000	2011	23	0.094	0.056			0.84			15	5	0	0			7			3															
2nd REF	65800	Paracentesis of anterior chamber of eye (separate	000	2012	9	0.217	0.055			1.53			28	12	1	5			5			5															
CURRENT	65778	Placement of amniotic membrane on the ocular	000	2015	38	0.089	0.030			1.00			33	17	1	5			5			5															
SVY AAO	65778	Placement of amniotic membrane on the ocular	000		41	0.142	0.038	0.50	0.84	1.30	1.90	43.00	34	17	3	4	1	3	5	10	22	5												0	3	5	12	80
SVY AOA	65778	Placement of amniotic membrane on the ocular	000		25	0.035	0.024	0.55	0.85	1.00	1.50	45.00	42	17	5	5	2	5	10	10	30	5												0	2	3	8	50
SVY (Combined)	65778	Placement of amniotic membrane on the ocular	000		66	0.111	0.033	0.50	0.84	1.18	1.75	45.00	36	17	4	5	1	3	5	10	30	5												0	2	5	10	80
REC	65778	Placement of amniotic membrane on the ocular surface; without sutures	000			0.057	0.025			0.84			33	17	1	5			5			5															

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	12016	Simple repair of superficial wounds of face, ears,	000	2010	15	0.077	0.057			2.68			47	8	2	1			30			6															
2nd REF	12015	Simple repair of superficial wounds of face, ears,	000	2010	9	0.069	0.054			1.98			37	5	1	1			25			5															
CURRENT	65779	Placement of amniotic membrane on the ocular	000	2015	34	0.060	0.038			2.50			65	19	1	5			30			10															
SVY PERF	65779	Placement of amniotic membrane on the ocular	000		23	0.073	0.034	0.90	1.80	2.68	3.00	51.00	78	38	5	5	10	16	20	30	37	10												1	1	2	10	75
SVY NON-PERF	65779	Placement of amniotic membrane on the ocular	000		11	0.085	0.042	1.10	1.84	2.25	2.84	5.00	53	20	5	5	6	15	18	25	45	5												0	0	0	0	0
SVY COMBINED	65779	Placement of amniotic membrane on the ocular	000		34	0.073	0.037	0.90	1.75	2.38	3.00	51.00	64	27	5	5	6	15	20	30	45	7												0	0	1	4	75
REC	65779	Placement of amniotic membrane on the ocular surface; single layer,	000			0.062	0.038			1.75			46	13	1	5			20			7															

Source	CPT	DESC	Global	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	FAC-inpt or obs/disch 91	92	33	32	31	38	39	Office 14	13	12	11	SURVEY EXPERIENCE MIN	25th	MED	75th	MAX
1st REF	66185	Revision of aqueous shunt to extraocular equatorial	090	2014	10	0.060	0.041			10.58			259	19	1	5			65			10						0.5		4	3							
2nd REF	66184	Revision of aqueous shunt to extraocular equatorial	090	2014	9	0.048	0.038			9.58			254	19	1	5			60			10						0.5		4	3							
CURRENT	65780	Ocular surface reconstruction; amniotic	090	2015	32	0.042	0.034			7.81			230	19	1	5			50			10						0.5		2	5							
SVY PERF	65780	Ocular surface reconstruction; amniotic	090		30	0.107	0.049	3.00	9.00	10.00	10.92	38.00	206	30	6	7	5	22	38	45	60	10								5				1	2	4	10	50
SVY NON PERF	65780	Ocular surface reconstruction; amniotic	090		17	0.261	0.073	6.10	7.00	9.21	10.50	20.00	126	17	5	5	10	20	25	45	90	10								4				0	0	0	0	0
SVY COMBINED	65780	Ocular surface reconstruction; amniotic	090		47	0.134	0.053	3.00	8.10	10.00	10.73	38.00	189	25	5	6	5	20	35	45	90	10								4	1			0	0	2	5	50
REC	65780	Ocular surface reconstruction; amniotic membrane transplantation,	090		47	0.041	0.037			7.03			192	13	1	6			35			10						0.5		4	1							
XWALK	29822	Arthroscopy, shoulder, surgical; debridement,	090	2020	10	0.080	0.037			7.03			191	30	15	15			30			20						0.5		2	1							
REF	29881	Arthroscopy, knee, surgical; with meniscectomy (medial	090	2011	10	0.064	0.036			7.03			194	33	10	15			40			15						0.5		2	1							

NONFACILITY DIRECT PE INPUTS

CPT CODE(S):__65778, 65779__
SPECIALTY SOCIETY(IES):_AAO, AOA, AUS__
PRESENTER(S):_David Glasser, Ankoor Shah, Charles Fitzpatrick, Bradley Fouraker_

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
65778	Placement of amniotic membrane on the ocular surface; without sutures	000
65779	Placement of amniotic membrane on the ocular surface; single layer, sutured	000

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
65778	A 27-year-old male presents with progressive loss of vision, severe pain, and light sensitivity in his right eye immediately after a chemical burn injury. Examination revealed severe ocular inflammation and a large corneal epithelial defect. Topical and systemic medications failed to relieve his symptoms from lack of corneal healing after one week. A self-retaining amniotic membrane device was placed on the corneal surface.
65779	A 45-year-old female presents with decreased vision, photophobia, and irritation in her right eye for three weeks. She was originally diagnosed with bacterial keratitis and treated with topical antibiotics. During the current examination, a nonhealing corneal epithelial defect was observed without evidence of infection. Frequent lubrication and a bandage contact lens were applied for five days with no improvement. An amniotic membrane for healing is applied and sutured in place.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The Academy convenes a consensus subcommittee utilizing the appropriate generalist and subspecialty representatives who sit on our Health Policy Committee that oversees our activities at RUC and CPT. Additionally, we queried other physicians across a range of geographic locations and practice types who have the appropriate expertise for this code. Informal surveys were performed to clarify typical practice when a plurality of options arose. The consensus committee considered the survey data and PE details in order to determine clinical time and applicable standard packages were also applied. The physicians on the consensus panel familiar with the service provided input on formulating the list of supplies and equipment.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   No reference code used; there is an existing code.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

   No. No.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

65778: Ophthalmology; 55.9%; No.
65779: Ophthalmology; 98.2%; No.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

65778: N/A. 65779: Compelling Evidence: Evidence that there has been a change in equipment or practice expense cost. The cost of the amniotic membrane graft that is used has gone up. Two invoices have been provided to reflect the current changes in pricing. The average cost of the two invoices was put into the PE spreadsheet. The price of the amniotic membrane increased from $771.33 to $835 based on the invoice and have changed the supply cost for purposes of PE spreadsheet calculations. The physician time has not increased.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs

remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

65778: N/A – we are removing all time for vitals.
65779: 3 minutes were assigned prior to increasing to 5 minutes in 2018. It is typical to obtain HR, RR, BP prior to performing the procedure. Consequently, we will be asking for 3 minutes, the standard time time for 1-3 vitals. This would reflect a 2 minute reduction from current values.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

N/A

    b. Service period (includes pre, intra and post):

65778
CA009 – standard, non-facility time required for greeting patient, providing gowning, ensuring appropriate records are available.

CA011 – Provide education / obtain consent. Patients are educated on placement of the device, care of the device, and consent is obtained describing the r/b/a of placing an amniotic membrane over the corneal surface.

CA013 – standard non-facility time used to prepare room, equipment, and supplies. This includes securing supplies and cleaning/rinsing the membrane free of the packaged preservative solution with balanced salt solution.

CA016 – standard non-facility time used for initial positioning of the patient in preparation placement of the amniotic membrane ring. The patient is typically placed in a supine position and elevated for this code.

CA018 – the technician assists the physician with the entirety of the service during the intraservice time. This includes all the activities listed in w SOR (eg. Assisting during the amniotic membrane rinse, pulling eyelids to expose the conjunctival fornices, repositioning the patient from supine position back to the slit lamp, etc.)

CA024 – standard non-facility time is used for cleaning the room and disposing of used supplies.

65779:
CA009 – standard, non-facility time required for greeting patient, providing gowning, ensuring appropriate records are available.

CA010 – decreased to the standard time for 1-3 vitals obtained. Typically BP, HR, RR is obtained prior to performing this procedure.

CA011 – Provide education / obtain consent. Patients are educated on placement of the device, care of the device, and consent is obtained describing the r/b/a of placing an amniotic membrane over the corneal surface.

CA013 – standard non-facility time used to prepare room, equipment, and supplies.

CA016 – standard non-facility time used for initial positioning of the patient. Since done under a microscope, positioning and stabilization of the head are critical. The patient is typically placed in lying flat in supine position.

CA018 – the technician assists the physician with the entirety of the service during the intraservice time. This includes all the activities listed in w SOR as multiple pieces of equipment/supplies are passed to the physician and removed from the surgical field in sterile fashion. The intraservice time is based on the survey data.

CA022 – standard monitoring patient following procedure/service w/ multitasking time is allotted. The patient is monitored post procedure closely as this is a procedure that is typically done in the facility setting, that is being performed in the non-facility setting.

CA024 – standard non-facility time is used for cleaning the room and disposing of used supplies.

CA026 – standard time for cleaning of basic instrument package used.

CA029 – time reduced to reflect the current standard time for checking dressings, catheters, and wounds. The bandaging is checked to ensure no bleeding, retaping, etc is required.

c. Post-service period:

N/A

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

65778:
As a general statement the amniotic membranes are expensive, and a dropped membrane is very costly to the practice. An extra set of hands is helpful in all steps, but below are some granular examples of what is typical.

The technician assists the physician with the entirety of the service during the intraservice time. This includes all the activities listed in w SOR such as assisting during the amniotic membrane rinse, pulling eyelids to expose the conjunctival fornices, and repositioning the patient from supine position back to the slit lamp.

65779:
The technician assists the physician in a sterile manner with the entirety of the service during the intraservice time. This includes all the activities listed in w SOR such as removing necrotic epithelium, transferring the graft, passing sutures, cutting sutures as they are tied, etc. Effectively the technician performs a function similar to a scrub nurse during the whole intraservice period.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A.

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A.

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A.

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

15. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment? **A new invoice is provided to show current pricing of the existing prokera ring (SD248). The price change reflects a net decrease in supply costs and a net savings to CMS.**

16. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment? **The new cost has been typed into the PE Spreadsheet SD248.**

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

65778: Yes – established pack SA050. This was used before, and currently is still typical for this procedure. 65779: No

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

65778: **Line 102 –** amniotic membrane mounted on ring (Pro-kera). This is the device that is placed onto the corneal surface to facilitate control of inflammation and closure of resistant corneal defects. Of note, two new invoices have been provided showing a net decrease in the cost of this device. (See discussion in question 25 below). **Line 103** – pack, ophthalmology (no dilation). The pack includes standard supplies that would be require for all ophthalmology procedures. (Cotton tipped applicators to retract the eyelids, fluorescein strips to determine extent of corneal defect, gloves for the technician and provider during the procedure, anesthetic, and aseptic supplies (paper chin-rest, alcohol swab) used with the slitlamp. **Line 108** – balanced salt solution. This was also used previously but erroneously omitted. This is used to rinse off the preservative solution from the packaged Pro-kera ring which is otherwise irritating to an already inflamed eye.
65779: **Line 104** – human amniotic membrane allograft. This is the tissue that is sutured into place over inflamed/non-healing corneal defects. Of note, the price has been updated in the PE spreadsheet to reflect current invoices (more detailed explanation below in question 25). **Line 105 –** sterile gloves are included for both the provider and the technician assisting throughout the procedure. **Line 106** – nylon suture 10-0. This is used to secure the graft to the eye to ensure coverage of the affected areas.

Line 107 – lidocaine is used topically to numb the eye. This is typically administered AFTER proparacaine, which is faster acting, has already been given as lidocaine burns on the conjunctiva when initially placed. Lidocaine is supplemented throughout the procedure as the surgeon moves around the eye to place multiple sutures.

Line 108 – balanced salt solution. This is used throughout the case to lubricate the cornea.

Line 109 – needle 18-27G – used to draw up lidocaine.

Line 110 – syringe 5-6ml. This is used to draw up lidocaine.

Line 111 – microsponges. Multiple microsponges are meticulously used to remove necrotic corneal epithelial tissue along with a forceps.

Line 112 – sterile eye pad. This is placed over the eye at the end of the case as a dressing.

Line 113 – cleaning pack. Used to clean instruments from the surgical tray at the conclusion of the case.

Line 114 – sterile drape. Used to maintain a sterile field throughout the case.

Line 119 – proparacaine. Two drops of proparacaine are used prior to placing lidocaine in the eye because it is faster acting, though lasts for a much shorter duration. This is the same amount that is typically included in the ophthalmology packs, but since a pack was not used it is included as a separate line item.

Line 120 – erythromycin ointment. A thick layer is applied under the sterile eye pad before patching the eye at the conclusion of the case. A thick layer is used to forma protective barrier to prevent scratches from the eye pad, as well as to provide antibacterial coverage during immediate post op recovery.

Line 122 – surgical tape. Three 3-inch strips (9-inches total) are used to secure the eye pad over the eye.

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A.

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?

c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

65778: **Line 128** – lane, screening (oph), default formula – The lane is where the entirety of the procedure pre-service, intraservice, and post-service time is performed. The equipment in the exam lane is not able to be used for other purposes during the entirety of the service.
65779: **Line 128** – lane, screening (oph), default formula – The lane is where the entirety of the procedure pre-service, intraservice, and post-service time is performed. The equipment in the exam lane is not able to be used for other purposes during the entirety of the service. **Line 129** – instrument pack, basic, instrument pack formula – This pack would typically include forceps, Wescott scissors, lid speculum, a set of tying forceps, and vannas scissors. All equipment necessary for the procedure which could not be used until cleaned and sterilized. **Line 130** – operating microscope, default formula – the entirety of the procedure is performed under a microscope.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

N/A

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

65778: Two invoices have been provided to reflect the current changes in pricing for SD248 (Line 102). The average cost of the two invoices was put into the PE spreadsheet. The price of the amniotic membrane decreased from $1097.91 to $850 (for one invoice) and $895 (for second invoice). We have averaged the amount from the invoices to $872.50 for purposes of PE spreadsheet calculations. This would reflect a substantial $225.47 cost savings over current supply costs for that item.
65779: The cost of the amniotic membrane graft that is used has gone up. An invoice has been provided to reflect the current changes in pricing. The price of the amniotic membrane increased from $771.33 to $835. Moreover we have provided Compelling Evidence arguments for 65779. However, it is worth noting the decrease in costs for supplies for other higher volume codes (65778) in the family will more than offset this increase in supply cost from (65779). Thus, we weren't sure if compelling evidence was needed at all – since the overall family (65778, 79, 80) will have a lower total cost. We welcome guidance on this matter.

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

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FACILITY DIRECT PE INPUTS

CPT CODE(S):__65779, 65780_
SPECIALTY SOCIETY(IES):_AAO, AUS_
PRESENTER(S):_David Glasser, Ankoor Shah, Bradley Fouraker_

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

CPT Code	Long Descriptor	Global Period
65779	Placement of amniotic membrane on the ocular surface; single layer, sutured	000
65780	Ocular surface reconstruction; amniotic membrane transplantation, multiple layers	090

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
65779	A 45-year-old female presents with decreased vision, photophobia, and irritation in her right eye for three weeks. She was originally diagnosed with bacterial keratitis and treated with topical antibiotics. During the current examination, a nonhealing corneal epithelial defect was observed without evidence of infection. Frequent lubrication and a bandage contact lens were applied for five days with no improvement. An amniotic membrane for healing is applied and sutured in place.
65780	A 48-year-old female with neurotrophic keratopathy presents with a persistent corneal epithelial defect that has failed to heal after treatment with lubricants and a bandage contact lens. There is significant corneal thinning with a high risk of perforation.

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The Academy convenes a consensus subcommittee utilizing the appropriate generalist and subspecialty representatives who sit on our Health Policy Committee that oversees our activities at RUC and CPT. Additionally, we queried other physicians across a range of geographic locations and practice types who have the appropriate expertise for this code. Informal surveys were performed to clarify typical practice when a plurality of options arose. The consensus committee considered the survey data and PE details in order to determine clinical time and applicable standard packages were also applied. The physicians on the consensus panel familiar with the service provided input on any needed changes in formulating the list of supplies and equipment.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code, but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

   No reference code used; there is an existing code.

3. Is this code(s) typically reported with an E/M service?

   No.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

4. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

N/A.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require either minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

5. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A.

6. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A.

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A.

8. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

65779: **Previously a total of 5 minutes was listed for CA003. This same work is done and the amount of time has been divided to match categories that provide more granular detail of how staff time is spent (ie 2 min to CA001 and 3 minutes to CA003). The amount is well below the RUC approved 15 minutes for 000 and 010 global codes booked in the facility setting with minimal use of staff time, and consistent with prior inputs.** **CA001 –** Complete pre-service diagnostic and referral forms. Getting insurance approvals and the added step of ensuring that human amniotic membrane is made available on the date of the surgery are required. We include 2 minutes which is below the RUC-approved standard input for minimal use of clinical staff time booked in the facility setting of 3 minutes. **CA003** – Schedule space and equipment in facility. Operating room space needs to be booked, along with pre-procedure orders. We include 3 minutes, which is the RUC-approved standard input for minimal use of clinical staff time in the facility setting is 3 minutes.
65780:

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Ocular surface reconstruction with amniotic membrane multiple layers is major surgery with a 90day global. Standard inputs are used during the pre-service period (CA001-CA005) consistent with PEAC recommendations for 90-day global procedures.

b. Service period (includes pre, intra and post):

65779: N/A.
65780: This time accounts for the standard inputs of same day discharge management.

c. Post-service period:

65779: N/A
65780: This time accounts for staff time during postoperative visits. Standard times were used based on the level of postoperative office visit as determined by the RUC-approved survey data for this code. Each of the 99213 level postop visits are typically no longer dilated visits, but typically one (or several) sutures are trimmed and removed at each of these visits. The overall postop visits have decreased from prior surveys and are reflected in the spreadsheet.

9. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A

10. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

11. ☒ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment? **N/A.**

12. ☒ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment? **N/A.**

13. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A

14. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

65779: N/A
65780: Yes – established pack SA050. This was used before, and currently is still typical for the 1 99212 visit and the 4 different 99213 visits.

15. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

65779: N/A
65780:
Line 103 – ophthalmology pack, no dilation. These are included for each of the post operative visits which include 1 99212, and 4 99213.

Line 115 – ophthalmology pack, dilation. Removed as no longer typical.

Line 116 – post-op incision pack. Removed as package contents are no longer typically used.

Line 118 – blade, single edge. 4 blades are listed as one is used at each of the 99213 visits, the provider would typically remove loose sutures and/or trim suture that are unravelling as they are a nidus of infection and a cause of significant irritation to the patient.

Line 119 – proparacaine. 0.1ml (two drops) would be used at each of the visits prior to suture removal or trimming. This is in excess of the 2 drops included in the ophthalmology pack as they are typically placed prior to instilling fluorescein and checking IOP. These drops wear off after 5 minutes; thus, they are typically placed again immediately prior to performing suture removal.

Line 120 – erythromycin ointment – 1/10th of a tube is used to place a thin ribbon of ointment for comfort and antimicrobial protection at each of the 4 99213 visits with suture removal/trimming.

Line 121 – sterile gauze. 2 pieces of sterile gauze are utilized at each 99213 visit with suture removal to remove the cut sutures off the instruments in a manner that maintains the sterility of the forceps.

16. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:
    N/A

17. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):
    N/A

18. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?
    N/A

19. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:
    65779: N/A

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

65780: **Line 128** – lane, screening (oph), default formula – The lane is used for the postoperative visits. Time is calculated based on standard inputs and would be adjusted if RUC adjusts the type and number of visits.

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

20. If this is a PE only code please select a crosswalk based on a similar specialty mix:
    N/A

ADDITIONAL INFORMATION

21. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:
    N/A

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

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	A	B	D	E	F	G	H	I	J	K
1	**RUC Practice Expense Spreadsheet**					**CURRENT**		**RECOMMENDED**		**CURR**
2						**65778**		**65778**		**657**
3		***RUC Collaboration Website***				Placement of amniotic membrane on the ocular surface; without sutures		Placement of amniotic membrane on the ocular surface; without sutures		Placem amni membran ocular s single
4	**Clinical Activity Code**	**Meeting Date: January 2023 Revision Date (if applicable): Tab: 18 Ocular Surface Amniotic Membrane Placement/Reconstruction**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**					
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**
6		**GLOBAL PERIOD**				**000**	**N/A**	**000**	**N/A**	**000**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 888.73**	**$ -**	**$ 887.82**	**$ -**	**$910.48**
8		**TOTAL CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**23.0**	**0.0**	**18.0**	**0.0**	**62.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**23.0**	**0.0**	**18.0**	**0.0**	**62.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 10.35**	**$ -**	**$ 8.10**	**$ -**	**$ 27.90**
13		**PRE-SERVICE PERIOD**								
14		**Start: Following visit when decision for surgery/procedure made**								
15	CA001	Complete pre-service diagnostic and referral forms	L038A	COMT/COT/RN/CST	0.45					
16	CA002	Coordinate pre-surgery services (including test results)	L038A	COMT/COT/RN/CST	0.45					
17	CA003	Schedule space and equipment in facility	L038A	COMT/COT/RN/CST	0.45					
18	CA004	Provide pre-service education/obtain consent	L038A	COMT/COT/RN/CST	0.45					
19	CA005	Complete pre-procedure phone calls and prescription	L038A	COMT/COT/RN/CST	0.45					
20	CA006	Confirm availability of prior images/studies	L038A	COMT/COT/RN/CST	0.45					
21	CA007	Review patient clinical extant information and questionnaire	L038A	COMT/COT/RN/CST	0.45					
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L038A	COMT/COT/RN/CST	0.45					
23			L038A	COMT/COT/RN/CST	0.45					
26		*Other activity: please include short clinical description here and type*	L038A	COMT/COT/RN/CST	0.45					
29		**End: When patient enters office/facility for surgery/procedure**								
30		**SERVICE PERIOD**								
31		**Start: When patient enters office/facility for surgery/procedure:**								
32		**Pre-Service (of service period)**								
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are	L038A	COMT/COT/RN/CST	0.45	3		3		3
34	CA010	Obtain vital signs	L038A	COMT/COT/RN/CST	0.45	5				5
35	CA011	Provide education/obtain consent	L038A	COMT/COT/RN/CST	0.45	3		3		3
36	CA012	Review requisition, assess for special needs	L038A	COMT/COT/RN/CST	0.45					
37	CA013	Prepare room, equipment and supplies	L038A	COMT/COT/RN/CST	0.45	2		2		2
38	CA014	Confirm order, protocol exam	L038A	COMT/COT/RN/CST	0.45					
39	CA015	Setup scope (nonfacility setting only)	L038A	COMT/COT/RN/CST	0.45					
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L038A	COMT/COT/RN/CST	0.45	2		2		2
41	CA017	Sedate/apply anesthesia	L038A	COMT/COT/RN/CST	0.45					
42			L038A	COMT/COT/RN/CST	0.45					
45		*Other activity: please include short clinical description here and type*	L038A	COMT/COT/RN/CST	0.45					
48		**Intra-service (of service period)**								
49	CA018	Assist physician or other qualified healthcare professional---directly	L038A	COMT/COT/RN/CST	0.45	5		5		30
50	CA019	Assist physician or other qualified healthcare professional---directly	L038A	COMT/COT/RN/CST	0.45					
51	CA020	Assist physician or other qualified healthcare professional---directly	L038A	COMT/COT/RN/CST	0.45					
52	CA021	Perform procedure/service---NOT directly related to physician work time	L038A	COMT/COT/RN/CST	0.45					
55			L038A	COMT/COT/RN/CST	0.45					
56		*Other activity: please include short clinical description here and type*	L038A	COMT/COT/RN/CST	0.45					
59		**Post-Service (of service period)**								
60	CA022	Monitor patient following procedure/service, multitasking 1:4	L038A	COMT/COT/RN/CST	0.45					1
61	CA023	Monitor patient following procedure/service, no multitasking	L038A	COMT/COT/RN/CST	0.45					
62	CA024	Clean room/equipment by clinical staff	L038A	COMT/COT/RN/CST	0.45	3		3		3
63	CA025	Clean scope	L038A	COMT/COT/RN/CST	0.45					
64	CA026	Clean surgical instrument package	L038A	COMT/COT/RN/CST	0.45					10
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L038A	COMT/COT/RN/CST	0.45					
66	CA028	Review/read post-procedure x-ray, lab and pathology reports	L038A	COMT/COT/RN/CST	0.45					
67	CA029	Check dressings, catheters, wounds	L038A	COMT/COT/RN/CST	0.45					3
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,	L038A	COMT/COT/RN/CST	0.45					
69	CA031	Review examination with interpreting MD/DO	L038A	COMT/COT/RN/CST	0.45					
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to	L038A	COMT/COT/RN/CST	0.45					
71	CA033	Perform regulatory mandated quality assurance activity (service period)	L038A	COMT/COT/RN/CST	0.45					
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry	L038A	COMT/COT/RN/CST	0.45					
73	CA035	Review home care instructions, coordinate visits/prescriptions	L038A	COMT/COT/RN/CST	0.45					
74	CA036	Discharge day management	L038A	COMT/COT/RN/CST	0.45					**n/a**
75			L038A	COMT/COT/RN/CST	0.45					
78		*Other activity: please include short clinical description here and type*	L038A	COMT/COT/RN/CST	0.45					
81		**End: Patient leaves office/facility**								
82		**POST-SERVICE PERIOD**								
83		**Start: Patient leaves office/facility**								
84	CA037	Conduct patient communications	L038A	COMT/COT/RN/CST	0.45					
85	CA038	Coordinate post-procedure services	L038A	COMT/COT/RN/CST	0.45					
86		***Office visits: List Number and Level of Office Visits***	**MINUTES**			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
87		99211 16 minutes	16							
88		99212 27 minutes	27							
89		99213 36 minutes	36							
90		99214 53 minutes	53							
91		99215 63 minutes	63							
92	CA039	Post-operative visits (total time)	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
93			L038A	COMT/COT/RN/CST	0.45					
96		*Other activity: please include short clinical description here and type*	L038A	COMT/COT/RN/CST	0.45					
99		**End: with last office visit before end of global period**								

	A	B	D	E	F	G	H	I	J	K
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6		**GLOBAL PERIOD**				**000**	**N/A**	**000**	**N/A**	**000**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 888.73**	**$ -**	**$ 887.82**	**$ -**	**$910.48**
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11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L038A	COMT/COT/RN/CST	0.45	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
100	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**						
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 875.22**	**$ -**	**$ 877.25**	**$ -**	**$873.53**
102	**SD248**	human amniotic membrane allograft mounted on a non-absorbable self-retaining ring	**872.50**	item		1		1		
103	SA050	pack, ophthalmology visit (no dilation)	2.72	pack		1		1		
104	**SD247**	human amniotic membrane allograft	**835.00**	item						1
105	SB024	gloves, sterile	0.91	pair						2
106	SC104	suture, nylon, 10-0	10.85	item						1
107	SH047	lidocaine 1%-2% inj (Xylocaine)	0.06	ml						5
108	SH078	balanced salt soln (BSS) (15ml uou)	2.03	item				1		1
109	SC029	needle, 18-27g	0.04	item						1
110	SC057	syringe 5-6ml	0.13	item						1
111	SG085	microsponge, cellulose (10 pack uou)	4.36	item						1
112	SG046	eye pad, sterile, strabismus	2.37	item						1
113	SA043	pack, cleaning, surgical instruments	12.61	pack						1
114	SB010	drape, sterile, fenestrated 16in x 16in (eye)	4.02	item						1
115	SA082	pack, ophthalmology visit (w-dilation)	3.91	pack						
116	SA054	pack, post-op incision care (suture)	4.62	pack						
117	SF005	blade, single edge	0.63	item						
118	SH058	proparacaine 0.5% ophth (Ophthaine, Alcaine)	2.3533	ml						
119	SH032	erythromycin ophth oint (3.5gm uou)	3.94	item						
120	SG055	gauze, sterile 4in x 4in	0.19	item						
121	SG078	tape, surgical occlusive 1in (Blenderm)	0.007	inch						
122										
123		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*								
124										
125	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**					
126		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 3.16**	**$ -**	**$ 2.47**	**$ -**	**$ 9.05**
127	EL006	lane, screening (oph)	43678.2	Default	0.13718053	23		18		54
128	EQ137	instrument pack, basic ($500-$1499)	500	Instrument Packs	0.00232378					58
129	EQ183	microscope, operating	7047.5	Default	0.02792358					54
130										
131										
132										
133		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*								
134										

	A	B	L	M	N	O	P	Q	R
1	**RUC Practice Expense Spreadsheet**		**ENT**	**RECOMMENDED**		**CURRENT**		**RECOMMENDED**	
2			**79**	**65779**		**65780**		**65780**	
3		***RUC Collaboration Website***	ent of	Placement of amniotic membrane on the ocular surface; single layer, sutured		Ocular Surface reconstruction; amniotic membrane transplantation, multiple layers		Ocular Surface reconstruction; amniotic membrane transplantation, multiple layers	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 18 Ocular Surface Amniotic Membrane Placement/Reconstruction**	otic e on the urface; ayer,						
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**000**	**000**	**000**	**N/A**	**090**	**N/A**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 2.25**	**$ 903.21**	**$ 2.25**	**$ -**	**$177.29**	**$ -**	**$ 150.27**
8		**TOTAL CLINICAL STAFF TIME**	**5.0**	**48.0**	**5.0**	**0.0**	**273.0**	**0.0**	**237.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**5.0**	**0.0**	**5.0**	**0.0**	**60.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**48.0**	**0.0**	**0.0**	**6.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**207.0**	**0.0**	**171.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 2.25**	**$ 21.60**	**$ 2.25**	**$ -**	**$122.85**	**$ -**	**$ 106.65**
13		**PRE-SERVICE PERIOD**							
14		**Start: Following visit when decision for surgery/procedure made**							
15	CA001	Complete pre-service diagnostic and referral forms			2		5		5
16	CA002	Coordinate pre-surgery services (including test results)					20		20
17	CA003	Schedule space and equipment in facility	5		3		8		8
18	CA004	Provide pre-service education/obtain consent					20		20
19	CA005	Complete pre-procedure phone calls and prescription					7		7
20	CA006	Confirm availability of prior images/studies							
21	CA007	Review patient clinical extant information and questionnaire							
22	CA008	Perform regulatory mandated quality assurance activity (pre-service)							
23									
26		*Other activity: please include short clinical description here and type*							
29		**End: When patient enters office/facility for surgery/procedure**							
30		**SERVICE PERIOD**							
31		**Start: When patient enters office/facility for surgery/procedure:**							
32		**Pre-Service (of service period)**							
33	CA009	Greet patient, provide gowning, ensure appropriate medical records are		3					
34	CA010	Obtain vital signs		3					
35	CA011	Provide education/obtain consent		3					
36	CA012	Review requisition, assess for special needs							
37	CA013	Prepare room, equipment and supplies		2					
38	CA014	Confirm order, protocol exam							
39	CA015	Setup scope (nonfacility setting only)							
40	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient		2					
41	CA017	Sedate/apply anesthesia							
42									
45		*Other activity: please include short clinical description here and type*							
48		**Intra-service (of service period)**							
49	CA018	Assist physician or other qualified healthcare professional---directly		20					
50	CA019	Assist physician or other qualified healthcare professional---directly							
51	CA020	Assist physician or other qualified healthcare professional---directly							
52	CA021	Perform procedure/service---NOT directly related to physician work time							
55									
56		*Other activity: please include short clinical description here and type*							
59		**Post-Service (of service period)**							
60	CA022	Monitor patient following procedure/service, multitasking 1:4		1					
61	CA023	Monitor patient following procedure/service, no multitasking							
62	CA024	Clean room/equipment by clinical staff		3					
63	CA025	Clean scope							
64	CA026	Clean surgical instrument package		10					
65	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions							
66	CA028	Review/read post-procedure x-ray, lab and pathology reports							
67	CA029	Check dressings, catheters, wounds		1					
68	CA030	Technologist QC's images in PACS, checking for all images, reformats,							
69	CA031	Review examination with interpreting MD/DO							
70	CA032	Scan exam documents into PACS. Complete exam in RIS system to							
71	CA033	Perform regulatory mandated quality assurance activity (service period)							
72	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry							
73	CA035	Review home care instructions, coordinate visits/prescriptions							
74	CA036	Discharge day management	**0**	**n/a**	**0**	**n/a**	**6**	**n/a**	**6**
75									
78		*Other activity: please include short clinical description here and type*							
81		**End: Patient leaves office/facility**							
82		**POST-SERVICE PERIOD**							
83		**Start: Patient leaves office/facility**							
84	CA037	Conduct patient communications							
85	CA038	Coordinate post-procedure services							
86		***Office visits: List Number and Level of Office Visits***	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
87		99211 16 minutes							
88		99212 27 minutes					5		1
89		99213 36 minutes					2		4
90		99214 53 minutes							
91		99215 63 minutes							
92	CA039	Post-operative visits (total time)	**0.0**	**0.0**	**0.0**	**0.0**	**207.0**	**0.0**	**171.0**
93									
96		*Other activity: please include short clinical description here and type*							
99		**End: with last office visit before end of global period**							

	A	B	L	M	N	O	P	Q	R
1	**RUC Practice Expense Spreadsheet**		**ENT**	**RECOMMENDED**		**CURRENT**		**RECOMMENDED**	
2			**79**	**65779**		**65780**		**65780**	
3		***RUC Collaboration Website***	ent of	Placement of amniotic membrane on the ocular surface; single layer, sutured		Ocular Surface reconstruction; amniotic membrane transplantation, multiple layers		Ocular Surface reconstruction; amniotic membrane transplantation, multiple layers	
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 18 Ocular Surface Amniotic Membrane Placement/Reconstruction**	otic e on the urface; ayer,						
5		**LOCATION**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**000**	**000**	**000**	**N/A**	**090**	**N/A**	**090**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 2.25**	**$ 903.21**	**$ 2.25**	**$ -**	**$177.29**	**$ -**	**$ 150.27**
8		**TOTAL CLINICAL STAFF TIME**	**5.0**	**48.0**	**5.0**	**0.0**	**273.0**	**0.0**	**237.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**5.0**	**0.0**	**5.0**	**0.0**	**60.0**	**0.0**	**60.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**0.0**	**48.0**	**0.0**	**0.0**	**6.0**	**0.0**	**6.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**207.0**	**0.0**	**171.0**
100	**Supply Code**	**MEDICAL SUPPLIES**							
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ 875.40**	**$ -**	**$ -**	**$ 26.04**	**$ -**	**$ 20.16**
102	**SD248**	human amniotic membrane allograft mounted on a non-absorbable self-retaining ring							
103	SA050	pack, ophthalmology visit (no dilation)					5		5
104	**SD247**	human amniotic membrane allograft		1					
105	SB024	gloves, sterile		2					
106	SC104	suture, nylon, 10-0		1					
107	SH047	lidocaine 1%-2% inj (Xylocaine)		5					
108	SH078	balanced salt soln (BSS) (15ml uou)		1					
109	SC029	needle, 18-27g		1					
110	SC057	syringe 5-6ml		1					
111	SG085	microsponge, cellulose (10 pack uou)		1					
112	SG046	eye pad, sterile, strabismus		1					
113	SA043	pack, cleaning, surgical instruments		1					
114	SB010	drape, sterile, fenestrated 16in x 16in (eye)		1					
115	SA082	pack, ophthalmology visit (w-dilation)					2		0
116	SA054	pack, post-op incision care (suture)					1		0
117	SF005	blade, single edge							4
118	SH058	proparacaine 0.5% ophth (Ophthaine, Alcaine)		0.1					0.4
119	SH032	erythromycin ophth oint (3.5gm uou)		0.4					0.4
120	SG055	gauze, sterile 4in x 4in							8
121	SG078	tape, surgical occlusive 1in (Blenderm)		9					
122									
123		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*							
124									
125	**Equipment Code**	**EQUIPMENT**							
126		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ 6.21**	**$ -**	**$ -**	**$ 28.40**	**$ -**	**$ 23.46**
127	EL006	lane, screening (oph)		37			207		171
128	EQ137	instrument pack, basic ($500-$1499)		43					
129	EQ183	microscope, operating		37					
130									
131									
132									
133		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*							
134									

AMA/Specialty Society RVS Update Committee Summary of Recommendations
**** CMS Request – CY 2023 Final Rule****

January 2023

Neuromuscular Ultrasound (PE Only) – Tab 19

In October 2021, the CPT Editorial Panel created CPT category I code 76883 to describe real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity and the revision of 76882 to add focal evaluation. These coding changes went into effect for CPT 2023. CPT codes 76881 and 76882 were identified as part of the neuromuscular ultrasound code family with CPT code 76883 and surveyed for the January 2022 RUC meeting. Based on 2020 Medicare claims data, rheumatology was the top provider for 76881 (25.7% of global and -26 Medicare claims across all sites). For rheumatology, physicians typically scan patients with portable ultrasound devices rather than utilizing sonographers. Based on Medicare 2020 claims data, radiology was the dominant physician provider for 76882 (57.3% of global and -26 Medicare claims across all sites) and typically performs examinations with preliminary ultrasound scanning by a sonographer and additional imaging performed by the physician. However, at its January 2022 meeting, the Practice Expense Subcommittee reviewed the direct practice expense inputs and made updates to reflect the appropriate specialty providing the service *in the global and technical component reporting only in the non-facility setting*: rheumatology (76881), podiatry (76882), and neurology (76883). For the professional component for CPT code 76882 (global + -26 reporting), the radiologist was the dominant provider for physician work at all sites of service; however, for the technical component (TC) in the non-facility setting (non-facility global and -TC reporting), which determines the top specialty for non-facility practice expense inputs, Podiatry was the top specialty. Thus, the radiology inputs were removed from the PE for code 76882 because podiatry was the top provider, and there were no sonographers included in the PE inputs as the physician performs the image acquisition instead.

In the Medicare Physician Payment Schedule Final Rule for CY 2023, CMS requested that the RUC and other interested parties reconsider the practice expense inputs for the neuromuscular ultrasound family codes 76881, 76882 and 76883 in the near term. In reviewing the comments posted at regulations.gov, CMS received 300+ form letters from rheumatologists objecting to the proposed practice expense payment reductions. This objection was not included in the letter from the American College of Rheumatology to CMS. This issue was placed on the level of interest for review at the January 2023 meeting.

As part of its deliberations, the PE Subcommittee reviewed a letter submitted by the six relevant specialty societies and an updated PE spreadsheet with recommended inputs appropriate for each of the three codes based on the current and projected utilization. The PE Subcommittee discussed the transitory nature of who is the typical provider amongst the multiple specialties which perform these services. The Subcommittee concurred that the most recent, 2021 Medicare utilization data, reflects the following top specialties providing the service in the global + TC non-facility setting: 76881 Rheumatology (26%), 76882 Radiology (27%) and 76883 Neurology are anticipated to be the top performing non-facility providers of the service. The PE Subcommittee agrees with the specialties' assertion that the top specialty for CPT code 76882 now accurately reflects service by radiology, which has been the historical standard and was temporarily changed to podiatry based on COVID pandemic alterations of the utilization. Additionally, utilization of 76883 should be greater among non-radiology specialties which will decrease their relative utilization of 76882. It was further noted that compelling evidence would be met for code 76882 given that there is evidence that previous practice expense

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inputs were based on one specialty, but that service is currently provided primarily by physicians from a different specialty according to utilization data.

The PE Subcommittee reviewed the practice expense recommendations for this code family and approved the inputs with two modifications to CPT code 76882. Three minutes were removed from CA009 *Greet patient, provide gowning, ensure appropriate medical records are available* to match 76881 as both codes are typically reported with an Evaluation & Management (E/M) service in the non-facility on the same day over 50%. The cleaning supplies were also updated for code 76882 for consistency across the code family. The inputs for CPT codes 76881 and 76883 were unchanged from January 2022. In addition, the Subcommittee agreed with the use of clinical labor staff type L050B *Diagnostic Medical Sonographer* for code 76882 since radiology has been reinstated as the top specialty. For this reason, the use of ED050 *Technologist PACS workstation* and ED053 *Professional PACS workstation* was deemed typical for code 76882 only. The use of EQ250 *ultrasound unit, portable*, not a hand-held unit or ultrasound room, was deemed to be most appropriate and typical for the equipment inputs across the code family. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee for CPT code 76882. In addition, the RUC recommends that a PC/TC split be applied for CPT codes 76881, 76882 and 76883.**

New Technology
In January 2022, CPT code 76883 was placed on the New Technology list and will be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions. It was explicitly noted that the other codes in the family, CPT codes 76881 and 76882, should also be reviewed at that time.

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
Radiology **Diagnostic Ultrasound** **Extremities**			
	Code 76881 represents a complete evaluation of a specific joint in an extremity. Code 76881 requires ultrasound examination of all of the following joint elements: joint space (eg, effusion), peri-articular soft-tissue structures that surround the joint (ie, muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. Code 76881 also requires permanently recorded images and a written report containing a description of each of the required elements or reason that an element(s) could not be visualized (eg, absent secondary to surgery or trauma).		
	When fewer than all of the required elements for a "complete" exam (76881) are performed, report the "limited" code (76882).		
	Code 76882 represents a limited evaluation of a joint or ~~an~~ focal evaluation of a structure(s) in an extremity other than a joint (eg, soft-tissue mass, fluid collection, or nerve[s]). Limited evaluation of a joint includes assessment of a specific anatomic structure(s) (eg, joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all of the required elements		

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included in 76881. Code 76882 also requires permanently recorded images and a written report containing a description of each of the elements evaluated.

Comprehensive evaluation of a nerve is defined as evaluation of the nerve throughout its course in an extremity. Documentation of the entire course of a nerve throughout an extremity includes the acquisition and permanent archive of cine clips and static images to demonstrate the anatomy.

For spectral and color Doppler evaluation of the extremities, use 93925, 93926, 93930, 93931, 93970, or 93971 as appropriate.

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
76881	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation	XXX	PE Review Only
76882	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation (Do not report 76882 in conjunction with 76883)	XXX	PE Review Only
76883	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity	XXX	PE Review Only

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Scott Manaker, MD, PhD
Chair, Practice Expense Subcommittee
American Medical Association
330 N. Wabash Avenue, Suite 39300
Chicago, IL 60611

Dear Dr. Manaker:

A new code, CPT code 76883 *(Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity)* was created to report real-time complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity. CPT codes 76881 *(Ultrasound, complete joint (ie, joint space and periarticular soft- tissue structures), real-time with image documentation)* and 76882 *(Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation)* were editorially revised to clarify the distinction between complete and limited studies.

All three codes were surveyed and presented at the January 2022 RUC meeting as a family:

- CPT code 76881 describes a complete evaluation of a specific joint in an extremity.
- CPT code 76882 describes a limited evaluation of a joint or a focal evaluation of a structure(s) in an extremity other than a joint.
- CPT code 76883 describes real-time, complete neuromuscular ultrasound of nerves and accompanying structures through their anatomic course, per extremity.

The PE recommendations were formulated based on available RUC database claims at that time, showing Rheumatology as the highest single provider of 76881 and Radiology as the highest single specialty provider of 76882, although for both codes no single specialty has more than a plurality. A subsequent update immediately prior to the January 2022 meeting indicated that based on 2020 claims data, Podiatry, rather than Radiology, was now the highest specialty provider of 76882 in the non-facility setting and the PE recommendations were adjusted to reflect the more common hand-held ultrasound device, rather than the ultrasound room, sonographer, and PACS workstation that are typical in radiology practices.

At subsequent RUC meetings in 2022 it has been recognized for multiple code family recommendations that the 2020 and 2021 utilization data have been heavily impacted by the on-going COVID-19 pandemic. This is likely particularly true in the outpatient radiology setting, where many offices were closed for a large portion of the year, and we are not confident that the current utilization is an accurate reflection of the ultimate new distribution. This is compounded by the creation of the new code, 76883, which will likely result in redistribution away from 76882.

In the Medicare Physician Fee Schedule Final Rule for CY 2023, for Neuromuscular Ultrasound codes 76881, 76882 and 76883, CMS requested that the RUC and other interested parties reconsider the practice expense inputs of 76881 in the near term. In reviewing the comments

posted at regulations.gov, CMS received several hundred form letters from rheumatologists objecting to the proposed practice expense payment reductions, including the clinical staff change from sonographer and the removal of the picture archiving and communication system (PACS) workstation equipment.

The American College of Radiology, American Academy of Neurology, American Association of Neuromuscular and Electrodiagnostic Medicine, American Academy of Physical Medicine and Rehabilitation, American College of Rheumatology, and American Podiatric Medical Association convened a panel that included experts familiar with these services and typical practice expense to reevaluate the direct practice expense inputs for neuromuscular ultrasound.

According to the most recent utilization data, in the non-facility (Global + TC), Rheumatology is the greatest provider at 26% for 76881. Radiology is the highest provider at 27% for 76882. For 76883, the expert panel anticipates that the highest provider will be Neurology. The expert panel asserts that the highest specialty for CPT code 76882 now accurately reflects service by Radiology, based on 2021 utilization data, which has been the historical standard and was temporarily changed to Podiatry based on COVID pandemic alterations of the utilization. Additionally, we believe that utilization of 76883 will be greater among non-Radiology specialties and decrease their relative utilization of 76882.

Therefore, the expert panel's recommended inputs for CPT code 76882 submitted for the January 2023 meeting reflect updated clinical staff, clinical activities, supplies, and equipment (PACS) utilized when performed by Radiology. These inputs are supported by the previous inputs from the January 2017 RUC (reference column) when Radiology was dominant.

Additionally, the expert panel carefully considered the comments submitted to CMS regarding the practice expense of 76881. While the use of dedicated sonographers is increasing in Rheumatology, we did not believe it was yet the typical clinical staff in the non-facility setting and will re-evaluate the issue when the code family returns for review under the new technology process. The expert panel recognizes that many non-radiology specialties are increasingly adopting a "picture archiving and communication system (PACS)" for image storage and important patient care. However, the RUC has previously indicated that these are general practice expenses not typically allocated to a single patient/code and that only the specific use of the PACS workstation is acceptable under PE supplies. As many PACS vendors increasingly shift to a per-patient cost, the RUC may need to reconsider how these supplies are allocated in practice expense.

In conclusion, we believe that the recommended inputs are appropriate for each of the three codes based on the current and projected utilization, and we plan to review these inputs with additional data according to the new technology process at a future RUC meeting.

Sincerely,
American College of Radiology
American Academy of Neurology
American Association of Neuromuscular and Electrodiagnostic Medicine
American Academy of Physical Medicine and Rehabilitation

American College of Rheumatology
American Podiatric Medical Association

NONFACILITY DIRECT PE INPUTS **CPT CODE(S): 76881, 76882, 76883**
SPECIALTY SOCIETY(IES): ACR, AAN, AANEM, AAPM&R, ACRh, APMA
PRESENTER(S): Lauren Nicola, MD; Andrew Moriarity, MD; Brooke A. Bisbee, DPM; Kevin Fitzpatrick, MD; Carlo Milani, MD;

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2023

Surveyed CPT Code	**76881**	**Global Period: XXX**
CPT Code Descriptor	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation	
Typical Patient/Service	A 45-year-old male presents with sore, swollen ankle, which developed gradually over a period of several weeks. He is an avid basketball player but can no longer play because of the pain. Plain radiographs were negative for fracture. The decision is made to perform a diagnostic ultrasound examination.	

Surveyed CPT Code	**76882**	**Global Period: XXX**
CPT Code Descriptor	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation (Do not report 76882 in conjunction with 76883)	
Typical Patient/Service	A 36-year-old male presents with an acute injury to his Achilles tendon, sustained while playing soccer. No open wounds are noted. X-rays are negative for osseous pathology. Mild erythema and edema are noted at the posterior lower leg. Ultrasound is performed to evaluate the Achilles tendon.	

Surveyed CPT Code	**76883**	**Global Period: XXX**
CPT Code Descriptor	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity	
Typical Patient/Service	A 45-year-old female presents with progressive atrophy and weakness of the intrinsic muscles on the left hand, associated with altered sensation on the medial aspect of the hand. An ultrasound of the left ulnar nerve and accompanying structures is ordered to assess for a disorder involving the ulnar nerve.	

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The American College of Radiology, American Academy of Neurology, American Association of Neuromuscular and Electrodiagnostic Medicine, American Academy of Physical Medicine and Rehabilitation, American College of Rheumatology, and American Podiatric Medical Association convened a panel that included a number of experts familiar with these services to reevaluate the direct practice expense inputs for neuromuscular ultrasound.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of*

clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes):

In addition to the current PE inputs for CPT codes 76881-76883 (approved at the January 2022 RUC), the specialties have also provided the previous PE inputs (approved at January 2017 RUC and current through Dec 2022) for CPT code 76882; these inputs reflect the Radiology-typical inputs for this code and parallel the recommendations we will be making for 76882 at the January 2023 RUC.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

Based on 2020 utilization data:
CPT code 76881 is typically reported with an E/M service at 60.2%.
CPT code 76881 is typically reported with an E/M service in the nonfacility at 66.8%.

CPT code 76882 is typically reported with an E/M service at 27.2%.
CPT code 76882 is typically reported with an E/M service in the nonfacility at 52.0%.

For CPT code 76883 the societies do not expect 76883 to be billed with an E/M based on expert panel consensus.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

According to the 2022 RUC database, in the non-facility (Global + TC), Rheumatology is the dominant provider at 26% for 76881. Radiology is the dominant provider at 27% for 76882.

For 76883, the expert panel believes that the dominant provider will be Neurology.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

Evidence that previous practice expense inputs were based on one specialty, but in actuality that service is currently provided primarily by physicians from a different specialty according to utilization data.

The dominant specialty for CPT code 76882 now accurately reflects service by Radiology, based on 2021 utilization data, which has been the historical standard and was temporarily changed to Podiatry based on COVID pandemic alterations of the utilization. Therefore, the recommended inputs for this January 2023 meeting reflect updated clinical staff, clinical activities, supplies, and equipment (PACS) utilized when performed by Radiology. These inputs are supported by the previous inputs from the January 2017 RUC (reference column), when Radiology was dominant.

CLINICAL STAFF ACTIVITIES

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

No.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

When 76882 was reviewed in January 2017, 2 minutes was the standard for *"Patient clinical information and questionnaire reviewed by technologist, order from physician confirmed and exam protocoled by radiologist."* Since the new PE spreadsheet update, this activity has been split into CA007 *(Review patient clinical extant information and questionnaire)* and CA014 *(Confirm order, protocol exam)*, each with 1 minute as the standard. Therefore, we have recommended 1 minute each for CA007 and CA014 for CPT code 76882.

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

N/A.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

• Confirm availability of prior images – Staff ensures that prior imaging is available prior to starting the examination. • Review clinical history and questionnaire – Staff ensures that all needed patient information is available prior to the examination.

    b. Service period (includes pre, intra and post):

• Greet patient, provide gowning, ensure appropriate medical records are available (only 76883). • Obtain vital signs (only 76883). • Provide education and obtain consent for the examination – Staff discusses the examination with the patient, answers any questions, and confirms consent.

- Prepare room, equipment, and supplies – Staff ensures that all needed supplies are available and organized.
- Confirm order and protocol exam.
- Initial positioning and monitoring of patient – Staff positions the patient for optimal technique and comfort.
- Assist physician (only 76882).
- Clean room/equipment by clinical staff – after the patient has left the room.
- Technologist QC's images in PACS, checking for all images, reformats, and dose page.
- Review examination with interpreting provider. Scan documents into PACS. Complete exam in RIS system – These steps ensure that the examination can be reviewed and completed by the physician.

c. Post-service period:

N/A.

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

- The clinical staff works directly with the physician during the entire physician scanning.
- Position patient on the exam table. Apply ultrasound gel. Set appropriate scan parameters on the ultrasound machine.
- Reposition patient and assist in adjusting scanning parameters throughout the examination as needed.
- Clean gel from patient's skin.
- Clean the room and equipment

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A.

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A.

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A.

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

15. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A.

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

No.

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

N/A.

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A.

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A.

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitude D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A.

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

• **Technologist PACS workstation (ED050)** = PACS formula • **Professional PACS workstation (ED053)** = Sum of half of pre-service physician time and full intra-service physician time

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

- **Table, power (EF031) =** Default formula
- **Ultrasound unit, portable (EQ250)** = Highly technical formula for 76882. For codes 76881 and 76883, we did not use equipment formulas for equipment items EF031 and EQ250. We allocated minutes to EF031 and EQ250 as both of those items remain in the room and are not used for other patients during the entire intraservice time.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

Since the last PE review of the neuromuscular ultrasound code family, the dominant specialty for 76882 changed from podiatry back to radiology, per the recent 2021 utilization data. Therefore, the specialties are requesting the diagnostic medical sonographer (L026A) staff type, as well as adding the PACS workstations back in. This is consistent with the "reference code" column for 76882, which captures the Radiology inputs for this procedure.

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

For 76882:

- 3 minutes removed from CA009 (Greet patient, provide gowning…)
- Cleaning supplies updated to match 76881 and 76883 for consistency.
  - Remove SM012 (disinfectant spray, Transeptic)
  - Add 1 unit of SM013 (disinfectant, surface, Envirocide, Sanizide)
  - Reduce SM021 (sanitizing cloth-wipe, patient) from 2 to 1
  - Added 3 items for SM022 (sanitizing cloth-wipe, surface, instruments, equipment)

	A	B	D	E	F	H	J
1	**RUC Practice Expense Spreadsheet**					**CURRENT**	**RECOMMENDED**
2						**76881**	**76881**
3		***RUC Collaboration Website***				Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation **(January 2022)**	Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation **(January 2023)**
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 19** **Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**		
5		**LOCATION**				**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**				**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 10.13**	**$ 10.13**
8		**TOTAL CLINICAL STAFF TIME**				**13.0**	**13.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L026A	Medical/Techn	0.31	**3.0**	**3.0**
10			L050B	Diagnostic Mec	0.635		
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L026A	Medical/Techn	0.31	**10.0**	**10.0**
12			L050B	Diagnostic Mec	0.635		
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L026A	Medical/Techn	0.31	**0.0**	**0.0**
14		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 4.03**	**$ 4.03**
15		**PRE-SERVICE PERIOD**					
16		**Start: Following visit when decision for surgery/procedure made**					
17	CA001	Complete pre-service diagnostic and referral forms					
18	CA002	Coordinate pre-surgery services (including test results)					
19	CA003	Schedule space and equipment in facility					
20	CA004	Provide pre-service education/obtain consent					
21	CA005	Complete pre-procedure phone calls and prescription					
22	CA006	Confirm availability of prior images/studies	L026A	Medical/Techn	0.31	2	2
23	CA006	Confirm availability of prior images/studies	L050B	Diagnostic Medical Sonographer	0.635		
24	CA007	Review patient clinical extant information and questionnaire	L026A	Medical/Techn	0.31	1	1
25	CA007	Review patient clinical extant information and questionnaire	L050B	Diagnostic Medical	0.635		
26	CA008	Perform regulatory mandated quality assurance activity (pre-service)					
27							
30		*Other activity: please include short clinical description here and type*					
33		**End: When patient enters office/facility for surgery/procedure**					
34		**SERVICE PERIOD**					
35		**Start: When patient enters office/facility for surgery/procedure:**					
36		**Pre-Service (of service period)**					
37	CA009	Greet patient, provide gowning, ensure appropriate medical records are	L026A	Medical/Techn	0.31		
38	CA009	Greet patient, provide gowning, ensure appropriate medical records are	L050B	Diagnostic	0.635		
39	CA010	Obtain vital signs	L026A	Medical/Techn	0.31		
40	CA011	Provide education/obtain consent	L026A	Medical/Techn	0.31	2	2
41	CA011	Provide education/obtain consent	L050B	Diagnostic	0.635		
42	CA012	Review requisition, assess for special needs					
43	CA013	Prepare room, equipment and supplies	L026A	Medical/Techn	0.31	2	2
44	CA013	Prepare room, equipment and supplies	L050B	Diagnostic	0.635		
45	CA014	Confirm order, protocol exam	L026A	Medical/Techn	0.31	1	1
46	CA014	Confirm order, protocol exam	L050B	Diagnostic Medical Sonographer	0.635		
47	CA015	Setup scope (nonfacility setting only)					
48	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L026A	Medical/Techn	0.31	2	2
49	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L050B	Diagnostic	0.635		
50	CA017	Sedate/apply anesthesia					
51							
54		*Other activity: please include short clinical description here and type*					
57		**Intra-service (of service period)**					
58	CA018	Assist physician or other qualified healthcare professional---directly	L050B	Diagnostic	0.635		
59	CA019	Assist physician or other qualified healthcare professional---directly					
60	CA020	Assist physician or other qualified healthcare professional---directly					
61	CA021	Perform procedure/service---NOT directly related to physician work time	L050B	Diagnostic	0.635		
64							
65		*Other activity: please include short clinical description here and type*					
68		**Post-Service (of service period)**					
69	CA022	Monitor patient following procedure/service, multitasking 1:4					
70	CA023	Monitor patient following procedure/service, no multitasking					
71	CA024	Clean room/equipment by clinical staff	L026A	Medical/Techn	0.31	3	3
72	CA024	Clean room/equipment by clinical staff	L050B	Diagnostic	0.635		
73	CA025	Clean scope					
74	CA026	Clean surgical instrument package					
75	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions					
76	CA028	Review/read post-procedure x-ray, lab and pathology reports					
77	CA029	Check dressings, catheters, wounds					
78	CA030	Technologist QC's images in PACS, checking for all images, reformats,	L050B	Diagnostic	0.635		
79	CA031	Review examination with interpreting MD/DO	L050B	Diagnostic	0.635		
80	CA032	Scan exam documents into PACS. Complete exam in RIS system to	L050B	Diagnostic	0.635		
81	CA033	Perform regulatory mandated quality assurance activity (service period)					
82	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry					
83	CA035	Review home care instructions, coordinate visits/prescriptions					
84	CA036	Discharge day management				**n/a**	**n/a**
85							
88		*Other activity: please include short clinical description here and type*					
91		**End: Patient leaves office/facility**					
92		**POST-SERVICE PERIOD**					

	A	B	D	E	F	H	J
1	**RUC Practice Expense Spreadsheet**					**CURRENT**	**RECOMMENDED**
2						**76881**	**76881**
3		***RUC Collaboration Website***				Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation **(January 2022)**	Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation **(January 2023)**
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 19** **Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**		
5		**LOCATION**				**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**				**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 10.13**	**$ 10.13**
8		**TOTAL CLINICAL STAFF TIME**				**13.0**	**13.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	L026A	Medical/Techn	0.31	**3.0**	**3.0**
10			L050B	Diagnostic Mec	0.635		
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	L026A	Medical/Techn	0.31	**10.0**	**10.0**
12			L050B	Diagnostic Mec	0.635		
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	L026A	Medical/Techn	0.31	**0.0**	**0.0**
110	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**			
111		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 2.56**	**$ 2.56**
112	SB006	drape, non-sterile, sheet 40in x 60in	0.13	item			
113	SB022	gloves, non-sterile	0.3	pair		1	1
114	SB026	gown, patient	0.59	item			
115	SB036	paper, exam table	0.014	foot			
116	SB044	underpad 2ft x 3ft (Chux)	0.32	item			
117	SJ062	ultrasound transmission gel	0.03	ml		60	60
118	SM012	disinfectant spray (Transeptic)	0.05	ml			
119	SM013	disinfectant, surface (Envirocide, Sanizide)	0.18	oz		1	1
120	SM021	sanitizing cloth-wipe (patient)	0.07	item		1	1
121	SM022	sanitizing cloth-wipe (surface, instruments, equipment)	0.07	item		3	3
122							
123		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*					
125	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**		
126		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 3.54**	**$ 3.54**
127	ED050	Technologist PACS workstation	5557	PACS	0.022017924		
128	ED053	Professional PACS Workstation	15467.671	Other Formula	0.061285948		
129	EF031	table, power	5906.76	Other Formula	0.015674926	20	20
130	EQ250	ultrasound unit, portable	41612.533	Other Formula	0.161253857	20	20
131							
132		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*					

	A	B	L	N	P	R
1	**RUC Practice Expense Spreadsheet**		**REF CODE**	**CURRENT**	**RECOMMENDED**	**CURRENT**
2			**76882**	**76882**	**76882**	**76883**
3		***RUC Collaboration Website***	Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 19** **Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**				
5		**LOCATION**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 31.24**	**$ 8.64**	**$ 28.11**	**$ 13.70**
8		**TOTAL CLINICAL STAFF TIME**	**36.0**	**13.0**	**33.0**	**18.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**		**3.0**		**3.0**
10			**4.0**		**3.0**	
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**		**10.0**		**15.0**
12			**32.0**		**30.0**	
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**		**0.0**	**0.0**	**0.0**
14		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 22.86**	**$ 4.03**	**$ 20.96**	**$ 5.58**
15		**PRE-SERVICE PERIOD**				
16		**Start: Following visit when decision for surgery/procedure made**				
17	CA001	Complete pre-service diagnostic and referral forms				
18	CA002	Coordinate pre-surgery services (including test results)				
19	CA003	Schedule space and equipment in facility				
20	CA004	Provide pre-service education/obtain consent				
21	CA005	Complete pre-procedure phone calls and prescription				
22	CA006	Confirm availability of prior images/studies		2		2
23	CA006	Confirm availability of prior images/studies	2		2	
24	CA007	Review patient clinical extant information and questionnaire		1		1
25	CA007	Review patient clinical extant information and questionnaire	2		1	
26	CA008	Perform regulatory mandated quality assurance activity (pre-service)				
27						
30		*Other activity: please include short clinical description here and type*				
33		**End: When patient enters office/facility for surgery/procedure**				
34		**SERVICE PERIOD**				
35		**Start: When patient enters office/facility for surgery/procedure:**				
36		**Pre-Service (of service period)**				
37	CA009	Greet patient, provide gowning, ensure appropriate medical records are				3
38	CA009	Greet patient, provide gowning, ensure appropriate medical records are	3		**0**	
39	CA010	Obtain vital signs				2
40	CA011	Provide education/obtain consent		2		2
41	CA011	Provide education/obtain consent	2		2	
42	CA012	Review requisition, assess for special needs				
43	CA013	Prepare room, equipment and supplies		2		2
44	CA013	Prepare room, equipment and supplies	2		2	
45	CA014	Confirm order, protocol exam		1		1
46	CA014	Confirm order, protocol exam			1	
47	CA015	Setup scope (nonfacility setting only)				
48	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient		2		2
49	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	2		2	
50	CA017	Sedate/apply anesthesia				
51						
54		*Other activity: please include short clinical description here and type*				
57		**Intra-service (of service period)**				
58	CA018	Assist physician or other qualified healthcare professional---directly	15			
59	CA019	Assist physician or other qualified healthcare professional---directly				
60	CA020	Assist physician or other qualified healthcare professional---directly				
61	CA021	Perform procedure/service---NOT directly related to physician work time			15	
64						
65		*Other activity: please include short clinical description here and type*				
68		**Post-Service (of service period)**				
69	CA022	Monitor patient following procedure/service, multitasking 1:4				
70	CA023	Monitor patient following procedure/service, no multitasking				
71	CA024	Clean room/equipment by clinical staff		3		3
72	CA024	Clean room/equipment by clinical staff	3		3	
73	CA025	Clean scope				
74	CA026	Clean surgical instrument package				
75	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions				
76	CA028	Review/read post-procedure x-ray, lab and pathology reports				
77	CA029	Check dressings, catheters, wounds				
78	CA030	Technologist QC's images in PACS, checking for all images, reformats,	2		2	
79	CA031	Review examination with interpreting MD/DO	2		2	
80	CA032	Scan exam documents into PACS. Complete exam in RIS system to	1		1	
81	CA033	Perform regulatory mandated quality assurance activity (service period)				
82	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry				
83	CA035	Review home care instructions, coordinate visits/prescriptions				
84	CA036	Discharge day management	**n/a**	**n/a**	**n/a**	**n/a**
85						
88		*Other activity: please include short clinical description here and type*				
91		**End: Patient leaves office/facility**				
92		**POST-SERVICE PERIOD**				

	A	B	L	N	P	R
1	**RUC Practice Expense Spreadsheet**		**REF CODE**	**CURRENT**	**RECOMMENDED**	**CURRENT**
2			**76882**	**76882**	**76882**	**76883**
3		***RUC Collaboration Website***	Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 19** **Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**				
5		**LOCATION**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 31.24**	**$ 8.64**	**$ 28.11**	**$ 13.70**
8		**TOTAL CLINICAL STAFF TIME**	**36.0**	**13.0**	**33.0**	**18.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**		**3.0**		**3.0**
10			**4.0**		**3.0**	
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**		**10.0**		**15.0**
12			**32.0**		**30.0**	
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**		**0.0**	**0.0**	**0.0**
110	**Supply Code**	**MEDICAL SUPPLIES**				
111		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ 2.14**	**$ 1.96**	**$ 1.96**	**$ 3.70**
112	SB006	drape, non-sterile, sheet 40in x 60in				1
113	SB022	gloves, non-sterile	1	1	1	1
114	SB026	gown, patient				1
115	SB036	paper, exam table				7
116	SB044	underpad 2ft x 3ft (Chux)				1
117	SJ062	ultrasound transmission gel	40	40	40	60
118	SM012	disinfectant spray (Transeptic)	10		**0**	
119	SM013	disinfectant, surface (Envirocide, Sanizide)		1	**1**	1
120	SM021	sanitizing cloth-wipe (patient)	2	1	**1**	1
121	SM022	sanitizing cloth-wipe (surface, instruments, equipment)		3	**3**	3
122						
123		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*				
125	**Equipment Code**	**EQUIPMENT**				
126		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 6.24**	**$ 2.65**	**$ 5.20**	**$ 4.42**
127	ED050	Technologist PACS workstation	32		30	
128	ED053	Professional PACS Workstation	14		14	
129	EF031	table, power		15		25
130	EQ250	ultrasound unit, portable	29	15	23	25
131						
132		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*				

	A	B	T
1	**RUC Practice Expense Spreadsheet**		**RECOMMENDED**
2			**76883**
3		***RUC Collaboration Website***	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 19** **Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**	
5		**LOCATION**	**Non Fac**
6		**GLOBAL PERIOD**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 13.70**
8		**TOTAL CLINICAL STAFF TIME**	**18.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**3.0**
10			
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**15.0**
12			
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**
14		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 5.58**
15		**PRE-SERVICE PERIOD**	
16		**Start: Following visit when decision for surgery/procedure made**	
17	CA001	Complete pre-service diagnostic and referral forms	
18	CA002	Coordinate pre-surgery services (including test results)	
19	CA003	Schedule space and equipment in facility	
20	CA004	Provide pre-service education/obtain consent	
21	CA005	Complete pre-procedure phone calls and prescription	
22	CA006	Confirm availability of prior images/studies	2
23	CA006	Confirm availability of prior images/studies	
24	CA007	Review patient clinical extant information and questionnaire	1
25	CA007	Review patient clinical extant information and questionnaire	
26	CA008	Perform regulatory mandated quality assurance activity (pre-service)	
27			
30		*Other activity: please include short clinical description here and type*	
33		**End: When patient enters office/facility for surgery/procedure**	
34		**SERVICE PERIOD**	
35		**Start: When patient enters office/facility for surgery/procedure:**	
36		**Pre-Service (of service period)**	
37	CA009	Greet patient, provide gowning, ensure appropriate medical records are	3
38	CA009	Greet patient, provide gowning, ensure appropriate medical records are	
39	CA010	Obtain vital signs	2
40	CA011	Provide education/obtain consent	2
41	CA011	Provide education/obtain consent	
42	CA012	Review requisition, assess for special needs	
43	CA013	Prepare room, equipment and supplies	2
44	CA013	Prepare room, equipment and supplies	
45	CA014	Confirm order, protocol exam	1
46	CA014	Confirm order, protocol exam	
47	CA015	Setup scope (nonfacility setting only)	
48	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	2
49	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	
50	CA017	Sedate/apply anesthesia	
51			
54		*Other activity: please include short clinical description here and type*	
57		**Intra-service (of service period)**	
58	CA018	Assist physician or other qualified healthcare professional---directly	
59	CA019	Assist physician or other qualified healthcare professional---directly	
60	CA020	Assist physician or other qualified healthcare professional---directly	
61	CA021	Perform procedure/service---NOT directly related to physician work time	
64			
65		*Other activity: please include short clinical description here and type*	
68		**Post-Service (of service period)**	
69	CA022	Monitor patient following procedure/service, multitasking 1:4	
70	CA023	Monitor patient following procedure/service, no multitasking	
71	CA024	Clean room/equipment by clinical staff	3
72	CA024	Clean room/equipment by clinical staff	
73	CA025	Clean scope	
74	CA026	Clean surgical instrument package	
75	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	
76	CA028	Review/read post-procedure x-ray, lab and pathology reports	
77	CA029	Check dressings, catheters, wounds	
78	CA030	Technologist QC's images in PACS, checking for all images, reformats,	
79	CA031	Review examination with interpreting MD/DO	
80	CA032	Scan exam documents into PACS. Complete exam in RIS system to	
81	CA033	Perform regulatory mandated quality assurance activity (service period)	
82	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry	
83	CA035	Review home care instructions, coordinate visits/prescriptions	
84	CA036	Discharge day management	**n/a**
85			
88		*Other activity: please include short clinical description here and type*	
91		**End: Patient leaves office/facility**	
92		**POST-SERVICE PERIOD**	

	A	B	T
1	**RUC Practice Expense Spreadsheet**		**RECOMMENDED**
2			**76883**
3		***RUC Collaboration Website***	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity
4	**Clinical Activity Code**	**Meeting Date: January 2023** **Revision Date (if applicable):** **Tab: 19** **Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**	
5		**LOCATION**	**Non Fac**
6		**GLOBAL PERIOD**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 13.70**
8		**TOTAL CLINICAL STAFF TIME**	**18.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**3.0**
10			
11		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**15.0**
12			
13		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**
110	**Supply Code**	**MEDICAL SUPPLIES**	
111		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ 3.70**
112	SB006	drape, non-sterile, sheet 40in x 60in	1
113	SB022	gloves, non-sterile	1
114	SB026	gown, patient	1
115	SB036	paper, exam table	7
116	SB044	underpad 2ft x 3ft (Chux)	1
117	SJ062	ultrasound transmission gel	60
118	SM012	disinfectant spray (Transeptic)	
119	SM013	disinfectant, surface (Envirocide, Sanizide)	1
120	SM021	sanitizing cloth-wipe (patient)	1
121	SM022	sanitizing cloth-wipe (surface, instruments, equipment)	3
122			
123		*Other supply item: to add a new supply item please include the name of the item consistent with the paid invoice here, type NEW in column A and enter the type of unit in column E (oz, ml, unit). Please note that you must include a price estimate consistent with the paid invoice in column D.*	
125	**Equipment Code**	**EQUIPMENT**	
126		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 4.42**
127	ED050	Technologist PACS workstation	
128	ED053	Professional PACS Workstation	
129	EF031	table, power	25
130	EQ250	ultrasound unit, portable	25
131			
132		*Other equipment item: to add a new equipment item please include the name of the item consistent with the paid invoice here, type NEW in column A and please note that you must include a purchase price estimate consistent with the paid invoice in column D.*	

(20) Neuromuscular Ultrasound (CPT codes 76881, 76882, and 76883)

Since their creation in 2011, CPT codes 76881 (*Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation*) and 76882 (*Ultrasound, limited, joint or other nonvascular extremity structure(s) (e.g., joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation*) have been reviewed numerous times as New Technology/New Services by the Relativity Assessment Workgroup (RAW). In October 2016, the RAW reviewed these codes and agreed with the specialty societies that the dominant specialties providing the complete (CPT code 76881) versus the limited (CPT code 76882) ultrasound of extremity services were different than originally thought, causing variation in the typical PE inputs. The RAW recommended referral to the Practice Expense Subcommittee for review of the direct PE inputs and the CPT Editorial Panel to clarify the introductory language regarding the reference to one joint in the complete ultrasound. The PE Subcommittee reviewed the direct PE inputs for CPT codes 76881 and 76882 and adjusted the clinical staff time at the January 2017 RUC meeting, and the CPT Editorial Panel editorially revised CPT codes 76881 and 76882 to clarify the distinction between complete and limited studies and revised the introductory guidelines to clarify reference to one joint in the complete ultrasound procedure in June 2017. In October 2021, the CPT Editorial Panel approved the addition of CPT code 76883 for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity, and the revision of CPT code 76882 to add focal evaluation. CPT codes 76881 and 76882 were identified as part of the neuromuscular ultrasound code family with CPT code 76883 and surveyed for the January 2022 RUC meeting.

For CPT codes 76881, 76882, and 76883, we disagreed with the RUC-recommended work RVUs of 0.90, 0.69, and 1.21, respectively, as we believed they did not account for the surveyed time changes or appropriate comparisons for the new add-on code, CPT code 76883, and proposed a work RVU of 0.54 for CPT code 76881, a work RVU of 0.59 for CPT code 76882, and a work RVU of 0.99 for CPT code 76883.

CPT code 76881 represents a complete evaluation of a specific joint in an extremity. This service requires ultrasound examination of all the following joint elements: joint space (for example, effusion), peri-articular soft-tissue structures that surround the joint (that is, muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. The RUC recommended 5 minutes of pre-service time, 20 minutes of intraservice time, and 5 minutes of post-service time, based on the survey. The RUC discussed the 5-minute increase in intraservice time and determined that the increase relates to the change in the dominant specialty provider since the creation of the code, as previously there was 15 minutes of intraservice time for the radiologist to scan and/or review the sonographer-obtained images. Now, the rheumatologist is performing the scanning and it takes 20 minutes for the typical patient. For rheumatology, physicians typically scan the patients with portable ultrasound devices rather than utilizing sonographers as originally described in the 2010 survey. The RUC noted that this code is reported with an office E/M visit 58.9 percent and a non-facility office E/M visit 66.3 percent of the time; the RUC stated that CPT code 76881 is imaging-specific so the physician work described would not overlap with the E/M service, but we disagreed, as the descriptions of pre-service and post-service work directly overlap. The description of pre-service work for CPT code 76881 states "Review pertinent clinical information. Review any prior

applicable imaging studies." Pre-service work for CPT code 99214 (*Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.*), the most common E/M code reported with CPT code 76811, includes "Review interval correspondence, referral notes, medical records, and diagnostic data generated since the last visit." Post-service work of CPT code 76881 is described as "Discuss significant findings with the referring physician. Review and sign final report," whereas the post-service work for CPT code 99214 includes "Arrange diagnostic testing and referral if necessary. Document the encounter in the medical record, spending time to further refine the differential diagnosis, workup, or treatment plan as necessary. Coordinate care by discussing the case with other physicians and members of the health care team and write letters of referral if necessary. Perform electronic data capture and reporting to comply with quality payment program and other electronic mandates. Review and analyze interval testing results and refine the differential diagnosis, workup, and treatment plan based on these results. Order additional testing based on these results. Communicate results and plan modifications with patient and/or family." We believed there was overlap in pre-service and post-service work between the E/M visit and CPT code 76881, and therefore, we proposed 0 minutes for the pre-service and post-service time rather than the RUC-recommended 5 minutes of pre-service and post-service time. The proposed work RVU of 0.54 was the reverse building block valuation based on the removal of the 5 minutes of pre-service and post-service time, with a long-standing intensity of 0.0224 (10 minutes * 0.0224 work/minute = 0.224 work RVUs). The proposed work RVU accounted for the 0.224 work RVU decrease as a result of the removal of pre-service and post-service time, and the

increase of 5 minutes of intraservice time, while maintaining the same IWPUT of 0.027, as there was no discussed change in intensity. The specialty societies and the RUC asserted that there was an increase of 5 minutes as a result of the intraservice work changing due to a change in dominant specialty providing the service (from radiology to rheumatology), but did not present a change in intensity. We noted that the specialty societies used CPT code 76700 (*Ultrasound, abdominal, real time with image documentation; complete*) with a work RVU = 0.81, 11 minutes of intra-service time, and 21 minutes total time, as a reference code because it has identical pre- and post-service time but less intra-service time than the surveyed code and is a clinically similar ultrasound code. We noted that this is not an appropriate reference code as it is billed alone 72.8 percent of the time, and therefore, the valuation of CPT code 76700 accounts for pre- and post-service work that would not overlap with an E/M visit like we believed the pre- and post-service work did for CPT code 76881.

CPT code 76882 represents a limited evaluation of a joint or focal evaluation of a structure(s) in an extremity other than a joint (for example, soft-tissue mass, fluid collection, or nerve[s]). This evaluation includes assessment of a specific anatomic structure(s) (for example, joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all the elements included in CPT code 76881, although it does include all surrounding anatomy and any associated pathology or contralateral comparison as indicated. The RUC discussed the four-minute increase in intraservice time and determined that the increase relates to the change in dominant supplier of this service since the creation of the code, as there is currently 11 minutes of intraservice time that included scanning performed only by the podiatrist, and now the radiologist works with the sonographer to obtain and interpret the images in addition to the physician performing additional scanning as needed. Because

radiologists no longer use portable ultrasound devices as originally described in the 2010 survey or in the 2017 PE update, the RUC and specialty societies assert that the physician work (time) has changed due to supervision of the sonographer in addition to the radiologist performing the scanning. The specialty societies and RUC also noted that ultrasound technology has evolved immensely since 2010, including proliferation of high-frequency ultrasound probes dedicated to musculoskeletal imaging, as well as producing images with higher fidelity and more detail, whereby the number and quality of images that can be reviewed and the pathology to evaluate have greatly increased since 2010. Therefore, the typical patient requires 15 minutes of intraservice time. While we agreed with the RUC that 15 minutes of intraservice time is warranted for CPT code 76882, we noted that there was no information indicating a change in intensity, and therefore, for CPT code 76882, we proposed the reverse building block work RVU of 0.59 to account for the 4-minute increase in intraservice time and the maintenance of the current IWPUT of 0.024.

We noted that commenters may raise concern about a potential rank order anomaly with the proposed work RVUs of 0.54 and 0.59 for CPT codes 76881 and 76882, respectively, but we noted that the IWPUT of each code adequately reflects the increased intensity of intraservice work for the complete ultrasound (CPT code 76881; IWPUT = 0.027) versus the limited/focal ultrasound (CPT code 76882; IWPUT = 0.024), and the lesser work RVU of 0.54 for CPT code 76881 stemmed from the removal of the presumed overlapping pre- and post-service time with the E/M visits that are typically performed. The RUC noted that consistency of intensity measures is demonstrated across the range of codes ascending from the limited code (CPT code 76881) to the new, most complex code (CPT code 76883). By proposing work RVUs that maintain the current IWPUTs, we maintained relativity both among the neuromuscular

ultrasound family, as well as the larger family of ultrasound imaging codes. We also noted that the difference between the RUC-recommend IWPUTs and our proposed IWPUTs for CPT codes 76881 and 76882 was the same, where CPT code 76882 had an IWPUT that is 0.003 less than the IWPUT of CPT code 76881.

CPT code 76883 will be available for CY 2023 to report real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity. This code will entail examination of a nerve throughout its length, within one extremity, including evaluation of multiple areas for potential nerve compression, measurement of cross-sectional areas, evaluation of echogenicity, vascularity, mobility including dynamic maneuvers when indicated, evaluation for any associated muscular denervation, with comparison to unaffected muscles or nerves within that extremity as needed. CPT code 76883 also requires permanently recorded images and cine loop and a written report containing a description of each of the elements evaluated. The RUC recommended 7 minutes of pre-service time, 25 minutes of intra-service time and 7 minutes of post-service time as supported by the survey. The RUC clarified that this service would not typically be reported with an office E/M visit. The RUC arrived at a recommended work RVU of 1.21 by comparing the pre-, intra-, and post-service times to those of CPT code 76881, which we proposed to modify due to presumed overlapping work in the pre- and post-service time with E/M visits. When we compared the proposed times of 0 minutes of pre-service time, 20 minutes of intraservice time, and 0 minutes of post-service time, and a work RVU of 0.54 for CPT code 76881, and the proposed times of 7 minutes of pre-service time, 25 minutes of intraservice time, and 7 minutes of post-service time for CPT code 76883, we arrived at a reverse building block work RVU of 0.99.

For the direct PE inputs, we proposed to remove the 2 minutes of clinical labor time for CA006 (*Confirm availability of prior images/studies*), the 1 minute of clinical labor time for the CA007 (*Review patient clinical extant information and questionnaire*), and the 2 minutes for CA011 (*Provide education/obtain consent*) for CPT code 76881 because these RUC recommendations describe clinical labor activities that presumably overlapped with the E/M visit that is typically billed with CPT code 76881. We proposed the direct PE inputs as recommended by the RUC for CPT codes 76882 and 76883.

We received several comments regarding our proposed work RVUs, pre- and post-service time, and direct PE input refinements for CPT codes 76881, 76882, and 76883 in response to the CY 2023 PFS proposed rule and those comments are summarized below.

Comment: Some commenters stated that the pre- and post-service work of CPT code 76881 should not be removed simply because it may be billed in conjunction with an E/M code. One commenter stated that if a rheumatologist decides to order the more expensive MRI instead of performing an ultrasound, the pre- and post- ordering time is quick, whereas, for musculoskeletal ultrasound (MSKU), the pre-service time includes detailed review of other studies and discussion with the patient that are not normally included as part of the E/M visit. The post-service work includes labelling, storing, documenting the results. The commenter stated that none of this would be part of the normal E/M coding for a visit. Another commenter stated that the physician work associated with an E/M visit is separate and distinct from the physician work associated with the imaging services reported by CPT code 76882. Furthermore, the commenter asserted that the E/M visit and ultrasound require different cognitive and technical skills by the rendering physician. When these services are performed in the same encounter, the physician work is neither overlapping nor duplicative, and should be separately accounted for.

Response: After review of the commenters' statements, CPT code 76881's pre- and post-service descriptions, and similar imaging codes that are typically reported with an E/M visit which allow for pre- and post-service time, we agree with the commenters' assertion that the 5 minutes of pre- and post-service time is appropriate for CPT code 76881. We also agree that, while the service descriptions of the E/M visit and CPT code 76881 may match, CPT code 76881's activities likely reflect image-specific activities that do not overlap with the E/M visit's activities; therefore, we are finalizing physician work time as the RUC recommended, with 5 minutes of pre-service evaluation time and 5 minutes of immediate post-service time.

Comment: Some commenters stated that these CPT codes are typically furnished by rheumatologists with the following direct PE inputs: (1) expensive, high quality, high frequency ultrasound machines with power Doppler capability rather than an inexpensive, handheld/portable device as included in the direct PE inputs; (2) a sonographer specially trained in MSKU rather than a physician or a standard x-ray technician as included in the direct PE inputs; and (3) a dedicated exam/imaging room in which to perform this service. One commenter submitted responses and synthesized conclusions from a limited survey of direct PE inputs typical of rheumatologists. More commenters noted that the RUC decided to reduce the PE portion of the technical component of CPT code 76881 by over 90 percent, phased in over time. The commenters continued by stating that there is another proposed decrease to 0.27 PE RVUs for CY 2023 based on a flawed assumption regarding the type of ultrasound services provided in the non-facility setting. The commenters stated that many clinics maintain and use a dedicated ultrasound room, a non-portable ultrasound room and a PACS system, as well as two dedicated sonographers. The commenters stated that even practices that use portable ultrasound units will utilize a dedicated ultrasound room and PACS system, and employ, or contract the services of, a

sonographer or other highly trained, typically highly credentialed, clinical staff. One commenter stated that the January 2022 RUC recommendations indicate rheumatology as the dominant specialty in the non-facility setting, but they incorrectly assumed that portable ultrasound is the typical equipment used by rheumatologists. This commenter stated that, of the 88 providers who submitted surveys for CPT code 76881 or the 100 providers that submitted surveys for CPT code 76882, no information was provided regarding the level of rheumatologists' input, and therefore, the commenter asserted that there is no way of knowing if rheumatologists were appropriately queried, despite the acknowledgement that they are the dominant specialty for CPT code 76881. This commenter submitted an attachment that claims that the dedicated medical sonographer's labor cost per hour is $47.50 and that they spent $80,017.24 on ultrasound technology and $3,003.00 in maintenance of the ultrasound technology per year. Another commenter stated that rheumatology was not part of the PE survey in 2017 and none of the RUC members who sat on the PE subcommittee in 2017 performed MSKU in their offices at the time of the survey. The commenter stated that we stated that the "transition period [to phase in the cuts year over year as finalized for CY 2018] would allow us to obtain more stakeholder input on the appropriate PE inputs and specialty assumptions for these services," and that we expected to consider this for future rulemaking. The commenter noted that their comments on the CY 2019 PFS proposed rule were deemed out of scope and that no further action was taken to obtain PE values.

Response: We appreciate the commenters' survey collection efforts to reflect rheumatologists' costs in performing CPT codes 76881, 76882, and 76883, and the concern regarding the accounting of rheumatologists' typical clinal labor and equipment in the January 2022 RUC recommendations. We share the commenters concerns that the recommended PE inputs may not fit within the family of services as currently valued given concerns raised by

commenters. In consideration of commenters' concerns and survey data, including early feedback on how the PE inputs for these services may not be reflective of what will be considered typical in how these services may be furnished, we encourage the RUC and other interested parties to reconsider the PE inputs of the neuromuscular ultrasound family, including the new code, in the near term.

We note that we did not make any proposals related to CPT codes 76881 or 76882 in the CY 2019 PFS proposed rule, therefore the comments were appropriately deemed out of scope at that time, and at that time, rheumatology was not the dominant specialty, therefore, we would have considered PE inputs of the dominant specialty to be typical when performing these CPT codes at that time. We encourage the commenters to coordinate with the RUC to provide the survey data to facilitate a reconsideration of PE inputs given the shift in dominant specialty and recent changes that were made by the RUC PE Subcommittee.

Because the RUC has standardized procedures for PE and physician surveys, and the fact that the surveyors' results differ so drastically from the RUC recommendations, we encourage the RUC and other interested parties to reconsider the PE inputs of the neuromuscular ultrasound family, which we would consider in future rulemaking if submitted. While the submission of the survey data is appreciated, we note that no invoices were submitted, and therefore, we encourage collaboration with the RUC PE subcommittee and the submission of specific invoices to support the surveys' results and robust data to show the typicality of these PE inputs.

Comment: One commenter asserted that they utilize a dedicated diagnostic medical sonographer with specific musculoskeletal training, high quality machines that cost around $40 thousand each (based on a recent purchase of a GE LOGIQ™ E ultrasound machine for a

Veteran Affairs Hospital that cost $44,110 after a government discount), and a dedicated ultrasound scanning room due to patient draping requirements and machine optimization.

Response: We appreciate the commenters' input regarding CPT codes 76881, 76882, and 76883. We encourage the RUC and other interested parties to reconsider the PE inputs of the neuromuscular ultrasound family, as they differ significantly from the RUC recommended direct PE inputs as submitted for the CY 2023 PFS proposed rule. After a reconsideration by the RUC and interested parties regarding the PE inputs, we would be interested in engaging with interested parties to obtain invoices to support accurate pricing for PE inputs that may be altered for this family of codes.

Comment: Many commenters urged CMS to pause all proposed reductions to CPT codes 76881 and 76882 to allow collaboration between the RUC and interested parties' on how rheumatologists currently utilize or plan to utilize MSKU since the rheumatology community has never been surveyed by the RUC on their typical PE investments in their ultrasound programs. Commenters stated that rheumatologists were not included in the 2017 survey when PE cuts were recommended by the RUC and finalized for CY 2018.

Response: We believe it is imperative that the RUC and interested parties reconsider the PE inputs for CPT codes 76881, 76882, and 76883 in the near term, as commenters have submitted survey responses that differ significantly from the RUC recommended direct PE inputs. There are also significant discrepancies between the RUC assumption that rheumatologists typically scan patients themselves, versus varying commenters agreeing with this assumption, and some arguing that rheumatologists utilize a highly trained sonographer to scan patients. There are also significant commenter and RUC discrepancies regarding typical equipment used for these CPT codes. We note that in the CY 2018 PFS final rule (82 FR 53058

through 53059), we sought comment on whether a portable ultrasound unit would be a more accurate PE input for CPT codes 76881 and 76882, given that the dominant specialty for both of these services was podiatry based on available 2016 Medicare claims data. At that time, we did not finalize our proposal to include an ultrasound room, and instead finalized the RUC recommended equipment, with the exception of the ultrasound room, which we replaced with a portable ultrasound unit based on the RUC's determination, as expressed through its recommendations for CY 2018, that a portable unit is the equipment type that is typical for podiatry, which was the dominant specialty furnishing CPT code 76882 at the time. Commenters disagreed with our proposals and RUC recommendations, stating that the shift of PE from CPT code 76881 to CPT code 76882 was based on inaccurate assumptions regarding the typical equipment used in furnishing these services. These commenters noted that the equipment used to furnish the two procedures is identical and that the RUC-recommended direct PE inputs for CPT code 76881, which were developed based on the assumption that the dominant specialty furnishing the service is podiatry, do not reflect the equipment inputs utilized by rheumatologists such as an ultrasound room and PACS workstation. Given the changes in dominant specialty for these CPT codes from 2010 to 2017, and again from 2017 to 2022, we recommend that the RUC and interested parties reconsider the PE inputs for each code based on the dominant specialty for each CPT code, based on the most recent year's Medicare claims data, and consideration of survey responses submitted to CMS in response to the CY 2023 PFS proposed rule.

Comment: Many commenters expressed the importance of MSKU in controlling the prescribing of expensive biologic medications, streamlining patient care, reducing delays in patient care that result from scheduling alternative imaging tests (not on the initial encounter) and subsequent follow up visits to act on the tests results, and obtaining sensitive, safe non-

traumatic images for pediatric patients. Commenters stated that MSKU benefits patients and families by allowing them to see their anatomy in real time, which aids the patients' confidence in their physician and diagnosis. Commenters also stated that MSKU aids minorities and underserved areas where access to MSKU extends the ability to care for patients who may otherwise not be able to travel for MRI or CT services due to cost or additional time required to schedule and attend subsequent visits for the imaging and follow up, which can extend the time to initiate treatment by months.

Response: We appreciate the commenters' input on the value of CPT codes 76881, 76882, and 76883, and agree with the commenters that these services play an integral part in high quality, cost effective, expedient imaging, diagnosis, and care for a variety of patient populations. For this reason, we believe it is imperative that the RUC and interested parties reconsider the PE inputs for CPT codes 76881, 76882, and 76883 in the near term.

In order to maintain relativity among this family of codes after being compelled by the commenters' assertion that the pre- and post-service time for CPT code 76881 does not overlap with an E/M visit, and finalizing the RUC-recommended work RVU and PE inputs for CPT code 76881, we are also finalizing the RUC recommended work RVUs and PE inputs for CPT codes 76882 and 76883. Therefore, for CPT codes 76881, 76882, and 76883, we are finalizing work RVUs of 0.90, 0.69, and 1.21, respectively. As mentioned above, we are finalizing 5 minutes of pre-service evaluation time and 5 minutes of immediate post-service time for CPT code 76881. Similarly, we are finalizing the inclusion of 2 minutes of clinical labor time for CA006 (*Confirm availability of prior images/studies*), 1 minute of clinical labor time for the CA007 (*Review patient clinical extant information and questionnaire*), and 2 minutes for CA011 (*Provide education/obtain consent*) for CPT code 76881 for the direct PE inputs, as recommended by the

RUC, because we are compelled by the commenters' assertion that these activities are imaging-specific and do not overlap with an E/M visit. We are finalizing the direct PE inputs as recommended by the RUC for CPT codes 76882 and 76883, as proposed. We reiterate our recommendation that the RUC and interested parties reconsider the PE inputs in the near term. We also remind interested parties that we have established an annual process for the public nomination of potentially misvalued codes. This process provides an annual means for those who believe that values for individual services are inaccurate and should be readdressed through notice and comment rulemaking to bring those codes to our attention, as detailed in section II.C. of this final rule. As part of our current process, we identify potentially misvalued codes for review, and request recommendations from the RUC and other public commenters on revised work RVUs and direct PE inputs for those codes. While this process is available to interested parties, we encourage the RUC and other interested parties to reconsider the PE inputs of the neuromuscular ultrasound family as a whole, including the new code, in the near term, as we have already reviewed comments for this final rule and survey data that may indicate that the PE inputs for these services may not be reflective of what will be considered typical in how these services may be furnished.

(21) Immunization Administration (CPT codes 90460, 90461, 90471, 90472, 90473, and 90474)

Especially in the context of the current PHE for COVID–19, it is evident that consistent beneficiary access to vaccinations is vital to public health. As discussed in the CY 2021 PFS proposed rule (85 CFR 50162), many interested parties raised concerns about the reductions in payment rates for the preventive vaccine administration services that had occurred over the past several years. The codes for immunization administration services include CPT codes 90460, 90471, and 90473, as well as the three Healthcare Common Procedural Coding System (HCPCS)

AMA/Specialty Society RVS Update Committee Summary of Recommendations
Screen: New Technology/New Services*

January 2022

Neuromuscular Ultrasound – Tab 11

CPT codes 76881 and 76882 were reviewed as New Technology/New Services by the Relativity Assessment Workgroup (RAW) in January 2015. The RAW recommended that the specialty societies develop a *CPT Assistant* article to define the proper coding of extremity ultrasound, particularly as it applies to the elements necessary to report a complete study and that the RAW should review in October 2016 after additional Medicare utilization data are available. This coding clarification was published in the September 2016 *CPT Assistant*.

In October 2016, the RAW re-reviewed these codes and agreed with the specialty that the dominant specialties providing the complete versus the limited ultrasound of extremity services were different causing variation in the typical practice expense inputs. The RAW recommended to 1) Refer CPT codes 76881 and 76882 to the Practice Expense Subcommittee for review of the direct practice expense inputs for January 2017; 2) Refer to the CPT Editorial Panel to clarify the introductory language regarding the reference to one joint in the complete ultrasound; and 3) Review again in 3 years (October 2019).

At the January 2017 RUC meeting, the Practice Expense Subcommittee reviewed the direct practice expense inputs for 76881 and 76882 and adjusted the clinical staff time. In June 2017, the CPT Editorial Panel editorially revised ultrasound of extremity codes 76881 and 76882 to clarify the distinction between complete and limited studies and revised the introductory guidelines to clarify reference to one joint in the complete ultrasound procedure.

In October 2019, the RAW reviewed and recommended to again review in two years after additional data are available (January 2022). However, in October 2021, the CPT Editorial Panel approved the addition of code 76883 for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity and the revision of 76882 to add focal evaluation. CPT code 76881 is included as part of this family, therefore, review by the RAW was no longer necessary.

CPT codes 76881 and 76882 were identified as part of the neuromuscular ultrasound code family with CPT code 76883 and surveyed for the January 2022 RUC meeting.

Compelling Evidence
The RUC agreed with the specialty societies that there is compelling evidence to support a change in physician work for the code family based on a documented change in technique and physician time, as supported by the survey. In 2009, CPT code 76880 was deleted, and two new codes were created to distinguish between the comprehensive diagnostic ultrasound and the focused anatomic-specific ultrasound. When CPT code 76881 was created and surveyed in 2010, radiology was expected to be the dominant provider. This would have typically included initial scanning by a diagnostic medical sonographer and subsequent scanning by a radiologist. When 76882 was created and surveyed in 2010, podiatry was expected to be the dominant provider. This would have typically included scanning performed only by the podiatrist. In 2016, the RUC PE Subcommittee

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noted that the "dominant specialties providing the complete versus the limited ultrasound of extremity services are different, causing variation in PE" leading to revised PE direct inputs in January 2017. The physician work was not reviewed at that time. In 2022, rheumatology is the top provider for 76881 (25.7% of Medicare claims across all sites) and that specialty did not participate in the original survey. For rheumatology, physicians typically scan the patients with portable ultrasound devices rather than utilizing sonographers as originally described in the 2010 survey. Therefore, the physician work has changed. In 2022, radiology is the dominant physician provider for 76882 (57.3% of Medicare claims across all sites) and typically performs examinations with preliminary ultrasound scanning by a sonographer and additional imaging performed by the physician. Since radiologists do not use portable ultrasound devices as originally described in the 2010 survey or in the 2017 practice expense update, the physician work has changed due to supervision of the sonographer in addition to the radiologist performing the scanning.

In addition, ultrasound technology has evolved immensely since 2010, including proliferation of high-frequency ultrasound probes dedicated to musculoskeletal imaging, as well as producing images with higher fidelity and more detail. This modality is increasingly used for a greater range of musculoskeletal injuries and has replaced MRI as the first line investigation for many pathologies. Furthermore, ultrasound can also be used to troubleshoot difficult cases that are inconclusive on either clinical evaluation or other imaging modalities which supports a change in overall physician time and work. **The RUC concurred that there is compelling evidence that the physician work for these services has changed due to change in physician time and technique/technology.**

76881 ***Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation***
The RUC reviewed the survey results from 88 physicians and determined that the survey 25th percentile work RVU of 0.90 appropriately accounts for the work involved in this service. CPT code 76881 represents a complete evaluation of a specific joint in an extremity. This service requires ultrasound examination of all the following joint elements: joint space (e.g., effusion), peri-articular soft-tissue structures that surround the joint (i.e., muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. Code 76881 also requires permanently recorded images and a written report containing a description of each of the required elements or reason that an element(s) could not be visualized (e.g., absent secondary to surgery or trauma). The RUC recommends 5 minutes of pre-service time, 20 minutes of intra-service time and 5 minutes of post-service time as supported by the survey. The RUC discussed the change in intra-service time and determined that the increase relates to the compelling evidence argument, as previously there was 15 minutes of intra-service time for the radiologist to scan and/or review the sonographer-obtained images. Whereas now, the rheumatologist is performing the scanning and it typically takes 20 minutes in the current patient population. The RUC noted that this code is reported with an office Evaluation and Management (E/M) visit 58.9% and a non-facility office E/M visit 66.3%; however, the code is imaging-specific so the physician work described would not overlap with the E/M service.

The RUC compared CPT code 76881 to the top key reference service MPC code 76700 *Ultrasound, abdominal, real time with image documentation; complete* (work RVU = 0.81, 11 minutes intra-service time and 21 minutes total time) which is a clinically similar ultrasound code and noted that the reference code has identical pre and post-service time but less intra-service time than the surveyed code. The RUC noted that 76881 has 9 minutes more intra-service and total time than the reference code, which appropriately reflects the evaluation of multiple surrounding structures in addition to the joint, and therefore is appropriately valued higher. In addition, for the reference code, the physician is typically supervising a sonographer and performing additional scanning, as needed instead of directly performing the entire image acquisition potion of the ultrasound study. The RUC also compared the surveyed code to the second highest key reference service MPC code 99214 *Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination*

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and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter (work RVU = 1.92, 47 minutes total time) and noted that the surveyed code has far less physician time than the reference code and therefore is appropriately valued lower.

For additional support, the RUC compared CPT code 76881 to MPC code 74246 *Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (e.g., high-density barium and effervescent agent) study, including glucagon, when administered* (work RVU = 0.90, 15 minutes intra-service time and 22 minutes total time) and noted that the comparator code has less intra-service and total time compared to the surveyed code but is more intense. MPC code 74246 involves examination of a much larger anatomic area compared to the typical anatomic area examined for the surveyed code. The RUC concluded that CPT code 76881 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.90 for CPT code 76881.**

76882 ***Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation***
The RUC reviewed the survey results from 100 physicians and determined that the survey 25th percentile work RVU of 0.69 appropriately accounts for the work involved in this service. CPT code 76882 represents a limited evaluation of a joint or focal evaluation of a structure(s) in an extremity other than a joint (e.g., soft-tissue mass, fluid collection, or nerve[s]). This evaluation includes assessment of a specific anatomic structure(s) (e.g., joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all the elements included in CPT code 76881, although it does include all surrounding anatomy and any associated pathology or contralateral comparison as indicated. Code 76882 also requires permanently recorded images and a written report containing a description of each of the elements evaluated. The CPT Editorial Panel revised the CPT descriptor for this service in October 2021 to include focal evaluation of a nerve. The RUC recommends 5 minutes of pre-service time, 15 minutes of intra-service time and 5 minutes of post-service time as supported by the survey. The RUC discussed the change in intra-service time given that this limited code is performed with a sonographer and determined that the increase relates to the compelling evidence argument, as previously there was 11 minutes of intra-service time, whereas now the radiologist is working with the sonographer to obtain and interpret the images in addition to the physician performing additional scanning as needed. Therefore, it takes 15 minutes. The change in physician time is also due to the enhancement of the ultrasound technology whereby the number and quality of images that can be reviewed and the pathology to evaluate have greatly increased since 2010.

The RUC compared CPT code 76882 to the top key reference service code 76705 *Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)* (work RVU = 0.59, 8 minutes intra-service time and 18 minutes total time) which is a clinically similar ultrasound code and noted that the reference code has identical pre and post-service time but less intra-service time than the surveyed code. The RUC noted that CPT code 76882 has 7 minutes more intra-service and total time than the reference code, which appropriately reflects that the limited ultrasound examination of a musculoskeletal structure typically involves evaluation of more adjacent structures and tissues compared to the limited abdominal examination of a single structure, and therefore is appropriately valued higher. The RUC also compared the surveyed code to the second highest key reference service MPC code 99213 *Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter* (work RVU = 1.30, 30 minutes total time) and noted that the surveyed code has less intra-service and total time than the reference code and therefore is appropriately valued lower.

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For additional support, the RUC compared CPT code 76882 to MPC code 95251 *Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; analysis, interpretation and report* (work RVU = 0.70, 15 minutes intra-service time and 20 minutes total time) and noted that the codes have identical intra-service time and a similar amount and type of physician work including analysis, interpretation and report of clinical data. The RUC concluded that CPT code 76882 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.69 for CPT code 76882.**

76883 ***Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity***

The RUC reviewed the survey results from 66 physicians and determined that the survey 25th percentile work RVU of 1.21 appropriately accounts for the work involved in this service. CPT code 76883 is for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity. This code will examine a nerve throughout its length, within one extremity, including evaluation of multiple areas for potential nerve compression, measurement of cross-sectional areas, evaluation of echogenicity, vascularity, mobility including dynamic maneuvers when indicated, evaluation for any associated muscular denervation, with comparison to unaffected muscles or nerves within that extremity as needed. CPT code 76883 also requires permanently recorded images and cine loop and a written report containing a description of each of the elements evaluated. The RUC recommends 7 minutes of pre-service time, 25 minutes of intra-service time and 7 minutes of post-service time as supported by the survey. The RUC clarified that this service would not typically be reported with an office E/M visit.

The RUC compared CPT code 76883 to the second highest key reference service MPC code 95861 *Needle electromyography; 2 extremities with or without related paraspinal areas* (work RVU = 1.54, 29 minutes intra-service time and 49 minutes total time) and noted that the surveyed code has less intra-service and total time than the reference code and therefore is appropriately valued lower. For additional support, the RUC compared CPT code 76883 to MPC code 95805 *Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness* (work RVU = 1.20, 20 minutes intra-service time and 50 minutes total time) and noted that the comparator code has less intra-service time and lower intensity than the surveyed code and an almost identical amount of physician work. The RUC concluded that CPT code 76883 should be valued at the 25th percentile work RVU as supported by the survey. Moreover, the RUC noted that consistency of intensity measures is demonstrated across the range of codes ascending from the limited code to this newest, most complex 76883 code and the recommendations maintain relatively both among the neuromuscular ultrasound family as well as the larger family of ultrasound imaging codes. **The RUC recommends a work RVU of 1.21 for CPT code 76883.**

Practice Expense

The Practice Expense Subcommittee reviewed the direct practice expense inputs and made updates to reflect the appropriate specialty providing the service in the global and technical component reporting only in the *non-facility setting*: rheumatology (76881), podiatry (76882), and neurology (76883). For the physician work component for CPT code 76882, the radiologist is the dominant provider for physician work at all sites of service; however, for the non-facility global and technical component utilization which determines the top specialty for non-facility practice expense inputs, Podiatry is the dominant specialty. Thus, the radiology inputs were removed from the PE for code 76882 because podiatry is dominant, and there is no sonographer or ultrasound room included in the PE spreadsheet as the physician performs the image acquisition with a portable ultrasound machine instead. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

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New Technology/New Service
The RUC recommends that CPT code 76883 be placed on the New Technology list to be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Radiology **Diagnostic Ultrasound** **Extremities** *Code 76881 represents a complete evaluation of a specific joint in an extremity. Code 76881 requires ultrasound examination of all of the following joint elements: joint space (eg, effusion), peri-articular soft-tissue structures that surround the joint (ie, muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. Code 76881 also requires permanently recorded images and a written report containing a description of each of the required elements or reason that an element(s) could not be visualized (eg, absent secondary to surgery or trauma).* *When fewer than all of the required elements for a "complete" exam (76881) are performed, report the "limited" code (76882).* Code 76882 represents a limited evaluation of a joint or ~~an~~ focal evaluation of a structure(s) in an extremity other than a joint (eg, soft-tissue mass, fluid collection, or nerve[s]). Limited evaluation of a joint includes assessment of a specific anatomic structure(s) (eg, joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all of the required elements included in 76881. Code 76882 also requires permanently recorded images and a written report containing a description of each of the elements evaluated. Comprehensive evaluation of a nerve is defined as evaluation of the nerve throughout its course in an extremity. Documentation of the entire course of a nerve throughout an extremity includes the acquisition and permanent archive of cine clips and static images to demonstrate the anatomy. *For spectral and color Doppler evaluation of the extremities, use 93925, 93926, 93930, 93931, 93970, or 93971 as appropriate.*				

CPT Code	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
(f)76881	Z1	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation	XXX	0.90

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▲76882	Z2	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation (Do not report 76882 in conjunction with 76883)	XXX	0.69
●76883	Z3	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity	XXX	1.21

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:76881 Tracking Number Z1 Original Specialty Recommended RVU: **0.90**
Presented Recommended RVU: **0.90**
Global Period: XXX Current Work RVU: **0.63** RUC Recommended RVU: **0.90**

CPT Descriptor: Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old male presents with sore, swollen ankle, which developed gradually over a period of several weeks. He is an avid basketball player but can no longer play because of the pain. Plain radiographs were negative for fracture. The decision is made to perform a diagnostic ultrasound examination.

Percentage of Survey Respondents who found Vignette to be Typical: 57%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review pertinent clinical information. Review any prior applicable imaging studies.

Description of Intra-Service Work: Perform the examination by scanning the patient, including perform dynamic maneuvers as needed. Interpret real-time and stored images of the ankle including: muscles, tendons, joint, other soft tissue structures, and any identifiable abnormality. Evaluate the lateral structures of the ankle, including: (1) The peroneus longus and peroneus brevis tendons for tears, tendinosis, or tenosynovitis. Also perform dynamic imaging with circumduction of the ankle to assess for peroneal subluxation in real time; and (2) The anterior talofibular ligament, calcaneofibular ligament, and anterior inferior tibiofibular ligament for tears or scarring. Perform stress maneuvers to evaluate for ligamentous laxity and anterolateral ankle impingement. Evaluate the medial structures of the ankle, including: (1) The posterior tibial, flexor digitorum longus and flexor hallucis longus tendons for tears, tendinosis, or tenosynovitis; (2) The deltoid ligament for tears or scarring; and (3) The neurovascular bundle for signs of nerve swelling or compression. Evaluate the anterior structures of the ankle, including: (1) The tibialis anterior tendon for tears, tendinosis, or tenosynovitis; and (2) The ankle joint for effusions, synovitis, arthritic changes, and adjacent ganglion cysts. Evaluate the posterior structures of the ankle, including: (1) The Achilles' tendon for tears, tendinosis, or peritendinitis; and (2) The retrocalcaneal and retroachilles bursa for fluid collections or inflammation. Compare the exam and correlate findings to any prior studies. Dictate a report for the medical record.

Description of Post-Service Work: Discuss and explain findings to the patient as needed. Review and sign final report. Communicate findings to referring clinician as needed.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2022		
Presenter(s):	Andy Moriarity, MD; Carlo Milani, MD; David Reece, DO; Andrea Boon, MD; Fredrica Smith, MD; Marianna V. Spanaki, MD, PhD; Brooke Bisbee, DPM		
Specialty Society(ies):	ACR, AAN, AANEM, AAPM&R, ACRh, APMA		
CPT Code:	76881		
Sample Size:	7339	**Resp N:**	88
Description of Sample:	The ACR surveyed a random sample of 1000 individuals from its membership as well as a random subset of 1000 members who indicated that they perform ultrasound, musculoskeletal, and neuro imaging procedures (total of 2000). The AAN surveyed a sample of 1000 current US members from the Neuromuscular Section and Clinical Neurophysiology Sections. The AANEM surveyed a random sample of 811 current US members, and 83 current US members with neuromuscular subspecialty designation (total of 894). The AAPM&R surveyed a random sample of 945 members who selected musculoskeletal medicine as an area of interest as well as our sports medicine community and our neuromuscular medicine community. The ACRh surveyed a random sample of 1000 current US members. The APMA surveyed a random sample of 1500 current US members.		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	7.00	**30.00**	98.00	1500.00
Survey RVW:	0.48	0.90	**1.43**	2.03	4.50
Pre-Service Evaluation Time:			**7.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	0.00	15.00	**20.00**	30.00	70.00

Immediate Post Service-Time:	**8.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	76881	**Recommended Physician Work RVU: 0.90**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)
XXX Global Code

	Specialty Recommended Post-Service Time	Specialty Recommended Post Time Package	Adjustments/Recommended Post-Service Time
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
76700	XXX	0.81	**RUC Time**

CPT Descriptor Ultrasound, abdominal, real time with image documentation; complete

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99214	XXX	1.92	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	908,859

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
74246	XXX	0.90	**RUC Time**	34,438

CPT Descriptor 2
Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (eg, high-density barium and effervescent agent) study, including glucagon, when administered

Other Reference CPT Code	Global	Work RVU	Time Source
85097	XXX	0.94	**RUC Time**

CPT Descriptor Bone marrow, smear interpretation

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 19 **% of respondents:** 21.5 **%**

Number of respondents who choose 2nd Key Reference Code: 11 **% of respondents:** 12.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 76881	**Top Key Reference CPT Code:** 76700	**2nd Key Reference CPT Code:** **99214**
Median Pre-Service Time	5.00	5.00	7.00
Median Intra-Service Time	20.00	11.00	30.00
Median Immediate Post-service Time	5.00	5.00	10.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**30.00**	**21.00**	**47.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	0%	68%	32%	0%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	5%	74%	21%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	63%	37%
Physical effort required	0%	74%	26%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	21%	68%	11%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	45%	45%	9%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	9%	55%	36%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	9%	91%
Physical effort required	0%	18%	82%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	18%	27%	55%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The Neuromuscular Ultrasound code family consists of the following three codes:

- CPT code 76881: *Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation*
- CPT code 76882: *Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation*
- CPT code 76883: *Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity*

The Neuromuscular Ultrasound code family was brought forth to the RUC due to the addition of CPT code 76883, a code for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity. This code will examine a nerve throughout its length, within one extremity, including evaluation of multiple areas for potential nerve compression, measurement of cross-sectional areas, evaluation of echogenicity, vascularity, mobility including dynamic maneuvers when indicated, evaluate for any associated muscular denervation, with comparison to unaffected muscles or nerves within that extremity as needed. Code 76883 also requires permanently recorded images and cine loop, and a written report containing a description of each of the elements evaluated. Additionally, the CPT Panel revised the CPT descriptor of code 76882 to include focal evaluation clarifying language.

CPT code 76881 represents a complete evaluation of a specific joint in an extremity. CPT code 76881 requires ultrasound examination of all the following joint elements: joint space (e.g., effusion), peri-articular soft-tissue structures that surround the joint (i.e., muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. In addition, CPT code 76881 requires permanently recorded images and a written report containing a description of each of the required elements or reason that an element(s) could not be visualized (e.g., absent secondary to surgery or trauma).

CPT code 76882 represents a limited evaluation of a joint or focal evaluation of a structure(s) in an extremity other than a joint (e.g., soft-tissue mass, fluid collection, or nerve[s]). This evaluation includes assessment of a specific anatomic structure(s) (e.g., joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all the elements included in 76881 although does include all surrounding anatomy and any associated pathology or contralateral comparison as indicated. Code 76882 also requires permanently recorded images and a written report containing a description of each of the elements evaluated.

The American College of Radiology (ACR), American Academy of Neurology (AAN), American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM), American Academy of Physical Medicine and Rehabilitation (AAPM&R), American College of Rheumatology (ACRh), and American Podiatric Medical Association (APMA) convened an expert panel familiar with these services to provide value and time recommendations for the January 2022 RUC meeting.

Survey Process
The ACR, AAN, AANEM, and AAPM&R surveyed for CPT codes 76881, 76882 and 76883. The ACRh and APMA surveyed only CPT codes 76881 and 76882.

The ACR surveyed a random sample of 1000 individuals from its membership as well as a random subset of 1000 members who indicated that they perform ultrasound, musculoskeletal, and neuro imaging procedures (total of 2000). The AAN surveyed a sample of 1000 current US members from the Neuromuscular Section and Clinical Neurophysiology Sections. The AANEM surveyed a random sample of 811 current US members, and 83 current US members with neuromuscular subspecialty designation (total of 894). The AAPM&R surveyed a random sample of 945 members who selected musculoskeletal medicine as an area of interest as well as our sports medicine community and our neuromuscular medicine community. The ACRh surveyed a random sample of 1000 current US members. The APMA surveyed a random sample of 1500 current US members.

Compelling Evidence
We believe that there is compelling evidence to consider an increase in the value for CPT code 76881 based on a documented change in the physician work due to differences in technique and physician time, which is supported by the survey respondent times. In 2022, a different specialty is dominant than the original survey of the previously approved RUC values which necessarily results in different physician work. In 2009, CPT code 76880 *(Ultrasound, extremity, nonvascular, real time with image documentation)* was deleted and two new codes were created to distinguish between the comprehensive diagnostic ultrasound and the focused anatomic-specific ultrasound. When 76881 was created and surveyed in 2010, radiology was expected to be the dominant provider and formed the basis for RUC valuation. This would have typically included initial scanning by a diagnostic medical sonographer and subsequent scanning by a radiologist. In 2016, the RUC PE Subcommittee noted that the "dominant specialties providing the complete versus the limited ultrasound of extremity services are different causing variation in PE" leading to revised PE direct inputs in January 2017. The physician work was not reviewed at that time. In 2021, rheumatology is now the dominant provider for 76881 and that specialty did not participate in the original survey. For rheumatology, physicians typically scan the patients themselves with portable US devices rather than the use of sonographers as originally described in the 2010 survey. Therefore, the physician work must be different. Additionally, since 2010, ultrasound is increasingly used for a greater range of musculoskeletal injuries and has replaced MRI as the first line investigation for many pathologies. Furthermore, ultrasound can also be used to troubleshoot difficult cases that are inconclusive on either clinical evaluation or other imaging modalities which supports a change in overall physician time and work.

Work RVU and Time Recommendations
The expert panel recommends the survey 25th percentile value at 0.90 work RVU and a survey median time of 20 minutes intra-service. Additionally, we are recommending maintaining the current times of 5 minutes pre-service and 5 minutes post-service.

Key Reference Services
Our recommended work RVU of 0.90 compares favorably to the most commonly chosen key reference service, CPT code 76700 *(Ultrasound, abdominal, real time with image documentation; complete),* which is a clinically similar ultrasound code and on the MPC list. CPT code 76700 has times of 5 minutes pre-service and 5 minutes post-service time but includes less intra-service time at 11 minutes compared to the surveyed code. CPT code 76881 has a survey median time of 20 minutes, which appropriately reflects the increased complexity of the service as the code involves evaluation of multiple surrounding structures in addition to the joint. Additionally, the recommended 0.90 work RVU is appropriately higher than that of key reference code 76700 at 0.81 work RVU. Similarly, survey respondents reported that the surveyed code was more intense overall than key reference code 76700.

The second key reference service code, CPT code 99214 *(Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.)* supports the recommendation as well and is also an MPC code. Service times (7 minutes pre-service, 30 minutes intra-service, and 5 minutes post-service time) are higher for the reference code, 99214, than those recommended for the surveyed code (5 minutes pre-service, 20 minutes intra-service, and 5 minutes post-service time). Additionally, the recommended 0.90 work RVU for the surveyed code is appropriately lower than that of key reference code 99214 at 1.92 work RVU and has an appropriately lower IWPUT.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76700	Ultrasound, abdominal, real time with image documentation; complete	0.81	5	11	5	21	0.053	0.039
76881	**Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation**	**0.90**	**5**	**20**	**5**	**30**	**0.034**	**0.030**
99214	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.	1.92	7	30	10	47	0.051	0.041

MPC Codes

Our recommendation for surveyed code 76881 compares favorably to the MPC codes depicted in the table below. This includes the most commonly chosen key reference service, CPT code 76700 *(Ultrasound, abdominal, real time with image documentation; complete),* which is a clinically similar ultrasound code. In addition, the value recommendation is identical to MPC code 74246 *(Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (eg, high-density barium and effervescent agent) study, including glucagon, when administered)*, which is another radiology code. MPC code 74246 has 5 minutes less intra-service time at 15 minutes compared to the surveyed code; however this results in an appropriately higher IWPUT. MPC code 74246 involves examination of a much larger anatomic area as well as multiple patient dynamic maneuvers including changes in positioning compared to the typical anatomic area and fixed position for scanning performed for the surveyed code. Finally, MPC code 85097 *(Bone marrow, smear interpretation)* is a pathology code that has a slightly higher RVU and an appropriately higher IWPUT compared to the surveyed code as the pathology code has 5 minutes greater intra-service time which is more intense during service performance.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76700	Ultrasound, abdominal, real time with image documentation; complete	0.81	5	11	5	21	0.053	0.039
76881	**Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation**	**0.90**	**5**	**20**	**5**	**30**	**0.034**	**0.030**
74246	Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (eg, high-density barium and effervescent agent) study, including glucagon, when administered	0.90	4	15	3	22	0.050	0.041
85097	Bone marrow, smear interpretation	0.94	0	25	0	25	0.038	0.038

Neuromuscular Ultrasound Family

The recommendations maintain relatively both among the neuromuscular ultrasound family, as well as the larger family of ultrasound imaging codes as indicated by the top key reference services. These relationships are summarized in the following table demonstrating the consistency of the IWPUT measurements across the range of codes at the recommended values ascending from the limited code to the newest, most complex 76883 code. The table below is sorted by IWPUT for reference.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76882	**Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation**	**0.69**	**5**	**15**	**5**	**25**	**0.031**	**0.028**
76881	**Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation**	**0.90**	**5**	**20**	**5**	**30**	**0.034**	**0.030**
76883	**Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity**	**1.21**	**7**	**25**	**7**	**39**	**0.036**	**0.031**

76705	Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)	0.59	5	8	5	18	0.046	0.033
76700	Ultrasound, abdominal, real time with image documentation; complete	0.81	5	11	5	21	0.053	0.039

Summary
In summary, our expert panel recommends the survey 25th percentile value at 0.90 work RVU and a survey median time of 20 minutes intra-service. Additionally, we are recommending maintaining the current times of 5 minutes pre-service and 5 minutes post-service. The recommended value compares favorably with the key reference services, 76700 and 99214, and maintains relativity within the RBRVS.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☒ Other reason (please explain) CPT code 76881 is billed with office E/M 58.9% of the time.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario. According to the RUC database, 76881 is billed with: a) 99213 (Office outpatient visit 15 minutes) at 21.1% b) 99214 (Office outpatient visit 25 minutes) at 17.4%, c) 99203 (Office outpatient new 30 minutes) at 8%, and d) 99204 (Office outpatient new 45 minutes) at 6% of the time.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 76881

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Radiology How often? Commonly

Specialty Rheumatology How often? Commonly

Specialty Podiatry How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period? 561000

If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This service described by CPT code 76881 is estimated to be provided 561000 times nationally in a one-year period.

Specialty Radiology	Frequency 78540	Percentage 14.00 %
Specialty Rheumatology	Frequency 151470	Percentage 27.00 %
Specialty Podiatry	Frequency 84150	Percentage 15.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 187,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. The service described by CPT code 76881 is estimated to be provided 187000 times in a one-year period to Medicare patients.

Specialty Radiology	Frequency 26180	Percentage 14.00 %
Specialty Rheumatology	Frequency 50490	Percentage 27.00 %
Specialty Podiatry	Frequency 28050	Percentage 15.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Imaging

BETOS Sub-classification:
Echography/ultrasonography

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 76881

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:76882 Tracking Number Z2 Original Specialty Recommended RVU: **0.69**
Presented Recommended RVU: **0.69**
Global Period: XXX Current Work RVU: **0.49** RUC Recommended RVU: **0.69**

CPT Descriptor: Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation

(Do not report 76882 in conjunction with 76883)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 36-year-old male presents with an acute injury to his Achilles tendon, sustained while playing soccer. No open wounds are noted. X-rays are negative for osseous pathology. Mild erythema and edema are noted at the posterior lower leg. Ultrasound is performed to evaluate the Achilles tendon

Percentage of Survey Respondents who found Vignette to be Typical: 64%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review pertinent clinical information. Review any prior applicable imaging studies.

Description of Intra-Service Work: Supervise the sonographer performing the examination, as well as personally scanning the patient to perform dynamic maneuvers and/or confirm the sonographer's impression as needed. This includes obtain images in multiple planes through the specific area of concern (i.e., Achilles' tendon) and evaluate for abnormalities of a specific structure or any pathology in the area. Document normal anatomic structure and assess any pathologic findings including evidence of tendinosis, tendon tear, or paratenonitis. Perform measurements of tendon thinning and tear seperation to assist in determining patient management options. Compare to the contralateral side as needed. Dictate a report for the patient's chart.

Description of Post-Service Work: Discuss and explain findings to the patient as needed. Review and sign final report. Communicate findings to referring clinician as needed.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2022		
Presenter(s):	Andy Moriarity, MD; Carlo Milani, MD; David Reece, DO; Andrea Boon, MD; Fredrica Smith, MD; Marianna V. Spanaki, MD, PhD; Brooke Bisbee, DPM		
Specialty Society(ies):	ACR, AAN, AANEM, AAPM&R, ACRh, APMA		
CPT Code:	76882		
Sample Size:	7339	**Resp N:**	100
Description of Sample:	The ACR surveyed a random sample of 1000 individuals from its membership as well as a random subset of 1000 members who indicated that they perform ultrasound, musculoskeletal, and neuro imaging procedures (total of 2000). The AAN surveyed a sample of 1000 current US members from the Neuromuscular Section and Clinical Neurophysiology Sections. The AANEM surveyed a random sample of 811 current US members, and 83 current US members with neuromuscular subspecialty designation (total of 894). The AAPM&R surveyed a random sample of 945 members who selected musculoskeletal medicine as an area of interest as well as our sports medicine community and our neuromuscular medicine community. The ACRh surveyed a random sample of 1000 current US members. The APMA surveyed a random sample of 1500 current US members.		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	10.00	**40.00**	100.00	600.00
Survey RVW:	0.30	0.69	**1.00**	1.51	4.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	0.00	10.00	**15.00**	20.00	60.00

Immediate Post Service-Time:	**6.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	76882	**Recommended Physician Work RVU: 0.69**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)
XXX Global Code

	Specialty Recommended Post-Service Time	Specialty Recommended Post Time Package	Adjustments/Recommended Post-Service Time
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
76705	XXX	0.59	**RUC Time**

CPT Descriptor Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99213	XXX	1.30	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
74220	XXX	0.60	**RUC Time**	196,573

CPT Descriptor 1 Radiologic examination, esophagus, including scout chest radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76830	XXX	0.69	**RUC Time**	442,342

CPT Descriptor 2 Ultrasound, transvaginal

Other Reference CPT Code	Global	Work RVU	Time Source
95251	XXX	0.70	**RUC Time**

CPT Descriptor Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; analysis, interpretation and report

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 21 **% of respondents:** 21.0 **%**

Number of respondents who choose 2nd Key Reference Code: 14 **% of respondents:** 14.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 76882	**Top Key Reference CPT Code:** 76705	**2nd Key Reference CPT Code:** **99213**
Median Pre-Service Time	5.00	5.00	5.00
Median Intra-Service Time	15.00	8.00	20.00
Median Immediate Post-service Time	5.00	5.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**25.00**	**18.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall intensity/complexity	0%	5%	81%	10%	5%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	10%	76%	14%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	5%	86%	10%
Physical effort required	5%	90%	5%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	19%	76%	5%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	43%	43%	14%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	21%	36%	43%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	7%	93%
Physical effort required	7%	7%	86%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	7%	36%	57%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The Neuromuscular Ultrasound code family consists of the following three codes:

- CPT code 76881: *Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation*
- CPT code 76882: *Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation*
- CPT code 76883: *Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity*

The Neuromuscular Ultrasound code family was brought forth to the RUC due to the addition of CPT code 76883, a code for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity. This code will examine a nerve throughout its length, within one extremity, including evaluation of multiple areas for potential nerve compression, measurement of cross-sectional areas, evaluation of echogenicity, vascularity, mobility including dynamic maneuvers when indicated, evaluate for any associated muscular denervation, with comparison to unaffected muscles or nerves within that extremity as needed. Code 76883 also requires permanently recorded images and cine loop, and a written report containing a description of each of the elements evaluated. Additionally, the CPT Panel revised the CPT descriptor of code 76882 to include focal evaluation *of a nerve*.

CPT code 76881 represents a complete evaluation of a specific joint in an extremity. Code 76881 requires ultrasound examination of all the following joint elements: joint space (e.g., effusion), peri-articular soft-tissue structures that surround the joint (i.e., muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. In addition, CPT code 76881 also requires permanently recorded images and a written report containing a description of each of the required elements or reason that an element(s) could not be visualized (e.g., absent secondary to surgery or trauma).

CPT code 76882 represents a limited evaluation of a joint or focal evaluation of a structure(s) in an extremity other than a joint (e.g., soft-tissue mass, fluid collection, or nerve[s]). This evaluation includes assessment of a specific anatomic structure(s) (e.g., joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all the elements included in 76881 although does include all surrounding anatomy and any associated pathology or contralateral comparison as indicated. Code 76882 also requires permanently recorded images and a written report containing a description of each of the elements evaluated.

The American College of Radiology (ACR), American Academy of Neurology (AAN), American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM), American Academy of Physical Medicine and Rehabilitation (AAPM&R), American College of Rheumatology (ACRh), and American Podiatric Medical Association (APMA) convened an expert panel familiar with these services to provide value and time recommendations for the January 2022 RUC meeting.

Survey Process
The ACR, AAN, AANEM, and AAPM&R surveyed for CPT codes 76881, 76882 and 76883. The ACRh and APMA surveyed only CPT codes 76881 and 76882.

The ACR surveyed a random sample of 1000 individuals from its membership as well as a random subset of 1000 members who indicated that they perform ultrasound, musculoskeletal, and neuro imaging procedures (total of 2000). The AAN surveyed a sample of 1000 current US members from the Neuromuscular Section and Clinical Neurophysiology Sections. The AANEM surveyed a random sample of 811 current US members, and 83 current US members with neuromuscular subspecialty designation (total of 894). The AAPM&R surveyed a random sample of 945 members who selected musculoskeletal medicine as an area of interest as well as our sports medicine community and our neuromuscular medicine community. The ACRh surveyed a random sample of 1000 current US members. The APMA surveyed a random sample of 1500 current US members.

Compelling Evidence
We believe that there is compelling evidence to consider an increase in the value for CPT code 76882 based on a documented change in the physician work due to differences in technique and physician time, which is supported by the survey respondent times. In 2022, a different specialty is dominant than the original survey of the previously approved RUC values which necessarily results in different physician work. In 2009, CPT code 76880 *(Ultrasound, extremity, nonvascular, real time with image documentation)* was deleted and two new codes were created to distinguish between the comprehensive diagnostic ultrasound and the focused anatomic-specific ultrasound. When 76882 was created and surveyed in 2010, podiatry was expected to be the dominant provider and formed the basis for RUC valuation. In 2016, the RUC PE Subcommittee noted that the "dominant specialties providing the complete versus the limited ultrasound of extremity services are different causing variation in PE" leading to revised PE direct inputs in January 2017. The physician work was not reviewed at that time, and since radiologists do not use portable US devices as originally described in the 2010 survey or in the 2017 PE update, the physician work must be different. In 2022, radiology is the dominant physician provider and typically performs examinations with preliminary ultrasound scanning by a sonographer and additional imaging performed by the physician. Additionally, since 2010, ultrasound is increasingly used for a greater range of musculoskeletal injuries and has replaced MRI as the first line investigation for many pathologies. Furthermore, ultrasound can also be used to troubleshoot difficult cases that are inconclusive on either clinical evaluation or other imaging modalities which supports a change in overall physician time and work.

Work RVU and Time Recommendations
The expert panel recommends the survey 25th percentile value at 0.69 work RVU and a survey median time of 15 minutes intra-service. Additionally, we are recommending maintaining the current times of 5 minutes pre-service and 5 minutes post-service.

Key Reference Services
Our recommended work RVU of 0.69 compares favorably to the most commonly chosen key reference service, CPT code 76705 *(Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)),* which is a clinically similar ultrasound code. CPT code 76705 has times of 5 minutes pre-service and 5 minutes post-service time but includes less intra-service time at 8 minutes compared to the surveyed code. CPT code 76882 has a survey median time of 15 minutes which appropriately reflects the increased complexity of the service, as the limited ultrasound examination of a musculoskeletal structure will typically involve evaluation of more adjacent structures and tissues compared to the limited abdominal examination of a single structure. Additionally, the recommended 0.69 work RVU is appropriately higher than that of key reference code 76705 at 0.59 work RVU.

The second key reference service code, CPT code 99213 *(Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.)* supports the recommendation and is an MPC code as well. Service times (5 minutes pre-service, 20 minutes intra-service, and 5 minutes post-service time) are higher for the reference code 99213 than those for the surveyed code (5 minutes pre-service, 15 minutes intra-service, and 5 minutes post-service time). Additionally, the recommended 0.69 work RVU for the surveyed code is appropriately lower than that of key reference code 99213 at 1.30 work RVU.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76705	Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)	0.59	5	8	5	18	0.046	0.033
76882	**Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation**	**0.69**	**5**	**15**	**5**	**25**	**0.031**	**0.028**
99213	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.	1.30	5	20	5	30	0.054	0.043

MPC Codes

Our recommendation for surveyed code 76882 compares favorably to the MPC codes depicted in the table below. The surveyed code has 5 minutes more intra-service time compared to MPC code 74220 *(Radiologic examination, esophagus, including scout chest radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study)* although it also has an appropriately lower IWPUT when considering how MPC code 74220 involves a greater area of patient anatomy and real time repositioning to obtain optimal views. This results in greater intensity of the intra-service time relative to the RVU. The second MPC code, 76830 *(Ultrasound, transvaginal),* is also an ultrasound code which is performed by multiple specialties and has an identical work RVU of 0.69 compared to the surveyed code. However, code 76830 involves evaluation of a larger number of structures in the pelvis via a transvaginal (endoluminal) approach compared to the surveyed code, resulting in greater intensity and IWPUT despite similar total service times. Finally, the surveyed code compares well to MPC code 95251 *(Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; analysis, interpretation and report)* which has 0.01 greater RVU with an identical intra-service time compared to 76882. MPC code 95251 has a similar type of work compared to 76882 including analysis, interpretation and report of clinical data.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
74220	Radiologic examination, esophagus, including scout chest radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study	0.60	3	10	3	16	0.047	0.038
76882	**Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation**	**0.69**	**5**	**15**	**5**	**25**	**0.031**	**0.028**
76830	Ultrasound, transvaginal	0.69	5	10	8	23	0.040	0.030
95251	Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; analysis, interpretation and report	0.70	2	15	3	20	0.039	0.035

Neuromuscular Ultrasound Family

The recommendations maintain relatively both among the neuromuscular ultrasound family, as well as the larger family of ultrasound imaging codes as indicated by the top key reference services. These relationships are summarized in the following table demonstrating the consistency of the IWPUT measurements across the range of codes at the recommended values ascending from the limited code to the newest, most complex 76883 code. The table below is sorted by IWPUT for reference.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76882	**Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation**	**0.69**	**5**	**15**	**5**	**25**	**0.031**	**0.028**
76881	**Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation**	**0.90**	**5**	**20**	**5**	**30**	**0.034**	**0.030**
76883	**Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity,**	**1.21**	**7**	**25**	**7**	**39**	**0.036**	**0.031**

	comprehensive, including real-time cine imaging with image documentation, per extremity							
76705	Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)	0.59	5	8	5	18	0.046	0.033
76700	Ultrasound, abdominal, real time with image documentation; complete	0.81	5	11	5	21	0.053	0.039

Summary
In summary, our expert panel recommends the survey 25th percentile value at 0.69 work RVU and a survey median time of 15 minutes intra-service. Additionally, we are recommending maintaining the current times of 5 minutes pre-service and 5 minutes post-service. The recommended value compares favorably with the key reference services, 76705 and 99213, and maintains relativity within the RBRVS.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 76882

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Diagnostic Radiology How often? Commonly

Specialty Podiatry How often? Commonly

Specialty Rheumatology How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period? 821000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This service described by CPT code 76882 is estimated to be provided 821000 times nationally in a one-year period.

Specialty Diagnostic Radiology Frequency 114940 Percentage 14.00 %

Specialty Podiatry Frequency 123150 Percentage 15.00 %

Specialty Rheumatology Frequency 213460 Percentage 26.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 274,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. The service described by CPT code 76882 is estimated to be provided 274000 times in a one-year period to Medicare patients.

Specialty Diagnostic Radiology Frequency 38360 Percentage 14.00 %

Specialty Podiatry Frequency 41100 Percentage 15.00 %

Specialty Rheumatology Frequency 71240 Percentage 26.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Imaging

BETOS Sub-classification:
Echography/ultrasonography

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 76882

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:76883 Tracking Number Z3 Original Specialty Recommended RVU: **1.21**
Presented Recommended RVU: **1.21**
Global Period: XXX Current Work RVU: RUC Recommended RVU: **1.21**

CPT Descriptor: Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old female presents with progressive atrophy and weakness of the intrinsic muscles on the left hand, associated with altered sensation on the medial aspect of the hand. An ultrasound of the left ulnar nerve and accompanying structures is ordered to assess for a disorder involving the ulnar nerve.

Percentage of Survey Respondents who found Vignette to be Typical: 80%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review available clinical data, including x-rays, MRI, and/or EMG if available. Consider the potential anatomic lesions that could cause the clinical manifestations and consider the questions posed by the referring physician. The nerve course and surrounding structures to be studied are considered.

Description of Intra-Service Work: The physician takes a focused history and physical examination, positions the patient for the procedure and instructs them to report any pain or paresthesiae felt during the examination from the ultrasound probe as this may reflect nerve entrapment. A high frequency linear transducer is used, and the nerve of interest is first identified distally, inspecting the nerve itself and any pertinent surrounding structures such as a ganglion cyst, anomalous muscle, bone spur, or tenosynovitis. The nerve is then followed proximally, throughout the entire length of the limb, making measurements of cross-sectional area and quantifying vascularity, mobility and echogenicity of the nerve at potential sites of entrapment, as well as taking long axis views to evaluate for changes in morphology. For the ulnar nerve, this would include Guyon's canal in the wrist, the cubital tunnel distal to the elbow, the retrocondylar groove at the elbow, the upper arm (ligament of Struthers), and the axilla. At areas of enlargement, the underlying joint is assessed for osteophytes or effusions, and the affected muscles are examined for signs of denervation (in the case of the ulnar nerve, atrophy and increased echogenicity of the first dorsal interosseous, abductor digiti minimi, flexor digitorum profundus and flexor carpi ulnaris muscles), with comparison to unaffected muscles as clinically indicated. Comparison of suspected abnormalities will also be made to the contralateral side. Record cine loops of any identified areas of entrapment or pathology. Dictate a report for the patient's chart.

Description of Post-Service Work: Discuss and explain findings to the patient as needed. Review and sign final report. Communicate findings to referring clinician as needed.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2022		
Presenter(s):	Andy Moriarity, MD; Carlo Milani, MD; David Reece, DO; Andrea Boon, MD; Marianna V. Spanaki, MD, PhD		
Specialty Society(ies):	ACR, AAN, AANEM, AAPM&R		
CPT Code:	76883		
Sample Size:	4839	**Resp N:**	66
Description of Sample:	The ACR surveyed a random sample of 1000 individuals from its membership as well as a random subset of 1000 members who indicated that they perform ultrasound, musculoskeletal, and neuro imaging procedures (total of 2000). The AAN surveyed a sample of 1000 current US members from the Neuromuscular Section and Clinical Neurophysiology Sections. The AANEM surveyed a random sample of 811 current US members, and 83 current US members with neuromuscular subspecialty designation (total of 894). The AAPM&R surveyed a random sample of 945 members who selected musculoskeletal medicine as an area of interest as well as our sports medicine community and our neuromuscular medicine community. The ACRh surveyed a random sample of 1000 current US members. The APMA surveyed a random sample of 1500 current US members.		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	3.00	**22.00**	58.00	600.00
Survey RVW:	0.49	1.21	**1.80**	2.58	4.04
Pre-Service Evaluation Time:			**7.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	7.00	15.00	**25.00**	30.00	70.00

Immediate Post Service-Time:	**7.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	76883	**Recommended Physician Work RVU: 1.21**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**7.00**	**0.00**	**7.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**25.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)
XXX Global Code

	Specialty Recommended Post-Service Time	Specialty Recommended Post Time Package	Adjustments/Recommended Post-Service Time
Immediate Post Service-Time:	**7.00**	**0.00**	**7.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99215	XXX	2.80	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
95861	XXX	1.54	**RUC Time**

CPT Descriptor Needle electromyography; 2 extremities with or without related paraspinal areas

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95805	XXX	1.20	**RUC Time**	3,017

CPT Descriptor 1 Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95861	XXX	1.54	**RUC Time**	44,204

CPT Descriptor 2 Needle electromyography; 2 extremities with or without related paraspinal areas

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by percent distribution) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 11 **% of respondents:** 16.6 **%**

Number of respondents who choose 2nd Key Reference Code: 8 **% of respondents:** 12.1 **%**

TIME ESTIMATES (Median)

	CPT Code: 76883	Top Key Reference CPT Code: 99215	2nd Key Reference CPT Code: **95861**
Median Pre-Service Time	7.00	10.00	10.00
Median Intra-Service Time	25.00	45.00	29.00
Median Immediate Post-service Time	7.00	15.00	10.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**39.00**	**70.00**	**49.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Survey Code Compared to Top Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	9%	55%	36%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	0%	55%	45%

• Urgency of medical decision making	

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	0%	100%
Physical effort required	0%	9%	91%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	0%	36%	64%

Survey Code Compared to 2nd Key Reference Code	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall intensity/complexity	0%	0%	63%	25%	13%

Mental Effort and Judgment	Less	Identical	More
• The number of possible diagnosis and/or the number of management options that must be considered • The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed • Urgency of medical decision making	0%	88%	13%

Technical Skill/Physical Effort	Less	Identical	More
Technical skill required	0%	50%	50%
Physical effort required	0%	75%	25%

Psychological Stress	Less	Identical	More
• The risk of significant complications, morbidity and/or mortality • Outcome depends on the skill and judgment of physician • Estimated risk of malpractice suit with poor outcome	38%	38%	25%

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

Background

The Neuromuscular Ultrasound code family consists of the following three codes:

- CPT code 76881: *Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation*
- CPT code 76882: *Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation*
- CPT code 76883: *Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity*

The Neuromuscular Ultrasound code family was brought forth to the RUC due to the addition of CPT code 76883, a code for reporting real-time, complete neuromuscular ultrasound of nerves and accompanying structures throughout their anatomic course, per extremity. This code will examine a nerve throughout its length, within one extremity, including evaluation of multiple areas for potential nerve compression, measurement of cross-sectional areas, evaluation of echogenicity, vascularity, mobility including dynamic maneuvers when indicated, evaluate for any associated muscular denervation, with comparison to unaffected muscles or nerves within that extremity as needed. Additionally, the CPT Panel revised the CPT descriptor of code 76882 to include focal evaluation of a nerve. Code 76883 also requires permanently recorded images and cine loop, and a written report containing a description of each of the elements evaluated.

CPT code 76881 represents a complete evaluation of a specific joint in an extremity. Code 76881 requires ultrasound examination of all the following joint elements: joint space (e.g., effusion), peri-articular soft-tissue structures that surround the joint (i.e., muscles, tendons, other soft-tissue structures), and any identifiable abnormality. In some circumstances, additional evaluations such as dynamic imaging or stress maneuvers may be performed as part of the complete evaluation. Code 76881 also requires permanently recorded images and a written report containing a description of each of the required elements or reason that an element(s) could not be visualized (e.g., absent secondary to surgery or trauma).

CPT code 76882 represents a limited evaluation of a joint or focal evaluation of a structure(s) in an extremity other than a joint (e.g., soft-tissue mass, fluid collection, or nerve[s]). This evaluation includes assessment of a specific anatomic structure(s) (e.g., joint space only [effusion] or tendon, muscle, and/or other soft-tissue structure[s] that surround the joint) that does not assess all the elements included in 76881 although does include all surrounding anatomy and any associated pathology or contralateral comparison as indicated. Code 76882 also requires permanently recorded images and a written report containing a description of each of the elements evaluated.

The American College of Radiology (ACR), American Academy of Neurology (AAN), American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM), American Academy of Physical Medicine and Rehabilitation (AAPM&R), American College of Rheumatology (ACRh), and American Podiatric Medical Association (APMA) convened an expert panel familiar with these services to provide value and time recommendations for the January 2022 RUC meeting.

Survey Process

The ACR, AAN, AANEM, and AAPM&R surveyed for CPT codes 76881, 76882 and 76883. The ACRh and APMA surveyed only CPT codes 76881 and 76882.

The ACR surveyed a random sample of 1000 individuals from its membership as well as a random subset of 1000 members who indicated that they perform ultrasound, musculoskeletal, and neuro imaging procedures (total of 2000). The AAN surveyed a sample of 1000 current US members from the Neuromuscular Section

and Clinical Neurophysiology Sections. The AANEM surveyed a random sample of 811 current US members, and 83 current US members with neuromuscular subspecialty designation (total of 894). The AAPM&R surveyed a random sample of 945 members who selected musculoskeletal medicine as an area of interest as well as our sports medicine community and our neuromuscular medicine community.

Work RVU and Time Recommendations
The expert panel recommends the survey 25th percentile value at 1.21 work RVU and survey median times of 7 minutes pre-service, 25 minutes intra-service, and 7 minutes post-service.

Key Reference Services
Our recommended work RVU of 1.21 compares favorably to the most commonly chosen key reference service, CPT code 99215 *(Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.).* CPT code 76883 has a survey median time of 25 minutes intra service which appropriately reflects the lower complexity of the service compared to key reference code 99215, which has a substantially higher intra service time of 45 minutes. Additionally, the work RVU of the key reference code is appropriately higher than that of the surveyed code at 2.80 work RVU.

The second key reference service code, CPT code 95861 *(Needle electromyography; 2 extremities with or without related paraspinal areas),* supports the recommendation favorably. CPT codes 76883 and 95861 has slightly higher intra service, pre service and post service times than CPT code 76883 with similar intensity, and the work RVU of the reference code is appropriately higher than that of the surveyed code at 1.54 work RVU (compared to 1.21 work RVU for 76883).

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76883	**Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity**	**1.21**	**7**	**25**	**7**	**39**	**0.036**	**0.031**
95861	Needle electromyography; 2 extremities with or without related paraspinal areas	1.54	10	29	10	49	0.038	0.031
99215	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.	2.80	10	45	15	70	0.050	0.040

MPC Codes
Our recommendation for surveyed code 76883 compares favorably to the MPC codes depicted in the table below. MPC code 95805 *(Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness)* has 5 minutes

less intra service time and lower intensity than the surveyed code and an almost identical work RVU. We therefore feel the recommended 25th percentile work RVU for 76883 is appropriate.

The second MPC code, 95861 *(Needle electromyography; 2 extremities with or without related paraspinal areas),* is also commonly reported by the anticipated dominant specialty and was the key reference service selected by survey respondents. Code 95861 supports the surveyed code, as it has a near identical IWPUT and WPUT. 95861 has 10 more minutes of total time and an appropriately higher work RVU.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness	1.20	15	20	15	50	0.026	0.024
76883	**Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity**	**1.21**	**7**	**25**	**7**	**39**	**0.036**	**0.031**
95861	Needle electromyography; 2 extremities with or without related paraspinal areas	1.54	10	29	10	49	0.038	0.031

Neuromuscular Ultrasound Family

The recommendations maintain relatively both among the neuromuscular ultrasound family, as well as the larger family of ultrasound imaging codes as indicated by the top key reference services. These relationships are summarized in the following table demonstrating the consistency of the IWPUT measurements across the range of codes at the recommended values ascending from the limited code to the newest, most complex 76883 code. The table below is sorted by IWPUT for reference.

CPT Code	Descriptor	Work RVU	Pre	Intra	Post	Total Time	IWPUT	WPUT
76882	**Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation**	**0.69**	**5**	**15**	**5**	**25**	**0.031**	**0.028**
76881	**Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation**	**0.90**	**5**	**20**	**5**	**30**	**0.034**	**0.030**
76883	**Ultrasound, nerve(s) and**	**1.21**	**7**	**25**	**7**	**39**	**0.036**	**0.031**

	accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity							
76705	Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)	0.59	5	8	5	18	0.046	0.033
76700	Ultrasound, abdominal, real time with image documentation; complete	0.81	5	11	5	21	0.053	0.039

Summary
In summary, our expert panel recommends the survey 25th percentile value at 1.21 work RVU and survey median times of 7 minutes pre-service, 25 minutes intra-service, and 7 minutes post-service. The recommended value compares favorably with the key reference services, 95861 and 99215, and maintains relativity within the RBRVS.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 76881

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Neurology How often? Commonly

Specialty Physical Medicine and Rehabilitation How often? Commonly

Specialty Diagnostic Radiology How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period? 71400
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. This service described by CPT code 76883 is estimated to be provided 71400 times nationally in a one-year period. The national estimate is the product of the estimated Medicare patient utilization (seen below) multiplied by 3.

Specialty Neurology Frequency 49980 Percentage 70.00 %

Specialty Physical Medicine and Rahabilitation Frequency 17850 Percentage 25.00 %

Specialty Diagnostic Radiology Frequency 3570 Percentage 5.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 23,800 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. The service described by CPT code 76883 is estimated to be provided 23800 times in a one-year period to Medicare patients. This estimate is the sum of 5% of CPT code 76881's Medicare utilization and 5% of CPT code 76882's Medicare's utilization. This estimation formula was derived from the Neuromuscular Ultrasound CCP.

Specialty Neurology Frequency 17850 Percentage 75.00 %

Specialty Physical Medicine & Rebilitation Frequency 5950 Percentage 25.00 %

Specialty Diagnostic Radiology Frequency 1190 Percentage 5.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Imaging

BETOS Sub-classification:
Echography/ultrasonography

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 95860

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

SS Rec Summary

ISSUE: Neuromuscular Ultrasound
TAB: 11

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	76700	XXX	Ultrasound, abdominal, real time with image documentation; complete	Oct-13	19	0.053	0.039			0.81			21	5					11			5					
2nd REF	99214	XXX	Office or other outpatient visit for the evaluation and management of an established patient, which requires a	Apr-19	11	0.051	0.041			1.92			47	7					30			10					
CURRENT	76881	XXX	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with	Apr-10		0.027	0.025			0.63			25	5					15			5					
SVY - Combined	76881	XXX	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with		88	0.055	0.041	0.48	0.90	1.43	2.03	4.50	35	7			0	15	20	30	70	8	0	7	30	98	1500
REC	76881	XXX	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with			0.034	0.030			0.90			30	5					20			5					

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	76705	XXX	Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant,	Oct-13	21	0.046	0.033			0.59			18	5					8			5					
2nd REF	99213	XXX	Office or other outpatient visit for the evaluation and management of an established patient, which requires a	Apr-19	14	0.054	0.043			1.30			30	5					20			5					
CURRENT	76882	XXX	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-	Apr-10		0.024	0.023			0.49			21	5					11			5					
SVY - Combined	76882	XXX	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-		100	0.050	0.038	0.30	0.69	1.00	1.51	4.00	26	5			0	10	15	20	60	6	0	10	40	100	600
REC	76882	XXX	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-			0.031	0.028			0.69			25	5					15			5					

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
1st REF	99215	XXX	Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and	Apr-19	11	0.050	0.040			2.80			70	10					45			15					
2nd REF	95861	XXX	Needle electromyography; 2 extremities with or without related paraspinal areas	Apr-12	8	0.038	0.031			1.54			49	10					29			10					
CURRENT	76881	XXX	Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image	Apr-10		0.027	0.025			0.63			25	5					15			5					
SVY - Combined	76883	XXX	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one		66	0.059	0.046	0.49	1.21	1.80	2.58	4.04	39	7			7	15	25	30	70	7	0	3	22	58	600
REC	76883	XXX	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one			0.036	0.031			1.21			39	7					25			7					

NONFACILITY DIRECT PE INPUTS **CPT CODE(S):76881, 76882, 76883**

SPECIALTY SOCIETY(IES): ACR, AAN, AANEM, AAPM&R, ACRh, APMA

PRESENTER(S):

Andy Moriarity, MD; Carlo Milani, MD; David Reece, DO; Andrea Boon, MD; Fredrica Smith, MD; Marianna V. Spanaki, MD, PhD; Brooke Bisbee, DPM

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: January 2022

Surveyed CPT Code	**76881**	**Global Period: XXX**
CPT Code Descriptor	Ultrasound, complete joint (ie, joint space and periarticular soft-tissue structures), real-time with image documentation	
Typical Patient/Service	A 45-year-old male presents with sore, swollen ankle, which developed gradually over a period of several weeks. He is an avid basketball player but can no longer play because of the pain. Plain radiographs were negative for fracture. The decision is made to perform a diagnostic ultrasound examination.	

Surveyed CPT Code	**76882**	**Global Period: XXX**
CPT Code Descriptor	Ultrasound, limited, joint or focal evaluation of other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft tissue mass[es]), real-time with image documentation (Do not report 76882 in conjunction with 76883)	
Typical Patient/Service	A 36-year-old male presents with an acute injury to his Achilles tendon, sustained while playing soccer. No open wounds are noted. X-rays are negative for osseous pathology. Mild erythema and edema are noted at the posterior lower leg. Ultrasound is performed to evaluate the Achilles tendon.	

Surveyed CPT Code	**76883**	**Global Period: XXX**
CPT Code Descriptor	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity	
Typical Patient/Service	A 45-year-old female presents with progressive atrophy and weakness of the intrinsic muscles on the left hand, associated with altered sensation on the medial aspect of the hand. An ultrasound of the left ulnar nerve and accompanying structures is ordered to assess for a disorder involving the ulnar nerve.	

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The American College of Radiology, American Academy of Neurology, American Association of Neuromuscular and Electrodiagnostic Medicine, American Academy of Physical Medicine and Rehabilitation, American College of Rheumatology, and American Podiatric Medical Association convened a panel that included a number of experts familiar with these services to evaluate the direct practice expense inputs for neuromuscular ultrasound.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for

the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

For our reference codes, the societies are providing the current codes for CPT codes 76881 and 76882. We are also providing CPT code 76706 as our reference code to CPT code 76883 because it is a recently valued ultrasound code with a similar amount of expected clinical staff and physician time to the newly created code.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

CPT code 76881 is typically reported with an E/M service at 58.9%.
CPT code 76881 is typically reported with an E/M service in the nonfacility at 66.3%.

CPT code 76882 is typically reported with an E/M service at 26.9%.
CPT code 76882 is typically reported with an E/M service in the nonfacility at 53.2%.

For CPT code 76883, the societies do not expect 76883 to be billed with an E/M based on expert panel consensus.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

According to the RUC database in the non-facility (Global & 26), Rheumatology is the dominant provider at 27.3% for 76881. Podiatry is the dominant provider at 28.2% for 76882.

For 76883, the expert panel believes that the dominant provider will be Neurology.

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

For CPT code 76881, we are requesting an increase over the aggregate current cost for clinical activities pertaining to the addition of minutes for CA011 (Provide education/obtain consent) and CA014 (Confirm order, protocol exam). These values are standard for ultrasound codes. Additionally, we are allocating 20 minutes for both EF031 and EQ250 based on the recommended physician work intra service time of 20 minutes as these equipment items remain in the room when the patient is being cared for during the intra service period.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If

the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

N/A.

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

N/A.

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A.

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

No time is currently allocated to "obtain vital signs". The specialties are recommending 2 minutes of this clinical activity for CPT code 76883 for height and weight, which can impact nerve size.

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

• Confirm availability of prior images – Staff ensures that prior imaging is available prior to starting the examination. • Review clinical history and questionnaire – Staff ensures that all needed patient information is available prior to the examination.

    b. Service period (includes pre, intra and post):

• Greet patient, provide gowning, ensure appropriate medical records are available. • Provide education and obtain consent for the examination – Staff discusses the examination with the patient, answers any questions, and confirms consent. • Prepare room, equipment, and supplies – Staff ensures that all needed supplies are available and organized. • Confirm order and protocol exam. • Initial positioning and monitoring of patient – Staff positions the patient for optimal technique and comfort. • Clean room/equipment by clinical staff – after the patient has left the room. • Technologist QC's images in PACS, checking for al images, reformats, and dose page.

- Review examination with interpreting provider. Scan documents into PACS. Complete exam in RIS system – These steps ensure that the examination can be reviewed and completed by the physician.

c. Post-service period:

N/A.

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

- The clinical staff works directly with the physician during the entire physician scanning.
- Position patient on the exam table. Apply ultrasound gel. Set appropriate scan parameters on the ultrasound machine.
- Reposition patient and assist in adjusting scanning parameters throughout the examination as needed.
- Clean gel from patient's skin.
- Clean the room and equipment

Note: the physician typically performs the ultrasound scanning for CPT codes 76881, 76882, and 76883.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

N/A.

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

N/A.

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

N/A.

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment?

16. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment?

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

N/A.

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

N/A.

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

N/A.

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

N/A.

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

N/A.

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

N/A.

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time)*. If you have selected "other formula" for any of the equipment please explain here:

• **Table, power (EF031) =** Default formula • **Ultrasound unit, portable (EQ250)** = Highly technical formula Note: For codes 76881, 76882, and 76883, we did not use equipment formulas for equipment items EF031 and EQ250. We allocated minutes to EF031 and EQ250 as both of those items remain in the room and are not used for other patients during the entire intraservice time.

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:
    N/A.

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)
NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

	A	B	D	E	F	I	K	O	Q	S	V
1	**RUC Practice Expense Spreadsheet**					**CURRENT**	**RECOMMENDED**	**CURRENT**	**RECOMMENDED**	**REFERENCE CODE**	**RECOMMENDED**
2						**76881**	**76881**	**76882**	**76882**	**76706**	**76883**
3		***RUC Collaboration Website***				Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation **(January 2017)**	Ultrasound, complete joint (ie, joint space and peri-articular soft-tissue structures), real-time with image documentation **(January 2022)**	Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation **(January 2017)**	Ultrasound, limited, joint or other nonvascular extremity structure(s) (eg, joint space, peri-articular tendon[s], muscle[s], nerve[s], other soft-tissue structure[s], or soft-tissue mass[es]), real-time with image documentation **(January 2022)**	Ultrasound, abdominal aorta, real time with image documentation, screening study for abdominal aortic aneurysm (AAA) **(October 2015)**	Ultrasound, nerve(s) and accompanying structures throughout their entire anatomic course in one extremity, comprehensive, including real-time cine imaging with image documentation, per extremity **(January 2022)**
4	**Clinical Activity Code**	**Meeting Date: January 2022 Revision Date (if applicable): Tab: Neuromuscular Ultrasound Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**						
5		**LOCATION**				**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**				**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 7.11**	**$ 9.80**	**$ 29.08**	**$ 8.32**	**$ 63.73**	**$ 13.25**
20		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 3.14**	**$ 3.71**	**$ 20.70**	**$ 3.71**	**$ 20.45**	**$ 5.13**
21		**PRE-SERVICE PERIOD**									
22		**Start: Following visit when decision for surgery/procedure made**									
23	CA001	Complete pre-service diagnostic and referral (coordinate pre-surgery services (including test results)									
24	CA002										
25	CA003	Schedule space and equipment in facility									
26	CA004	Provide pre-service education/obtain consent									
27	CA005	Complete pre-procedure phone calls and prescription									
28	CA006	Confirm availability of prior images/studies	L026A	Medical/Technical Assistant	0.285	2	2		2		2
29	CA006	Confirm availability of prior images/studies	L051B	RN/Diagnostic	0.575			2			
30	CA006	Confirm availability of prior images/studies	L050B	Diagnostic Medical	0.568					2	
31	CA007	Review patient clinical extant information and questionnaire	L026A	Medical/Technical Assistant	0.285	2	1		1		1
32	CA007	Review patient clinical extant information and questionnaire	L051B	RN/Diagnostic Medical Sonographer	0.575			2			
33	CA007	Review patient clinical extant information and questionnaire	L050B	Diagnostic Medical Sonographer	0.568					2	
34	CA008	Perform regulatory mandated quality assurance activity (pre-service)									
41		**End: When patient enters office/facility for surgery/procedure**									
42		**SERVICE PERIOD**									
43		**Start: When patient enters office/facility for surgery/procedure:**									
44		**Pre-Service (of service period)**									
45	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L051B	RN/Diagnostic Medical Sonographer	0.575			3			
46	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L050B	Diagnostic Medical Sonographer	0.568					3	
47	CA009	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Medical/Technical Assistant	0.285						3
48	CA010	Obtain vital signs	L026A	Medical/Technical Assistant	0.285						2
49	CA011	Provide education/obtain consent	L026A	Medical/Technical	0.285		2		2		2
50	CA011	Provide education/obtain consent	L051B	RN/Diagnostic	0.575			2			
51	CA011	Provide education/obtain consent	L050B	Diagnostic Medical	0.568					2	
52	CA012	Review requisition, assess for special needs									
53	CA013	Prepare room, equipment and supplies	L026A	Medical/Technical	0.285	2	2		2		2
54	CA013	Prepare room, equipment and supplies	L051B	RN/Diagnostic	0.575			2			
55	CA013	Prepare room, equipment and supplies	L050B	Diagnostic Medical	0.568					2	
56	CA014	Confirm order, protocol exam	L026A	Medical/Technical Assistant	0.285		1		1		1
57	CA014	Confirm order, protocol exam	L050B	Diagnostic Medical Sonographer	0.568						
58	CA015	Setup scope (nonfacility setting only)									
59	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L026A	Medical/Technical Assistant	0.285	2	2		2		2
60	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L051B	RN/Diagnostic	0.575			2			
61	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L050B	Diagnostic Medical	0.568					2	
62	CA017	Sedate/apply anesthesia									
69		**Intra-service (of service period)**									
70	CA018	Assist physician or other qualified healthcare professional---directly related to physician work time (100%)	L051B	RN/Diagnostic Medical Sonographer	0.575			15			
71	CA018	Assist physician or other qualified healthcare professional---directly related to physician work time (100%)	L050B	Diagnostic Medical Sonographer	0.568					15	
72	CA019	Assist physician or other qualified healthcare professional---directly related to physician work									
73	CA020	Assist physician or other qualified healthcare professional---directly related to physician work									
74	CA021	Perform procedure/service---NOT directly related to physician work time	L050B	Diagnostic Medical	0.568						

	A	B	D	E	F	I	K	O	Q	S	V
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4	**Clinical Activity Code**	**Meeting Date: January 2022 Revision Date (if applicable): Tab: Neuromuscular Ultrasound Specialty: ACR, AAN, AANEM, AAPM&R, ACRh, APMA**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**						
5		**LOCATION**				**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**				**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 7.11**	**$ 9.80**	**$ 29.08**	**$ 8.32**	**$ 63.73**	**$ 13.25**
81		**Post-Service (of service period)**									
82	CA022	~~Monitor patient following procedure/service, multitask~~									
83	CA023	~~Monitor patient following procedure/service, no multitasking~~									
84	CA024	Clean room/equipment by clinical staff	L026A	Medical/Technical	0.285	3	3		3		3
85	CA024	Clean room/equipment by clinical staff	L051B	RN/Diagnostic	0.575			3			
86	CA024	Clean room/equipment by clinical staff	L050B	Diagnostic Medical Sonographer	0.568					3	
92	CA030	~~Technologist QC's images in PACS, checking for all images, reformats, and dose page~~	L051B	RN/Diagnostic	0.575			2			
93	CA030	Technologist QC's images in PACS, checking for all images, reformats, and dose page	L050B	Diagnostic Medical Sonographer	0.568					2	
94	CA031	Review examination with interpreting MD/DO	L051B	RN/Diagnostic	0.575			2			
95	CA031	Review examination with interpreting MD/DO	L050B	Diagnostic Medical Sonographer	0.568					2	
97	CA032	~~Scan exam documents into PACS: Complete exam in RIS system to populate images into work queue~~	L051B	RN/Diagnostic	0.575			1			
98	CA032	Scan exam documents into PACS: Complete exam in RIS system to populate images into work queue	L050B	Diagnostic Medical Sonographer	0.568					1	
109		**End: Patient leaves office/facility**									
110		**POST-SERVICE PERIOD**									
111		**Start: Patient leaves office/facility**									
127		**End: with last office visit before end of global**									

	A	B	D	E	F	I	K	O	Q	S	V
1	**RUC Practice Expense Spreadsheet**					**CURRENT**	**RECOMMENDED**	**CURRENT**	**RECOMMENDED**	**REFERENCE CODE**	**RECOMMENDED**
2						**76881**	**76881**	**76882**	**76882**	**76706**	**76883**
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5		**LOCATION**				**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**	**Non Fac**
6		**GLOBAL PERIOD**				**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 7.11**	**$ 9.80**	**$ 29.08**	**$ 8.32**	**$ 63.73**	**$ 13.25**
128	**Supply**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**							
129		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 2.74**	**$ 2.56**	**$ 2.14**	**$ 1.96**	**$ 4.47**	**$ 3.70**
130	SB006	drape, non-sterile, sheet 40in x 60in	0.13	item						1	1
131	SB022	gloves, non-sterile	0.3	pair		1	1	1	1	2	1
132	SB026	gown, patient	0.59	item						1	1
133	SB036	paper, exam table	0.014	foot						7	7
134	SB037	pillow case	0.47	item						1	
135	SB044	underpad 2ft x 3ft (Chux)	0.32	item						1	1
136	SJ062	ultrasound transmission gel	0.03	ml		60	60	40	40	60	60
137	SM012	disinfectant spray (Transeptic)	0.05	ml		10		10			
138	SM013	disinfectant, surface (Envirocide, Sanizide)	0.18	oz			1		1	1	1
139	SM021	sanitizing cloth-wipe (patient)	0.07	item		2	1	2	1	1	1
140	SM022	sanitizing cloth-wipe (surface, instruments, equipment)	0.07	item			3		3	3	3
146	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**						
147		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 1.24**	**$ 3.54**	**$ 6.24**	**$ 2.65**	**$ 38.81**	**$ 4.42**
148	ED050	Technologist PACS workstation	5557	PACS	0.022			32		32	
149	ED053	Professional PACS Workstation	15468	Other Formula	0.0613			14		13	
150	EF031	table, power	5907	Other Formula	0.0157	7	20		15		25
151	EL015	room, ultrasound, general	4E+05	Highly Technical	1.5546					24	
152	EQ250	ultrasound unit, portable	41613	Highly Technical	0.1613	7	20	29	15		25

AMA/Specialty Society RVS Update Committee Summary of Recommendations
Contractor Priced High Volume*

January 2023

Remote Interrogation Device Evaluation – Cardiovascular – Tab 20

In January 2017, the RUC reviewed the work and practice expense (PE) for codes 93297 and 93298 as part of the Cardiac Electrophysiology Device Monitoring Services code family. Subsequently, based on issues identified in the Proposed Rule for CY 2018, the RUC again reviewed the direct practice expenses only for 93297 and 93298 at the October 2018 RUC meeting. Additionally for CY2020, CMS created and implemented practice expense only code G2066 *Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results* as contractor-priced rather than adopt the direct practice expense inputs put forward in a separate CPT code, 93299 *Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results*. In February 2019, the CPT Editorial Panel deleted CPT code 93299 (effective CPT 2021), as it was no longer necessary to have a separate code for practice expense once CPT codes 93297 and 93298 were allocated direct practice expense inputs in 2020.

In April 2022, the Relativity Assessment Workgroup (RAW) identified G2066 as a contractor-priced service with 2020 Medicare utilization over 10,000. In September 2022, the specialty societies requested that the RAW reaffirm its 2018 approved PE inputs for 93299 and recommend that they be used to establish national pricing for G2066. However, CPT code 93299 was deleted in 2021. Therefore, code G2066 was referred to the RUC for review at the January 2023 RUC meeting.

Affirmation of RUC Recommendations
In January 2023, the RUC recommends affirming the January 2017 RUC recommendations for CPT codes 93297 *Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional* (work RVU = 0.52) and 93298 *Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor ¬system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional* (work RVU = 0.52), previously submitted for the *CPT 2018* cycle.

Practice Expense
The RUC reviewed the direct practice expense inputs for CPT codes 93297 and 93298 and agreed with the specialty societies to change the clinical staff allocation for CA021 *Perform procedure/service---NOT directly related to physician work time* from L037A *Electrodiagnostic Technologist* to L038B *Cardiovascular Technician*. The PE Subcommittee discussed that since these codes are reported monthly, the 11 minutes for education/re-education should be reduced. The PE Subcommittee reduced the education/re-education from 11 minutes to 4 minutes, therefore

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totaling 69 minutes for CPT codes 93298 and G2066 and 33 minutes for CPT code 93297 for CA021 *Perform procedure/service---NOT directly related to physician work time*. Consequently, the equipment time was also reduced by 7 minutes for EQ198 *pacemaker follow-up system (incl software and hardware) (Paceart)*. The RUC recommends the same direct practice expense inputs for G2066 as CPT code 93298 since they are the same type of monitoring. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

New Technology/New Services
In October 2018, CPT codes 93297 and 93298 were reviewed and placed on the new technology/new services list for review by the Relativity Assessment Workgroup in April 2024. CMS did not accept the practice expense for these services and instead created G2066 to report the practice expense associated with these services. **Since the RUC affirmed the work RVUs and recommended direct PE inputs for codes 93297, 93298 and G2066 at this meeting, the RUC requests that these services be placed back on the new technology/new services list to assess the work and practice expense in 3 years (April 2027).**

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
G2066	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX	0.00 (PE Only)
(f)93297	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional (For heart rhythm derived data elements, use 93295) (Do not report 93297 in conjunction with 93264, 93290, 93298, 99091, 99454) (Report 93297 only once per 30 days)	XXX	0.52 (Affirmed January 2017 RUC Recommendation)
(f)93298	subcutaneous cardiac rhythm monitor system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional (Do not report 93298 in conjunction with 33285, 93291, 93297, 99091, 99454) (Report 93298 only once per 30 days) (For remote monitoring of an implantable wireless pulmonary artery pressure sensor, use 93264)	XXX	0.52 (Affirmed January 2017 RUC Recommendation)

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December 12, 2022

Ezequiel Silva III, M.D., Chair
AMA Relative Value Update Committee
AMA Plaza
330 N. Wabash Ave., Suite 39300
Chicago, IL 60611-5885

Dear Dr. Silva,

The Heart Rhythm Society (HRS) and the American College of Cardiology (ACC) are requesting that the American Medical Association Relative Value Update Committee (RUC) reaffirm the previously approved RUC values for CPT codes 93297 and 93298 at its upcoming January 2023 meeting. At the September 2022 RUC meeting, an Action Plan was submitted by our groups in response to a RAW request regarding high utilization of CMS G codes including G2066. The RAW agreed that a request for reaffirmation be forwarded for further consideration.

These codes were previously reviewed, and recommendations were determined at the October 2018 RUC meeting. Following those proceedings, CMS opted for CY2020 rulemaking to create and implement code G2066 as contractor-priced rather than adopt the direct practice expense pricing put forward in a separate code, 93299, that was deleted for 2020. They pointed to concerns with the recommendations for 93297 and 93298. Previously, the RAW identified now deleted 93299 as a CMS/Other code with high volume utilization. Our societies took the above action to delete code 93299 to eliminate coding confusion when the RUC developed direct PE input recommendations for 93297 and 93298 that rendered 93299 redundant.

Remote monitoring allows physicians to diagnose complex, abnormal heart rhythms which provides the ability to prevent strokes and/or fatalities, and to identify situations where medical treatment is no longer working. Prior to the creation of the G-code, the use of this service saw widespread adoption. As pointed out by RUC, it is highly unusual to have a service with such significant volume be carrier priced.

Code	2017	2018	2019	2020
93299	468,596	646,311	790,445	N/A
G2066	N/A	N/A	N/A	938,880

93299 was a technical code meant to capture the PE for remote monitoring of implantable cardiac monitors (93297) and implantable loop recorders (93298). Both are 30-day codes. But in the decade since these codes were created, we now see a bifurcation in the way each is used and the amount of PE each requires. In 2018, our societies presented recommendations to create direct PE inputs for both 30-day remote interrogation codes. We recommended that the same inputs for 93298 be applied to G2066.

Activity	93298/93299	93297
Automated alert transmissions	17	
Technician requested transmissions	11	
Patient-initiated transmissions	19	11
Monthly report	14	14
Education/re-education	11	11
Troubleshooting	4	4
Sum	**76**	**40**

Since CMS moved to carrier-pricing for the service represented by G2066, there has been significant ranges of payments for this service across the country. Most recently, based on misinformation and a lack of understanding of this service, some carriers have reduced payments significantly below what was previously approved by the RUC. This is the outcome that CMS feared might happen when it rejected the original RUC recommendations for 2020.

HRS and ACC believe the previous non-facility inputs gathered by our organizations and approved by the RUC are appropriate and should be used to determine practice expense for these services. The prior recommendations are presented with updated materials on current PE forms in Tab 20. Because G2066 currently is contractor priced, we also offer recommendations for that code, even though the goal is to see that code deleted with reliance on direct PE inputs for 93297 and 93298.

Thank you for your consideration of this important issue. We look forward to discussion of this topic at the Practice Expense Subcommittee.

Sincerely,

Mark Schoenfeld, MD, HRS RUC Advisor

Richard C. Wright, ACC RUC Advisor

SS Rec Summary

ISSUE: Remote Interrogation Device Evaluation

TAB: 20

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
CURRENT	93298	XXX	Interrogation device evaluation(s	2018	64	0.042	0.031			0.52			17	5					7			5
OCT 2018 RUC Rec	93298	XXX	Interrogation device evaluation(s	2018	64	0.042	0.031			0.52			17	5					7			5
REC	93298	XXX	Interrogation device evaluation(s	AFFIRM		0.042	0.031			0.52			17	5					7			5

Source	CPT	Global	DESC	RUC Review Year	Resp	IWPUT	Work Per Unit Time	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
CURRENT	93297	XXX	Interrogation device evaluation(s	2018	56	0.049	0.033			0.52			16	5					6			5
OCT 2018 RUC Rec	93297	XXX	Interrogation device evaluation(s	2018	56	0.049	0.033			0.52			16	5					6			5
REC	93297	XXX	Interrogation device evaluation(s	AFFIRM		0.049	0.033			0.52			16	5					6			5

NONFACILITY DIRECT PE INPUTS **CPT CODE(S):_93298, 93297, G2066**
SPECIALTY SOCIETY(IES):_ACC, HRS_
PRESENTER(S):_Dr. Richard Wright, Dr. Ed Tuohy, Dr. Mark Schoenfeld_

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

Meeting Date: 01/2023

CPT Code	Long Descriptor	Global Period
93298	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm monitor system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX
93927	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX
G2066	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system, implantable loop recorder system, or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX

Vignette(s) (*vignette required even if PE only code(s)***):**

CPT Code	Vignette
93298	A 41-year-old patient with unexplained recurrent traumatic syncope underwent implantable loop recorder (ILR) placement 1 month ago. The device is sensing the intrinsic rhythm. The patient is followed by wireless remote monitoring, which constantly checks both device function and arrhythmias and sends alerts for any issues, which are reviewed. (Note: This service includes all evaluations received within a 30-day period.)
93927	A 71-year-old male with ischemic cardiomyopathy and symptomatic systolic congestive heart failure has undergone implantation of a physiologic monitor to aide in the titration of heart failure therapies. The patient is followed by wireless remote monitoring, which constantly checks both device function and arrhythmias. (Note: This includes all such services within a 30-day period.)
G2066	A 41-year-old patient with unexplained recurrent traumatic syncope underwent implantable loop recorder (ILR) placement 1 month ago. The device is sensing the intrinsic rhythm. The patient is followed by wireless remote monitoring, which constantly checks both device function and arrhythmias and sends alerts for any issues, which are reviewed. (Note: This service includes all evaluations received within a 30-day period.)

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

The ACC and HRS utilized a consensus panel process to develop recommended inputs. ACC and HRS are revisiting the inputs after the RAW executed a screen of carrier-priced codes with utilization over 10,000. We present previously reviewed inputs after support from the RAW to

reiterate to CMS that direct PE inputs should be implemented nationally for 93298. CPT previously agreed with this approach when it deleted predecessor code 93299 and the RUC previously approved inputs for 93297 and 93298.

For 2018, CMS opted to allow carrier pricing after hearing concerns from stakeholders that the RUC-recommended inputs would underpay in comparison. In 2018, to better scrutinize the inputs that were a straight crosswalk when these codes were reviewed in January 2017 as part of a large family, we engaged industry to obtain use log data to quantify and quality clinical staff time. CMS again declined to implement national pricing with direct inputs for 2020 and created a G code to describe the technical service of remote monitoring. The societies presenting recommendations based on those data again with some additional information to try to make this approach more compelling to CMS.

2. Please provide reference code(s) for comparison on your spreadsheet. If you are making recommendations on an existing code, you are required to use the current direct PE inputs as your reference code but may provide an additional reference code for support. Provide an explanation for the selection of reference code(s) here (NOTE: *For services reviewed prior to the implementation of clinical activity codes, detail is not provided in the RUC database, please contact Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org for PE spreadsheets for your reference codes*):

93298

93296 is the 90-day remote pacemaker and ICD device monitoring technical code that has process similarities to this service. In both services, a remote technologist is monitoring the patient for an extended period of time, executing different device checks or looking at alerts or troubleshooting throughout the reporting period.

93291 is also listed as a reference code. That is the related in office version of an implanted recorder interrogation service. We show it here for contrast, as it includes clinical staff time for normal in-office interactions. It also has a shorter time for clinical staff procedure work because the clinical staff for in-office visits are mainly interrogating and documenting information for the physician to interpret. In remote service 93298, clinical staff are doing more activities for a longer period of time, as described further below.

93297

93296 is the 90-day remote pacemaker and ICD device monitoring technical code that has process similarities to this service. In both services, a remote technologist is monitoring the patient for an extended period of time, executing different device checks or looking at alerts or troubleshooting throughout the reporting period.

93290 is also listed as a reference code. That is the related in office version of an implanted cardiac monitoring interrogation service. We show it here for contrast, as it includes clinical staff time for normal in-office interactions. It also has a shorter time for clinical staff procedure work because the clinical staff for in-office visits are mainly interrogating and documenting

information for the physician to interpret. In remote service 93297, clinical staff are doing more activities for a longer period of time, as described further below.

G2066
93296 is the 90-day remote pacemaker and ICD device monitoring technical code that has process similarities to this service. In both services, a remote technologist is monitoring the patient for an extended period of time, executing different device checks or looking at alerts or troubleshooting throughout the reporting period.
93291 is also listed as a reference code. That is the related in office version of an implanted recorder interrogation service. We show it here for contrast, as it includes clinical staff time for normal in-office interactions. It also has a shorter time for clinical staff procedure work because the clinical staff for in-office visits are mainly interrogating and documenting information for the physician to interpret. In remote service 93298, clinical staff are doing more activities for a longer period of time, as described further below.

3. Is this code(s) typically reported with an E/M service?
   Is this code(s) typically reported with the E/M service in the nonfacility?
   (Please see the *Billed Together* tab in the RUC Database)

93298, 93297, G2066 No, No.

4. What specialty is the dominant provider in the nonfacility?
   What percent of the time does the dominant provider provide the service(s) in the nonfacility?
   Is the dominant provider in the nonfacility different than for the global?
   (Please see the *Billed Together* tab in the RUC Database)

93298
Cardiology, Cardiac EP
45%, 44%

93297
Cardiology, Cardiac EP
48%, 40%

G2066
Cardiology, Cardiac EP
44%, 39%

5. If you are requesting an increase over the aggregate current cost for clinical activities, supplies and equipment, please provide compelling evidence. (Please see *PE compelling evidence guidelines* on Collaboration). Please explain if the increase can be entirely accounted for because of an increase in physician time:

The PE for 93298 and 93297 is currently contained in G2066, the CMS-created successor to 93299, that was originally meant to be a catch-all for both types of 30-day remote monitoring services. In the following decade, it has become clear that ICM and ILR services are different and

cannot be appropriately captured in a single technical code. We present recommendations for incorporating direct PE inputs to both 93297 and 93298 that align with each of those services. We have not been able to identify exactly why they were designed that way in 2007. It could have been to allow for the possibility that the technical work would be provided by vendors, but that is not how the service is being provided, with most billing coming from physician office practices. It would have to also be somewhat in parallel with other remote monitoring/diagnostic services, such as Holter monitors, to compartmentalize these aspects. Regardless, we thought it made sense to create PE inputs for each code directly since G2066/93299 is an awkward mix of technical work of two different services that both happen to have a 30-day interval.

93298 and 93297

We were able to obtain data from one manufacturer that sells the vast majority of ILR devices on the number of device-generated event notifications per month, the number of patient-generated manual event transmissions per month, and the amount of time a technologist is logged into the system and engaging with the monitoring reports. That data indicates that over the course of a month, a technologist interacts with patient monitoring reports 1.63 times a month to process device-generated notifications for 17 minutes, 1.74 times a month to process patient-generated notifications for 19 minutes, and once a month to generate a monthly report for 14 minutes. That is 50 minutes per month for alerts and report work.

Additionally, the clinical staff engages with the patient throughout the month to perform education about the device and re-education protocols after the initial enrollment (4 minutes), troubleshoot non-connective monitoring hardware (4 minutes), and request manual transmission(s) to incorporate additional device data into reports (11 minutes). That is a separate and additional 26 minutes.

Activity	**93298/G2066**	**93297**
Automated alert transmissions	17	
Technician requested transmissions	11	
Patient-initiated transmissions	19	11
Monthly report	14	14
Education/re-education	4	4
Troubleshooting	4	4
Sum	**69**	**33**

Unless/until a change is made to G2066 at CMS, since 93298 is the service typically and most commonly billed with G2066, we recommend the same inputs for 93298 be applied to G2066.

Clinical Staff Type

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

In completing this re-review for the PE Subcommittee after the RAW agreed with our action plan to affirm the prior recommendations, we recognized that the last time these inputs were reviewed staff type L037D for RN/LPN/MTA blend was included. We identified L038B for Cardiovascular Technician as a more appropriate staff type for this service and have updated that input on line 61.

CLINICAL STAFF ACTIVITIES

The RUC has agreed that there is a presumption of zero pre-service clinical staff time unless the specialty can provide evidence to the PE Subcommittee that any pre-service time is appropriate. The RUC agreed that with evidence some subset of codes may require minimal or extensive use of clinical staff and has allocated time when appropriate (for example when a service describes a major surgical procedure). If the package times are not applicable, alternate times may be presented and should be justified for consideration by the Subcommittee.

6. Are the global periods of the codes transitioning? Information about the amount of pre-service clinical staff time and a rationale for the change from a 090-day global to a 000 or 010 day global should be described below.

n/a

7. If you are recommending more minutes than the PE Subcommittee standards for clinical activities, you must provide rationale to justify the time:

n/a

8. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and assigned a clinical activity code (*please see second worksheet in PE spreadsheet workbook*), please explain the difference here:

N/A

9. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here:

0

10. Please provide a brief description of the clinical staff work for the following:
    a. Pre-Service period:

    b. Service period (includes pre, intra and post):

Clinical staff perform the service, NOT related to physician work time

c. Post-service period:

11. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

93298/G2066
During the course of a 30-day monitoring period, the cardiovascular technologist educates the patient about the device and transmittal protocols, troubleshoots hardware/connectivity issues, receives and reviews several types of remote transmissions, distributes results, and prepares a report.

93297
During the course of a 30-day monitoring period, the cardiovascular technologist educates the patient about the device and transmittal protocols, troubleshoots hardware/connectivity issues, receives and reviews remote transmissions, distributes results, and prepares a report.

12. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived.

n/a

13. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities (*please see second worksheet in PE spreadsheet*):

n/a

14. If you wish to identify a new staff type, please include a very specific staff description, salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

n/a

MEDICAL SUPPLIES & EQUIPMENT/INVOICES

15. ☐ Please check the box to confirm that you have provided invoices for all new supplies and/or equipment? n/a

16. ☐ Please check the box to confirm that you have provided an estimate price on the PE spreadsheet for all new supplies and/or equipment? n/a

17. If you wish to include a supply that is not on the list (*please see fourth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the supply input and invoice here:

n/a

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC) PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

18. Are you recommending a PE supply pack for this recommendation? Yes or No.
If Yes, please indicate if the pack is an established package of supplies as defined by CMS (eg, SA047 *pack, E/M visit*) or a pack that is commercially available?

No

19. Please provide an itemized list of the contents for all supply kits, packs and trays included in your recommendation. Please include the description, CMS supply code, unit, item quantity and unit price (if available). See documents two and three under PE reference materials on the RUC Collaboration Website for information on the contents of kits, packs and trays.

n/a

20. If you wish to include an equipment item that is not on the list (*please see fifth worksheet in PE spreadsheet*) please provide a paid invoice. Identify and explain the equipment input and invoice here:

n/a

21. Please provide an estimate of the useful life of the new equipment item as required to calculate the equipment cost per minute (*please see fifth worksheet in PE spreadsheet*):

n/a

22. Have you recommended equipment minutes for a computer or equivalent laptop/integrated computer, equipment item computer, desktop, w-monitor, ED021 or notebook (Dell Latitute D600), ED038?
    a. If yes, please explain how the computer is used for this service(s).
    b. Is the computer used exclusively as an integral component of the service or is it also used for other purposes not specific to the code?
    c. Does the computer include code specific software that is typically used to provide the service(s)?

No

23. List all the equipment included in your recommendation and the equipment formula chosen *(*please see document titled *Calculating equipment time).* If you have selected "other formula" for any of the equipment please explain here:

-EQ198 Default formula with 11 minutes removed from CA021 because equipment would not be used while tech is education/-re-educating the patient

AMA/SPECIALTY SOCIETY RELATIVE VALUE UPDATE COMMITTEE (RUC)
PRACTICE EXPENSE SUMMARY OF RECOMMENDATION (SOR)

PROFESSIONAL LIABILITY INSURANCE (PLI) INFORMATION

24. If this is a PE only code please select a crosswalk based on a similar specialty mix:
    93296

ADDITIONAL INFORMATION

25. If there is any other item(s) on your spreadsheet not covered in the categories above that requires greater detail/explanation, please include here:

ITEMIZED LIST OF CHANGES (FOLLOWING THE PE SUBCOMMITTEE MEETING)

NOTE: The virtual meetings have provided for real-time updates to the PE spreadsheets. PE SORs must still be updated after the meeting and resubmitted asap.

During and immediately following the review of this tab at the PE Subcommittee meeting, please revise the summary of recommendation (PE SOR) based on modifications made during the meeting. Please submit the revised form electronically to Rebecca Gierhahn at rebecca.gierhahn@ama-assn.org immediately following the close of business. In addition, please also provide an itemized list of the modifications made to the PE spreadsheet during the PE Subcommittee meeting in the space below (e.g. clinical activity CA010 *obtain vital signs* was reduced from 5 minutes to 3 minutes).

-EQ198 Default formula adjusted to remove 11 minutes from CA021 because equipment would not be used while tech is education/-re-educating the patient; noted in table on page 4
-CA021 reduced by 7 minutes to 4 minutes for shorter education/re-education staff time

	A	B	D	E	F	G	H	I	J	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**OCT 2018 REC**	
2						**93296**		**93298**		**93298**	
3		***RUC Collaboration Website***				Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead		Interrogation device evaluation(s), (remote) up to 30 days;		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: Jan 2023** **Revision Date (if applicable): January 11, 2023** **Tab: 20** **Specialty:ACC, HRS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**						
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 24.62**	**$ -**	**$ -**	**$ -**	**$ 95.87**	**$ -**
25		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**				**$ 11.34**	**$ -**	**$ -**	**$ -**	**$ 30.78**	**$ -**
26		**PRE-SERVICE PERIOD**									
27		**Start: Following visit when decision for surgery/procedure made**									
28	CA001	Complete pre-service diagnostic and referral forms	L037D	RN/LPN/MTA	0.455						
29	CA002	Coordinate pre-surgery services (including test results)	L037D	RN/LPN/MTA	0.455						
30	CA003	Schedule space and equipment in facility	L037D	RN/LPN/MTA	0.455						
31	CA004	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	0.455						
32	CA005	Complete pre-procedure phone calls and prescription	L037D	RN/LPN/MTA	0.455						
33	CA006	Confirm availability of prior images/studies	L037D	RN/LPN/MTA	0.455						
34	CA007	Review patient clinical extant information and questionnaire	L037D	RN/LPN/MTA	0.455						
35	CA008	Perform regulatory mandated quality assurance activity (pre-service)	L037D	RN/LPN/MTA	0.455						
36			L037D	RN/LPN/MTA	0.455						
39		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
42		**End: When patient enters office/facility for surgery/procedure**									
43		**SERVICE PERIOD**									
44		**Start: When patient enters office/facility for surgery/procedure:**									
45		**Pre-Service (of service period)**									
46	CA009	Greet patient, provide gowning, ensure appropriate medical records are	L026A	Medical/Technic	0.31						
47	CA010	Obtain vital signs	L026A	Medical/Technic	0.31						
48	CA011	Provide education/obtain consent	L037D	RN/LPN/MTA	0.455						
49	CA012	Review requisition, assess for special needs	L037D	RN/LPN/MTA	0.455						
50	CA013	Prepare room, equipment and supplies	L026A	Medical/Technic	0.31						
51	CA013	Prepare room, equipment and supplies	L037D	RN/LPN/MTA	0.455						
52	CA014	Confirm order, protocol exam	L037D	RN/LPN/MTA	0.455						
53	CA015	Setup scope (nonfacility setting only)	L037D	RN/LPN/MTA	0.455						
54	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient	L037D	RN/LPN/MTA	0.455						
55	CA017	Sedate/apply anesthesia	L037D	RN/LPN/MTA	0.455						
56			L037D	RN/LPN/MTA	0.455						
59		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
62		**Intra-service (of service period)**									
63	CA018	Assist physician or other qualified healthcare professional---directly	L037A	Electrodiagnosti	0.405	28					
64	CA018	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455						
65	CA019	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455						
66	CA020	Assist physician or other qualified healthcare professional---directly	L037D	RN/LPN/MTA	0.455						
67	CA021	Perform procedure/service---NOT directly related to physician work time	L037A	Electrodiagnosti c Technologist	0.405					76	
68	CA021	Perform procedure/service---NOT directly related to physician work time	L038B	Cardiovascular Technician	0.49						
72		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
75		**Post-Service (of service period)**									
76	CA022	Monitor patient following procedure/service, multitasking 1:4	L037D	RN/LPN/MTA	0.455						
77	CA023	Monitor patient following procedure/service, no multitasking	L037D	RN/LPN/MTA	0.455						
78	CA024	Clean room/equipment by clinical staff	L026A	Medical/Technic	0.31						
79	CA025	Clean scope	L037D	RN/LPN/MTA	0.455						
80	CA026	Clean surgical instrument package	L037D	RN/LPN/MTA	0.455						
81	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	L037D	RN/LPN/MTA	0.455						
82	CA028	Review/read post-procedure x-ray, lab and pathology reports	L037D	RN/LPN/MTA	0.455						
83	CA029	Check dressings, catheters, wounds	L037D	RN/LPN/MTA	0.455						
84	CA030	Technologist QC's images in PACS, checking for all images, reformats,	L037D	RN/LPN/MTA	0.455						
85	CA031	Review examination with interpreting MD/DO	L037D	RN/LPN/MTA	0.455						
86	CA032	Scan exam documents into PACS. Complete exam in RIS system to	L037D	RN/LPN/MTA	0.455						
87	CA033	Perform regulatory mandated quality assurance activity (service period)	L037D	RN/LPN/MTA	0.455						
88	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs,	L037D	RN/LPN/MTA	0.455						
89	CA035	Review home care instructions, coordinate visits/prescriptions	L037D	RN/LPN/MTA	0.455						
90	CA036	Discharge day management	L037D	RN/LPN/MTA	0.455	**n/a**		**n/a**		**n/a**	
91			L037D	RN/LPN/MTA	0.455						
94		*Other activity: please include short clinical description here and type*	L037D	RN/LPN/MTA	0.455						
97		**End: Patient leaves office/facility**									
98		**POST-SERVICE PERIOD**									
115		**End: with last office visit before end of global period**									

	A	B	D	E	F	G	H	I	J	K	L
1	**RUC Practice Expense Spreadsheet**					**REFERENCE CODE**		**CURRENT**		**OCT 2018 REC**	
2						**93296**		**93298**		**93298**	
3		***RUC Collaboration Website***				Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead		Interrogation device evaluation(s), (remote) up to 30 days;		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: Jan 2023** **Revision Date (if applicable): January 11, 2023** **Tab: 20** **Specialty:ACC, HRS**	**Clinical Staff Type Code**	**Clinical Staff Type**	**Clinical Staff Type Rate Per Minute**						
5		**LOCATION**				**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**				**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**				**$ 24.62**	**$ -**	**$ -**	**$ -**	**$ 95.87**	**$ -**
116	**Supply Code**	**MEDICAL SUPPLIES**	**PRICE**	**UNIT**							
117		**TOTAL COST OF SUPPLY QUANTITY x PRICE**				**$ 0.20**	**$ -**	**$ -**	**$ -**	**$ 0.20**	**$ -**
118	SK057	paper, laser printing (each sheet)	0.02	item		10				10	
119	SA048	pack, minimum multi-specialty visit	5.02	pack							
120	SD053	electrode, ECG (single)	0.06	item							
121	SJ019	electrode adhesive disk	0.21	item							
122	SJ053	swab-pad, alcohol	0.04	item							
126	**Equipment Code**	**EQUIPMENT**	**Purchase Price**	**Equipment Formula**	**Cost Per Minute**						
127		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**				**$ 13.08**	**$ -**	**$ -**	**$ -**	**$ 64.89**	**$ -**
128	EQ198	pacemaker follow-up system (incl software and hardware) (Paceart)	279453.169	Default	0.85376676					76	
129	EQ320	pacemaker interrogation, system	123250	Default	0.46699661	28					
130	EF023	table, exam	4737.727	Default	0.01053857						
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1	**RUC Practice Expense Spreadsheet**		**RECOMMENDED**		**REFERENCE CODE**			**CURRENT**		**OCT 2018 REC**		**RECOMMENDED**	
2			**93298**		**93291**			**93297**		**93297**		**93297**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm		Interrogation device evaluation (in person) with analysis, review and report by			Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular	
4	**Clinical Activity Code**	**Meeting Date: Jan 2023** **Revision Date (if applicable): January 11, 2023** **Tab: 20** **Specialty:ACC, HRS**											
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**XXX**	**XXX**	**XXX**	**XXX**		**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 83.53**	**$ -**	**$ 35.62**	**$ -**		**$ -**	**$ -**	**$ 50.55**	**$ -**	**$ 35.15**	**$ -**
25		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 33.81**	**$ -**	**$ 9.78**	**$ -**		**$ -**	**$ -**	**$ 16.20**	**$ -**	**$ 16.17**	**$ -**
26		**PRE-SERVICE PERIOD**											
27		**Start: Following visit when decision for surgery/procedure made**											
28	CA001	Complete pre-service diagnostic and referral forms			1								
29	CA002	Coordinate pre-surgery services (including test results)											
30	CA003	Schedule space and equipment in facility											
31	CA004	Provide pre-service education/obtain consent											
32	CA005	Complete pre-procedure phone calls and prescription											
33	CA006	Confirm availability of prior images/studies											
34	CA007	Review patient clinical extant information and questionnaire											
35	CA008	Perform regulatory mandated quality assurance activity (pre-service)											
36													
39		*Other activity: please include short clinical description here and type*											
42		**End: When patient enters office/facility for surgery/procedure**											
43		**SERVICE PERIOD**											
44		**Start: When patient enters office/facility for surgery/procedure:**											
45		**Pre-Service (of service period)**											
46	CA009	Greet patient, provide gowning, ensure appropriate medical records are			3								
47	CA010	Obtain vital signs			5								
48	CA011	Provide education/obtain consent			2								
49	CA012	Review requisition, assess for special needs											
50	CA013	Prepare room, equipment and supplies											
51	CA013	Prepare room, equipment and supplies			2								
52	CA014	Confirm order, protocol exam											
53	CA015	Setup scope (nonfacility setting only)											
54	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient											
55	CA017	Sedate/apply anesthesia											
56													
59		*Other activity: please include short clinical description here and type*											
62		**Intra-service (of service period)**											
63	CA018	Assist physician or other qualified healthcare professional---directly											
64	CA018	Assist physician or other qualified healthcare professional---directly			7								
65	CA019	Assist physician or other qualified healthcare professional---directly											
66	CA020	Assist physician or other qualified healthcare professional---directly											
67	CA021	Perform procedure/service---NOT directly related to physician work time								40			
68	CA021	Perform procedure/service---NOT directly related to physician work time	69									33	
72		*Other activity: please include short clinical description here and type*											
75		**Post-Service (of service period)**											
76	CA022	Monitor patient following procedure/service, multitasking 1:4											
77	CA023	Monitor patient following procedure/service, no multitasking											
78	CA024	Clean room/equipment by clinical staff			3								
79	CA025	Clean scope											
80	CA026	Clean surgical instrument package											
81	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions			2								
82	CA028	Review/read post-procedure x-ray, lab and pathology reports											
83	CA029	Check dressings, catheters, wounds											
84	CA030	Technologist QC's images in PACS, checking for all images, reformats,											
85	CA031	Review examination with interpreting MD/DO											
86	CA032	Scan exam documents into PACS. Complete exam in RIS system to											
87	CA033	Perform regulatory mandated quality assurance activity (service period)											
88	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs,											
89	CA035	Review home care instructions, coordinate visits/prescriptions											
90	CA036	Discharge day management	**n/a**		**n/a**			**n/a**		**n/a**		**n/a**	
91													
94		*Other activity: please include short clinical description here and type*											
97		**End: Patient leaves office/facility**											
98		**POST-SERVICE PERIOD**											
115		**End: with last office visit before end of global period**											

	A	B	M	N	O	P	Q	T	U	V	W	X	Y
1	**RUC Practice Expense Spreadsheet**		**RECOMMENDED**		**REFERENCE CODE**			**CURRENT**		**OCT 2018 REC**		**RECOMMENDED**	
2			**93298**		**93291**			**93297**		**93297**		**93297**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s), (remote) up to 30 days; subcutaneous cardiac rhythm		Interrogation device evaluation (in person) with analysis, review and report by			Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular	
4	**Clinical Activity Code**	**Meeting Date: Jan 2023** **Revision Date (if applicable): January 11, 2023** **Tab: 20** **Specialty:ACC, HRS**											
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**		**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**XXX**	**XXX**	**XXX**	**XXX**		**XXX**	**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 83.53**	**$ -**	**$ 35.62**	**$ -**		**$ -**	**$ -**	**$ 50.55**	**$ -**	**$ 35.15**	**$ -**
116	**Supply Code**	**MEDICAL SUPPLIES**											
117		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ 0.20**	**$ -**	**$ 6.83**	**$ -**		**$ -**	**$ -**	**$ 0.20**	**$ -**	**$ 0.20**	**$ -**
118	SK057	paper, laser printing (each sheet)	10		15					10		10	
119	SA048	pack, minimum multi-specialty visit			1								
120	SD053	electrode, ECG (single)			5								
121	SJ019	electrode adhesive disk			5								
122	SJ053	swab-pad, alcohol			4								
126	**Equipment Code**	**EQUIPMENT**											
127		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 49.52**	**$ -**	**$ 19.01**	**$ -**		**$ -**	**$ -**	**$ 34.15**	**$ -**	**$ 18.78**	**$ -**
128	EQ198	pacemaker follow-up system (incl software and hardware) (Paceart)	58		22					40		22	
129	EQ320	pacemaker interrogation, system											
130	EF023	table, exam			22								
136													
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1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT- CP**		**RECOMMENDED**		**REFERENCE CODE**	
2			**93290**		**G2066**		**G2066**		**93291**	
3		***RUC Collaboration Website***	Interrogation device evaluation (in person) with analysis, review		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation (in person) with analysis, review and	
4	**Clinical Activity Code**	**Meeting Date: Jan 2023** **Revision Date (if applicable): January 11, 2023** **Tab: 20** **Specialty:ACC, HRS**								
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**XXX**	**XXX**			**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 38.33**	**$ -**	**$ -**	**$ -**	**$ 83.53**	**$ -**	**$ 35.62**	**$ -**
25		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ 10.86**	**$ -**	**$ -**	**$ -**	**$ 33.81**	**$ -**	**$ 9.78**	**$ -**
26		**PRE-SERVICE PERIOD**								
27		**Start: Following visit when decision for surgery/procedure made**								
28	CA001	Complete pre-service diagnostic and referral forms	1						1	
29	CA002	Coordinate pre-surgery services (including test results)								
30	CA003	Schedule space and equipment in facility								
31	CA004	Provide pre-service education/obtain consent								
32	CA005	Complete pre-procedure phone calls and prescription								
33	CA006	Confirm availability of prior images/studies								
34	CA007	Review patient clinical extant information and questionnaire								
35	CA008	Perform regulatory mandated quality assurance activity (pre-service)								
36										
39		*Other activity: please include short clinical description here and type*								
42		**End: When patient enters office/facility for surgery/procedure**								
43		**SERVICE PERIOD**								
44		**Start: When patient enters office/facility for surgery/procedure:**								
45		**Pre-Service (of service period)**								
46	CA009	Greet patient, provide gowning, ensure appropriate medical records are	3						3	
47	CA010	Obtain vital signs	5						5	
48	CA011	Provide education/obtain consent	1						2	
49	CA012	Review requisition, assess for special needs								
50	CA013	Prepare room, equipment and supplies	2							
51	CA013	Prepare room, equipment and supplies	2						2	
52	CA014	Confirm order, protocol exam								
53	CA015	Setup scope (nonfacility setting only)								
54	CA016	Prepare, set-up and start IV, initial positioning and monitoring of patient								
55	CA017	Sedate/apply anesthesia								
56										
59		*Other activity: please include short clinical description here and type*								
62		**Intra-service (of service period)**								
63	CA018	Assist physician or other qualified healthcare professional---directly								
64	CA018	Assist physician or other qualified healthcare professional---directly	10						7	
65	CA019	Assist physician or other qualified healthcare professional---directly								
66	CA020	Assist physician or other qualified healthcare professional---directly								
67	CA021	Perform procedure/service---NOT directly related to physician work time								
68	CA021	Perform procedure/service---NOT directly related to physician work time					69			
72		*Other activity: please include short clinical description here and type*								
75		**Post-Service (of service period)**								
76	CA022	Monitor patient following procedure/service, multitasking 1:4								
77	CA023	Monitor patient following procedure/service, no multitasking								
78	CA024	Clean room/equipment by clinical staff	3						3	
79	CA025	Clean scope								
80	CA026	Clean surgical instrument package								
81	CA027	Complete post-procedure diagnostic forms, lab and x-ray requisitions	1						2	
82	CA028	Review/read post-procedure x-ray, lab and pathology reports								
83	CA029	Check dressings, catheters, wounds								
84	CA030	Technologist QC's images in PACS, checking for all images, reformats,								
85	CA031	Review examination with interpreting MD/DO								
86	CA032	Scan exam documents into PACS. Complete exam in RIS system to								
87	CA033	Perform regulatory mandated quality assurance activity (service period)								
88	CA034	Document procedure (nonPACS) (e.g. mandated reporting, registry logs,								
89	CA035	Review home care instructions, coordinate visits/prescriptions								
90	CA036	Discharge day management	**n/a**		**n/a**		**n/a**		**n/a**	
91										
94		*Other activity: please include short clinical description here and type*								
97		**End: Patient leaves office/facility**								
98		**POST-SERVICE PERIOD**								
115		**End: with last office visit before end of global period**								

	A	B	Z	AA	AE	AF	AG	AH	AI	AJ
1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**CURRENT- CP**		**RECOMMENDED**		**REFERENCE CODE**	
2			**93290**		**G2066**		**G2066**		**93291**	
3		***RUC Collaboration Website***	Interrogation device evaluation (in person) with analysis, review		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation (in person) with analysis, review and	
4	**Clinical Activity Code**	**Meeting Date: Jan 2023** **Revision Date (if applicable): January 11, 2023** **Tab: 20** **Specialty:ACC, HRS**								
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**	**XXX**	**XXX**			**XXX**	**XXX**	**XXX**	**XXX**
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ 38.33**	**$ -**	**$ -**	**$ -**	**$ 83.53**	**$ -**	**$ 35.62**	**$ -**
116	**Supply Code**	**MEDICAL SUPPLIES**								
117		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ 6.73**	**$ -**	**$ -**	**$ -**	**$ 0.20**	**$ -**	**$ 6.83**	**$ -**
118	SK057	paper, laser printing (each sheet)	10				10		15	
119	SA048	pack, minimum multi-specialty visit	1						1	
120	SD053	electrode, ECG (single)	5						5	
121	SJ019	electrode adhesive disk	5						5	
122	SJ053	swab-pad, alcohol	4						4	
126	**Equipment Code**	**EQUIPMENT**								
127		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ 20.74**	**$ -**	**$ -**	**$ -**	**$ 49.52**	**$ -**	**$ 19.01**	**$ -**
128	EQ198	pacemaker follow-up system (incl software and hardware) (Paceart)	24				58		22	
129	EQ320	pacemaker interrogation, system								
130	EF023	table, exam	24						22	
136										
137										
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AMA/Specialty Society RVS Update Committee Summary of Recommendations
CMS High Expenditure Procedures

October 2016

Cardiac Electrophysiology Device Monitoring Services

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT codes 93280, 93288, 93293, 93294, 93295, and 93296 were identified and the specialty societies indicated they will survey the entire family services for the October 2016 RUC meeting.

To survey this large family of services, the specialty societies obtained the RUC's approval to complete traditional surveys for the three benchmark codes 93280, 93283 and 93288. These services were selected because they are commonly performed and well understood, encompassing the two main devices, pacemakers and implantable cardioverter defibrillator s (ICDs). Respondents then surveyed the remaining services for physician time and work RVU.

Pacemaker Services

93279 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system
The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.65, below the survey 25th percentile work RVU of 0.70, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time. The specialty societies indicated and the RUC agreed that the physician work and time has not changed since this service was last reviewed. For additional support the RUC referenced MPC code 76830 *Ultrasound, transvaginal* (work RVU = 0.69 and 10 minutes intra-service time) and similar service 95937 *Neuromuscular junction testing (repetitive stimulation, paired stimuli), each nerve, any 1 method* (work RVU = 0.65 and 12 minutes intra-service time). **The RUC recommends a work RVU of 0.65 for CPT code 93279.**

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93280 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.77, similar to the survey 25th percentile work RVU of 0.75, appropriately accounts for the work required to perform this service. The RUC recommends 7 minutes pre-service time, 15 minutes intra-service time and 10 minutes immediate post-service time. The specialty societies indicated and the RUC agreed that the physician work has not changed since this service was last reviewed. The RUC compared 93280 to the top to key reference services 93750 *Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report* (work RVU = 0.92 and 30 minutes of intra-service time) and 99213 *Office or other outpatient visit for the evaluation and management of an established patient* (work RVU = 0.97 and 15 minutes of intra-service time) and determined that this service requires slightly less physician work to complete. For additional support the RUC referenced MPC codes 93015 *Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report* (work RVU = 0.75 and 20 minutes intra-service time) and 76816 *Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus* (work RVU = 0.85 and 15 minutes intra-service time). **The RUC recommends a work RVU of 0.77 for CPT code 93279.**

93281 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

The RUC reviewed the survey results from 78 cardiologists and determined that a crosswalk to a work RVU of 0.85 appropriately accounts for the work required to perform this service. The RUC noted that the intra-service time had decreased by 5 minutes, therefore the current value of 0.90 and survey 25th percentile work RVU of 0.89 were slightly high given the decrease in time. The RUC recommends 7 minutes pre-service time, 15 minutes intra-service time and 10 minutes immediate post-service time. The RUC recommended to crosswalk the work RVU to MPC code 76816 *Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus* (work RVU = 0.85 and 15 minutes intra-service time). **The RUC recommends a work RVU of 0.85 for CPT code 93281.**

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93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system
The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.43, below the survey 25th percentile work RVU of 0.60 appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time. The specialty societies indicated and the RUC agreed that the physician work and time has not changed since this service was last reviewed. The RUC noted that 93288 is parallel to the other interrogation codes 93290 and 93292, which all require the same physician work and 10 minutes of intra-service time. For additional support the RUC referenced MPC code 29540 *Strapping; ankle and/or foot* (work RVU = 0.39 and 9 minutes intra-service time) and similar service 75902 *Mechanical removal of intraluminal (intracatheter) obstructive material from central venous device through device lumen, radiologic supervision and interpretation* (work RVU = 0.39 and 10 minutes intra-service time). **The RUC recommends a work RVU of 0.43 for CPT code 93288.**

Implantable Cardioverter Defibrillator (ICD) Services

93282 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system
The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.85, which is the survey 25th percentile work as well, appropriately accounts for the work required to perform this service. The RUC recommends 6 minutes pre-service time, 12 minutes intra-service time and 10 minutes immediate post-service time. For additional support the RUC referenced MPC code 76700 *Ultrasound, abdominal, real time with image documentation; complete* (work RVU = 0.81 and 11 minutes intra-service time) which appropriately requires slightly less physician work and time. **The RUC recommends a work RVU of 0.85 for CPT code 93282.**

93283Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 1.15, in between the survey 25th percentile work RVU of 0.91 and survey median work RVU of 1.25, appropriately accounts for the work required to perform this service. The RUC recommends 10 minutes pre-service time, 15 minutes intra-service time and 10 minutes immediate post-service time. The RUC compared 93283 to the top to key reference services 93750 *Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report* (work RVU = 0.92 and 30 minutes of intra-service time) and 99238 *Hospital discharge day management; 30 minutes or less* (work RVU = 1.28 and 20 minutes of intra-service time) and determined that this service requires slightly less physician work to complete. For additional support the RUC referenced MPC codes 70460 *Computed tomography, head or brain; with contrast material(s)* (work RVU = 1.13 and 12 minutes intra-service time) and 95819 *Electroencephalogram (EEG); including recording awake and asleep* (work RVU = 1.08 and 15 minutes intra-service time). **The RUC recommends a work RVU of 1.15 for CPT code 93283.**

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93284 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 1.25, which is between the survey 25th percentile work of 0.95 and survey median of 1.40, appropriately accounts for the work required to perform this service. The RUC recommends 9 minutes pre-service time, 18 minutes intra-service time and 10 minutes immediate post-service time. For additional support the RUC referenced MPC code 99238 *Hospital discharge day management; 30 minutes or less* (work RVU = 1.28 and 20 minutes of intra-service time), which appropriately requires similar physician work and time. **The RUC recommends a work RVU of 1.25 for CPT code 93284.**

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements
The RUC reviewed the survey results from 78 cardiologists and determined that the survey 25th percentile work RVU of 0.75 appropriately accounts for the work required to perform this service. The intra-service time had decreased by 5 minutes from the last time it was surveyed therefore, the RUC determined that decreasing the work RVU from the current 0.92 to the 25th percentile appropriately addresses the decrease in time, while maintaining rank order among these service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 9 minutes immediate post-service time. For additional support the RUC referenced MPC code 76817 *Ultrasound, pregnant uterus, real time with image documentation, transvaginal* (work RVU = 0.75 and 10 minutes intra-service time) which appropriately requires the same physician work. **The RUC recommends a work RVU of 0.75 for CPT code 93289.**

Peri-Procedural Services

93286 Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.30, which is below the survey 25th percentile work of 0.60, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time, which is the same total time as it is currently. The RUC noted that 93286 is similar to 93279 (recommended work RVU =0.65) and is valued approximately half the physician work of 93279 because 93286 will be reported peri-procedurally, once before the procedure and once after the procedure. Additionally, code 93286 and 93279 are comparable because both involve interrogation and programming of a pacemaker device. The RUC determined a lesser relative value for 93286 is appropriate because this service involves only interrogating certain parameters and programming certain parameters. For additional support the RUC referenced comparable code 94726 *Plethysmography for determination of lung volumes and, when performed, airway resistance* (work RVU = 0.26 and 5 minutes of intra-service time) which requires less physician work and time. **The RUC recommends a work RVU of 0.30 for CPT code 93286.**

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93287 Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.45, which is below the survey 25th percentile work of 0.70, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 10 minutes immediate post-service time. The RUC determined that while this service is similar to 93282 (recommended work RVU= 0.85), due to both involving interrogation and programming of a defibrillator device, the surveyed code should be valued approximately half the work because 93287 will be reported peri-procedurally, once before the procedure and once after the procedure.For additional support the RUC referenced comparable code 77002 *Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device)* (work RVU = 0.54 and 15 minutes of intra-service time) which requires more physician work and time. **The RUC recommends a work RVU of 0.45 for CPT code 93287.**

Other Cardiac Device Services

93285 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable loop recorder system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.52, which is below the survey 25th percentile work of 0.60, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 5 minutes immediate post-service time. The RUC questioned why 93285 is more intense than 93292 (recommended work RVU = 0.43), as they have the same physician time. The specialty society indicated that the loop recorder, 93285, has multiple parameters to program to make sure it is sensing and detecting appropriately. There are many different ways to program depending on what type of rhythm the physician is looking for, bradyarrhythmia, tachyarrhythmia or irregular arrhythmia and sensing needs to be adjusted based on where it is placed and the movement of the patient. Given this explanation and supported by the IWPUT of 0.030, the RUC determined 93285 is more intense than 93292. For additional support the RUC referenced comparable codes 93926 *Duplex scan of lower extremity arteries or arterial bypass grafts; unilateral or limited study* (work RVU = 0.50 and 10 minutes of intra-service time) and 76820 *Doppler velocimetry, fetal; umbilical artery* (work RVU = 0.50 and 10 minutes intra-service time) which require similar physician work and time. **The RUC recommends a work RVU of 0.52 for CPT code 93285.**

93290 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.43, which is below the survey 25th percentile work of 0.58, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time,

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10 minutes intra-service time and 8 minutes immediate post-service time. The RUC noted that 93290 is parallel to the pacemaker interrogation code 93288 and wearable defibrillator interrogation code 93292, all require the same physician work and 10 minutes of intra-service time. For additional support the RUC referenced comparable code 29540 *Strapping; ankle and/or foot* (work RVU = 0.39 and 9 minutes intra-service time) which requires similar physician work and time. **The RUC recommends a work RVU of 0.43 for CPT code 93290.**

93291 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis
The RUC reviewed the survey results from 78 cardiologists and determined that the a crosswalk to 0.37 work RVUs is appropriate due to the 5 minute decrease in intra-service time. The RUC recommends 5 minutes pre-service time, 7 minutes intra-service time and 5 minutes immediate post-service time. The RUC crosswalked 93291 to 96446 *Chemotherapy administration into the peritoneal cavity via indwelling port or catheter* (work RVU = 0.37 and 7 minutes intra-service time). For additional support the RUC referenced comparable code 92228 *Remote imaging for monitoring and management of active retinal disease (eg, diabetic retinopathy) with physician review, interpretation and report, unilateral or bilateral* (work RVU = 0.37 and 8 minutes intra-service time) which requires similar physician work and time. **The RUC recommends a work RVU of 0.37 for CPT code 93291.**

93292 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.43, which is below the survey 25th percentile work of 0.60, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 5 minutes immediate post-service time. The RUC noted that 93292 is parallel to the other interrogation codes 93288 and 93290, all require the same physician work and 10 minutes of intra-service time. For additional support the RUC referenced comparable code 29540 *Strapping; ankle and/or foot* (work RVU = 0.39 and 9 minutes intra-service time) which requires similar physician work and time. **The RUC recommends a work RVU of 0.43 for CPT code 93292.**

Remote Monitoring Services **(93293, 93294, 93295, 93297 & 93298)**

The specialty societies indicated and the RUC agreed that the survey respondents may have based their responses on a single transmission and not all transmissions for the 30-90 days as described. **The specialty society will resurvey the remote monitoring codes 93293, 93294, 93295, 93297 and 93298 with specific instructions vetted via the Research Subcommittee directing survey respondents to account for the work and time required for all transmissions provided. These services will be resurveyed in January 2017 and will be included in the same cycle, CPT 2018.**

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Practice Expense
The Practice Expense Subcommittee reviewed the direct practice expense inputs and made the following modifications:

1) Reduced vital signs from 5 to 3 minutes;
2) Reduced the assist anting the physician in performing the procedure to line 35 to reflect the physician intra-service time was at least the clinical staff intra-time or more ;
3) Revised the PE SORs to clearly distinguish the different activities of the two clinical staff on lines 44 and 45 as they are completing different forms and performing different work;
4) Adjusted all the equipment by a couple minutes based on the changes in intra-service time; and
5) Discussed a vendor issue that with all of the implanted defibrillator and pacemaker devices where there are circumstances vendor sends a technician in to interpret the devices and in those cases the practice is not bearing the cost. Also in some cases the vendor technician even brings in the device itself and interprets and the practice is not bearing these costs as well. The Subcommittee discussed this may be addressed by a modified -26 and just report the professional interpretation or a -52 modifier and represent a reduced service. However, neither modifier addresses the issue properly. Reporting the professional service only (-26) doesn't cover the physicians expenses of exam table, office and clinical staff for vital signs and the reduced modifier (-52) does not provide a good proxy. **The RUC recommends that this issue will be referred to the CPT Editorial Panel to determine how to appropriately report these cases.**

The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Work Neutrality
The RUC's recommendation for these codes will result in an overall work savings that should be redistributed back to the Medicare conversion factor.

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
93279 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system	XXX	0.65 (No Change)

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93280	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system	XXX	0.77 (No Change)
93281 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system	XXX	0.85
93282 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system	XXX	0.85 (No Change)
93283 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system	XXX	1.15 (No Change)
93284 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system	XXX	1.25 (No Change)
93285(f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable loop recorder system	XXX	0.52 (No Change)

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93286 (f)	Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system	XXX	0.30 (No Change)
93287 (f)	Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system	XXX	0.45 (No Change)
93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system	XXX	0.43 (No Change)
93289 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements	XXX	0.75
93290 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors	XXX	0.43 (No Change)
93291 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis	XXX	0.37

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93292 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system	XXX	0.43 (No Change)
93293	Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days	XXX	Survey for January 2017 (2016: 0.32)
93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	Survey for January 2017 (2016: 0.65)
93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	Survey for January 2017 (2016: 1.29)
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX	PE Only
93297 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	Survey for January 2017 (2016: 0.52)

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93298 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	Survey for January 2017 (2016: 0.52)
93299 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system or implantable loop recorder system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX	PE Only

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Overview

CMS identified several cardiac device monitoring services in CY 2016 PFS rulemaking—93280, 93288, 93293, 93294, 93295, and 93296—as potentially misvalued on its high-expenditure screen. Consistent with RUC policy, the societies expanded the review to include the entire family of cardiac device monitoring codes—19 codes with work and PE and 2 PE-only codes.

Motivated by the difficulty of surveying this many codes at once, but also a need for survey respondents to review all codes in an effort to ensure appropriate rank order, the societies sought and received Research Subcommittee approval for an alternative survey methodology. Survey respondents completed traditional RUC surveys of three benchmark services in the family—93280 (Dual pacemaker programming evaluation), 93283 (Dual ICD programming evaluation), and 93298 (30-day remote implantable loop recorder interrogation). These codes were selected because they are commonly performed and well understood, encompassing the two main devices—pacemakers and ICDs—and the two types of services—in-office programming and remote interrogation. Respondents were then taken to a table of all 19 codes divided into groups by service similarity. Time and work RVU responses from the three comprehensive surveys were transferred into that table. Survey respondents then completed the table for pre-service, intra-service, post-service times, and work RVUs. During this step, respondents also could adjust their responses from the three benchmark surveys. That survey tool is included in Tab 25 materials.

The societies also requested Research Subcommittee review of the RSL and vignettes. The Subcommittee supported the range of the RSL and appreciated the mix of MPC services. With the entire, large code-family being surveyed at once, we appreciated the Subcommittee's suggestions and applied their revisions.

Survey respondents generally appear to have understood the exercise of constructing rank order within the smaller groupings and for the most part these fit together within the larger family. However, there are exceptions where either rank order within a device family rank order across device families does not perfectly align. We identified some of these in our initial submission. Others were pointed out by preliminary reviewers. We have made some modifications to our initial recommendations in an attempt to more carefully address these inconsistencies. This rank order (as shown in Table 1) reflects the increasing intensity and decision-making complexity of these services.

One common theme we heard from reviewers was a desire to better understand differences in intensity between services and between devices. In response, we have updated the work descriptors in each SOR to eliminate errors, eliminate confusion about whether certain aspects of the services are performed by the physician or clinical staff, and to more simply present the physician work so services can be better compared. We also added vignettes to the SORs where they had previously been left out because they were not surveyed.

We note that the current values and times were often internally crosswalked or imputed by building block. Survey results at the 25th-percentile closely aligned with the current values in many instances. When possible, we have used the survey to validate work RVUs and update times. We had hoped to rely entirely on the surveys, but found that in certain instances it still made more sense to impute times for some of the services.

Finally, reviewer comments and suggestions helped us identify an issue that may address some questions service time. Reviewers noted reductions in survey intraservice time were often accompanied by increases in survey postservice times, and often that survey work RVUs did not decrease. After further scrutiny, we suggest that survey respondents are not as equipped as members of the RUC to distinguish intraservice time from postservice time for these services. Some respondents may have considered certain activities as postservice—there could be a blurring of the line as they interpret data but also prepare and finalize a report. This would explain a shift in the allocation of time from intraservice to postservice in some instances, additional increases to postservice time in some cases for devices with advanced features, and the lack of reduction in survey work RVUs.

Table 1: Recommendations in Rank Order

Code	Desc	wRVU	Intra	Total	Notes
93286	PERI-PX PACEMAKER DEVICE EV	0.30	10	21.5	Maintain. Below survey 25th 0.60.
93293	TRANSTELEPHONIC PM PHONE R-STRIP DEVICE EVAL, 90-DAY	0.32	5	15	Maintain. Below survey 25th 0.40.
93288	PM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	22	Maintain. Below survey 25th 0.60.
93290	ICM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	23	Maintain. Below survey 25th 0.58.
93291	ILR DEVICE INTERROGATION EVAL IN PERSON	0.43	7	17	Maintain. Below survey 25th 0.50.
93292	WCD DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20	Maintain. Below survey 25th 0.60.
93287	PERI-PX ICD DEVICE EV	0.45	10	25	Maintain. Below survey 25th 0.70.
93285	ILR DEVICE PROGR EVAL	0.52	10	20	Maintain. Below survey 25th 0.60.
93297	ICM DEVICE INTERROGATION REMOTE, 30-DAY	0.52	10	46	Maintain. Below survey 25th 0.55. RUC derived current times as double 93290. We propose that method again.
93298	ILR DEVICE INTERROGATION REMOTE, 30-DAY	0.52	10	34	Maintain. Matches survey 25th 0.52. RUC derived current times as double 93290. We propose that method again, doubling 93291.
93294	PM DEVICE INTERROGATION REMOTE, 90-DAY	0.65	15	33	Maintain. RUC derived current times and values as 1.5 of 93288. We propose that method again.
93279	PM DEVICE	0.65	10	22	Maintain. Below survey 25th 0.70.

	PROGR EVAL SNGL				
93289	ICD DEVICE INTERROGATIO N EVAL IN PERSON	0.75	10	23.5	Reduce to survey 25th 0.75.
93280	PM DEVICE PROGR EVAL DUAL	0.77	15	32	Maintain. Above survey 25th 0.75. Time increase.
93282	ICD DEVICE PROGR EVAL SNGL	0.85	12	28	Maintain. Matches survey 25th 0.85.
93281	PM DEVICE PROGR EVAL MULTI	0.90	20	37	Maintain. Above survey 25th 0.89. Time increase.
93295	ICD DEVICE INTERROGATIO N REMOTE, 90-DAY	1.13	15	35.5	Reduce. RUC derived current times and values as 1.5 of 93289. We propose that method again.
93283	ICD DEVICE PROGR EVAL DUAL	1.15	15	35	Maintain. Above survey 25th 0.91. Time increase.
93284	ICD DEVICE PROGR EVAL MULTI	1.25	17.5	37.5	Maintain. Above survey 25th 0.95. Time increase.

1,500 non-duplicative members were randomly surveyed (1,000 from ACC, 500 from HRS). 78 respondents completed the survey, so each code has 78 respondents. This meets the response threshold of 75 completed surveys for services with utilization over 1,000,000; that was necessary for code 93280.

Pacemaker Office Services

93280 In this group of four codes, we used code 93280 for programming evaluation of a dual-chamber pacemaker as the benchmark survey. Respondents completed the traditional RUC survey for this code. Key reference service 93750 for Ventriclar Assist Device interrogation was selected by 18 respondents. These respondents found 93280 to be slightly more intense/complex in some measures, slightly less in others, and overall equivalent to 93750. These results are summarized in the SOR and the new intensity/complexity addendum. Second key reference code 99213 for a level-3 office visit was selected by 14 respondents. These respondents found 93280 to be slightly more intense/complex in some measures, slightly less in others, and overall slightly more intense/complex than 99213.

Despite the comparison to higher-valued key reference services and the slight increase in total time indicated by survey respondents, we do not believe we have a compelling evidence argument to recommend the survey median. As such, we are **recommending the current work RVU of 0.77 with median survey times of 7 minutes preservice, 15 minutes intraservice, and 10 minutes postservice.** These times result in a 2-minute decrease in intraservice time but a 5-minute increase in total time that we believe supports the current value. This value is near the survey 25th-percentile value of 0.75. It aligns well with identified MPC services as shown in the summary spreadsheet and the SOR—cardiovascular stress test code 93015 with a work RVU of 0.75 and times of 2 minutes preservice, 20 minutes intraservice, 4 minutes postservice, and ultrasound of pregnant uterus code 76816 with a work RVU of 0.86 and times of 6 minutes preservice, 15 minutes intraservice, 10 minutes postservice.

93279 For the second code in this group, we move down in rank order and present code 93279 for programming evaluation of a single-chamber pacemaker. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.65 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 7 minutes postservice.** These times result in a 2-minute increase in total time that we believe supports the current value. This value is slightly below the survey 25th-percentile value of 0.70. This is one of several instances where we followed the precedent of maintaining the current value when it falls below the 25th-percentile, as we do not have a compelling evidence argument for this code. For validation, we suggest comparing this code to MPC code 76830 for transvaginal ultrasound with a work RVU of 0.69 and times of 5 minutes preservice, 10 minutes intraservice, and 8 minutes postservice as presented in the summary spreadsheet.

93288 For the third code in this group, we move another step down in rank order and present 93288 for interrogation evaluation of a single, dual, or multi-chamber pacemaker. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.43 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 7 minutes postservice.** These times result in a 2-minute increase in total time that we believe supports the current value. This value is below the 25th-percentile value of 0.60. Acknowledging that survey respondents indicated this service to have the same time inputs as 93279, we note this is currently the case with these two codes and the difference based on intensity. For validation, we suggest comparing this code to MPC code 29540 for ankle strapping which is slightly shorter and lower-valued with a work RVU of 0.39 and times of 7 minutes preservice, 9 minutes intraservice, and 2 minutes postservice as presented in the summary spreadsheet.

93281 For the fourth and final code in this group, we go back above the benchmark survey code in rank order to code 93281 for programming evaluation of a multi-chamber pacemaker. This is one instance where the survey table did not provide a reasonable rank order. Respondents indicated this 93281 to have 30 seconds less preservice time and the same intraservice time as dual-chamber code 93280. **As such, we recommend the current work RVU of 0.90 with 93280's preservice time of 7 minutes, an expert consensus intraservice time of 16 minutes, and survey median postservice time of 10 minutes.** These times more sensibly align this service as the most difficult in-office pacemaker programming code, and also make sense in comparison to the multi-lead ICD code that will be presented later. This value is slightly above the survey 25th-percentile value of 0.89. For validation, we suggest comparing this code to slightly shorter MPC code 76816 for ultrasound of pregnant uterus with a work RVU of 0.86 and times of 6 minutes preservice, 15 minutes intraservice, and 10 minutes post-service.

ICD Office Services

93283 In this group of four codes, we start with benchmark survey code 93283 for programming evaluation of a dual-chamber ICD. Respondents completed the traditional RUC survey for this code. Key reference service 93750 for VAD interrogation was selected by 13 respondents. These respondents found 93283 to be slightly more intense/complex in every measure. These results are summarized in the SOR and the new intensity/complexity addendum. Second key reference code 99238 for hospital discharge day management was selected by 11 respondents. These respondents found 93283 to be more intense/complex every measure than 99238.

Reflecting the survey and reasonable alignment between key reference services and MPC comparators as shown in the summary spreadsheet, the societies recommend **the current work RVU of 1.15 with median survey times of 10 minutes preservice, 15 minutes intraservice, and 10 minutes postservice.** These times result in a 2-minute increase in total time that we believe supports the current value. This value is between the survey 25th-percentile and median values. It aligns well with identified MPC services as shown in the summary spreadsheet and the SOR—CT head code 70460 with a work RVU of 1.13 and times of 5 minutes preservice, 12 minutes intraservice, 5 minutes postservice, and asleep and awake EEG code 95819 with a work RVU of 1.08 and times of 5 minutes preservice, 15 minutes intraservice, 6 minutes postservice.

93282 For the second code in this group, we move down in rank order and present code 93282 for programming evaluation of a single-chamber ICD. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.85 with median survey times of 6 minutes preservice, 12 minutes intraservice, and 10 minutes postservice.** These times result in no change in total time that we believe supports the current value. This value also happens to match the survey 25th-percentile. For validation, we suggest comparing this code to slightly shorter MPC code 76700 for complete abdominal ultrasound with a work RVU of 0.81 and times of 5 minutes preservice, 11 minutes intraservice, and 5 minutes postservice as presented in the summary spreadsheet.

93289 For the third code in this group, we move another step down in rank order and present 93289 for interrogation evaluation of a single, dual, or multi-chamber ICD. Respondents indicated service times and a work RVU for this code using the table. After considering reviewer comments that this value creates a rank order issue within the ICD codes by placing interrogation higher than single-lead programming, **we recommend the survey 25th-percentile work RVU of 0.75 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 8.5 minutes postservice.** This ICD group will now

mirror the pacemaker group, with a progression in work from interrogation to single-, dual-, then multi-lead device programming services. This value also accounts for small reduction in total time that includes a shift of time from intraservice to postservice. Acknowledging that survey respondents indicated this service to have the same 10 minutes of intraservice time as 93288, we note that a difference remains in total time and intensity. For validation, we suggest comparing this code to nearly identical code 76817 for transvaginal ultrasound with a work RVU of 0.75 and times of 5 minutes preservice, 10 minutes intraservice, and 8 minutes postservice as presented in the summary spreadsheet.

93284 For the fourth and final code in this group, we go back above the benchmark survey code in rank order to code 93284 for programming evaluation of a multi-chamber ICD. Respondents indicated service times and a work RVU for this code using the table. This is a second instance where the survey table did not provide a reasonable rank order, as respondents indicated 93284 to have 1 minute less preservice time than dual-chamber code 93283. **As such, we recommend the current work RVU of 1.25 with 93283's preservice time of 10 minutes, then median survey times of 17.5 minutes intraservice and 10 minutes postservice.** These times result in a 2.5-minute increase intraservice time and 4-minute increase in total time that we believe supports the current value. This value falls between the survey 25th-percentile value of 0.95 and the median of 1.40. For validation we suggest comparing this code to slightly longer MPC code 99238 for hospital discharge day management with a work RVU of 1.28 and times of 8 minutes preservice, 20 minutes intraservice, and 10 minutes postservice as presented in the summary spreadsheet.

Pacemaker & ICD Peri-procedural Services

Two codes exist for evaluation of an implantable pacemaker or ICD to adjust device settings appropriate for the patient before and/or after a procedure or test.

93286 The first code of this pair describes peri-procedural device programming of a single, dual, or multi-chamber pacemaker. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.30 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 6.5 minutes postservice.** As discussed previously, we see some time shift between intraservice and postservice, which we believe supports the current value. This value is below the 25th-percentile RVU of 0.60. For validation, we suggest comparing this code to commonly performed, slightly shorter, and lower-valued code 94726 for plethysmography with a work RVU of 0.26 and times of 5 minutes preservice, 5 minutes intraservice, and 5 minutes postservice as presented in the summary spreadsheet.

93287 The second code of this pair describes peri-procedural device programming of a single, dual, or multi-chamber ICD. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.45 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 10 minutes postservice.** We again see some time shift between intraservice and postservice, which we believe supports the current value. This value is below the 25th-percentile RVU of 0.70. For validation, we suggest comparing this code to commonly performed, longer, and higher-valued code 77002 for fluoroscopic needle guidance with a work RVU of 0.54 and times of 7 minutes preservice, 15 minutes intraservice, and 5 minutes postservice as presented in the summary spreadsheet.

Other Device Office Services

Rounding out the services performed with the patient present is a group of four codes: three interrogation and one programming. This group is somewhat challenging because total time stays the same or goes down slightly, but the survey 25th-percentile values are still higher than the current value. We note that when these codes were previously valued, the work of the three interrogation codes was felt to be roughly the same as a crosswalk, pacemaker interrogation code 93288, even though the codes had slightly different time inputs. That work consistency remains, as does the slight time variation.

93290 The most common of these codes describes interrogation of an implantable cardiovascular monitor. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.43 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 8 minutes postservice.** This value is below the 25th-percentile RVU of 0.58. For validation, we suggest comparing this code to slightly shorter and lower-valued MPC code 29540 for ankle strapping with a work RVU of 0.39 and times of 7 minutes preservice, 9 minutes intraservice, and 2 minutes postservice as presented in the summary spreadsheet.

93292 The least common of these codes describes interrogation of a wearable cardiac defibrillator. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.43 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice.** This value is below the 25th-percentile RVU of 0.60. For validation, we again suggest comparing this code to slightly shorter and lower-valued MPC code 29540 for ankle strapping with a work RVU of 0.39 and times of 7 minutes preservice, 9 minutes intraservice, and 2 minutes postservice as presented in the summary spreadsheet.

93291 The third and fourth codes in this group are both related for implantable loop recorders. 93291 describes the in-office interrogation of that device. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.43 with median survey times of 5 minutes preservice, 7 minutes intraservice, and 5 minutes postservice.** This value is below the 25th-percentile RVU of 0.50. As we noted earlier, this code and the previous two were all deemed equal to pacemaker interrogation code 93288 even though the codes had slightly different time inputs. We believe that methodology is still appropriate. For validation, we again suggest comparing this code to slightly longer and higher-valued code 93971 for limited duplex scan of extremity veins with a work RVU of 0.45 and times of 3 minutes preservice, 10 minutes intraservice, and 5 minutes postservice as presented in the summary spreadsheet.

93285 The final code in this group describes in-office programming of an implantable loop recorder. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.52 with median survey times of 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice.** This value is below the 25th-percentile RVU of 0.60. For validation, we suggest comparing this code to commonly performed, and similarly-valued code 93926 for limited lower extremity duplex scan with a work RVU of 0.50 and identical times of 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice as presented in the summary spreadsheet.

Remote Monitoring Services

The final group of codes describes five remote device interrogation services. It is important to note that the times and values for these codes were imputed by societies and the RUC from other services when they were first valued in 2008. Those rationales are briefly summarized below in Table 2 for reference. Certain aspects of those assumptions still hold true. We again rely on calculated times after finding some inconsistencies within device families in our initial submission.

Table 2: Current Imputed times and values for remote services

Code	Desc	wRVU	Intra	Total	2008 RUC Rationale Notes
93293	TRANSTELEPHONIC PM PHONE R-STRIP DEVICE EVAL	0.32	10	20	1.9 transmissions per 90 days; 190% of survey times; 190% wRVU of 93010
93294	PM INTERROGATION REMOTE, 90-DAY	0.65	15	30	1.5 transmissions per 90 days; 150% of 93288 times; 150% wRVU of 93288
93295	ICD INTERROGATION REMOTE, 90-DAY	1.29	22.5	37.5	1.5 transmissions per 90 days; 150% of 93289 times; 150% wRVU of 93289 (later reduced by CMS)
93297	ICM INTERROGATION REMOTE, 30-DAY	0.52	24	50	2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228
93298	ILR INTERROGATION REMOTE, 30-DAY	0.52	24	44	2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228

93298 In this group of codes, we set code 93298 for 30-day remote interrogation evaluation of an implantable loop recorder as the benchmark survey. Respondents completed the traditional RUC survey for this code. Key reference service 93224 for 48-hour ECG recording was selected by 31 respondents. These respondents found 93298 to be somewhat more intense/complex in every measure. These results are summarized in the SOR and the new intensity/complexity addendum. Second key reference code 93015 for cardiovascular stress test was selected by 10 respondents. These respondents found 93298 to be more intense/complex every measure than 99238.

Median survey times for 93298 are 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice. In considering reviewer comments and further scrutinizing our original recommendations, we realized that these times do not reflect a large enough increment from in-office interrogation code 93291 that has times of 5 minutes preservice, 7 minutes intraservice, and 5 minutes postservice. This suggests to us that survey respondents did not correctly consider the multiple transmissions that occur in a 30-day period. The current assumption that two transmissions are reviewed per 30 days remains reasonable, if not somewhat conservative. As such, **we recommend doubling the times from 93291 and using the 93298 survey 25th-percentile work RVU of 0.52, which also happens to be the current value. This produces calculated times of 10 minutes preservice, 14 minutes intraservice, and 10 minutes postservice.** MPC codes with bracketing values but shorter times are included in the SOR and summary sheet. We would also direct the RUC's attention to additional comparator 95926 for lower limb somatosensory evoked potential study, with a work RVU of 0.54 and times of 6.5 minutes preservice, 15 minutes intraservice, and 10 minutes postservice.

93297 The second code of this group describes 30-day remote interrogation evaluation of an implantable cardiac monitor, most commonly heart failure data from a CRT-D device. Respondents indicated service times and a work RVU for this code using the table. Median survey times for 93297 are 5 minutes preservice, 7.5 minutes intraservice, and 5 minutes postservice. In considering reviewer comments and further scrutinizing our original recommendations, we realized that these times create a rank order issue with in-office interrogation code 93290 that has longer survey times of 5 minutes preservice, 10 minutes intraservice, and 8 minutes postservice. This suggests to us that survey respondents did not correctly consider the multiple transmissions that occur in a 30-day period. The current assumption that two transmissions are reviewed per 30 days remains reasonable, if not somewhat conservative. As such, **we recommend doubling the times from 93290 and using the current 93297 work RVU of 0.52. This produces calculated times of 10 minutes preservice, 20 minutes intraservice, and 16 minutes postservice.** This value is below the 25th-percentile RVU of 0.55. As with the previous code, it seems the current crosswalk value of 0.52 is about right while the imputed time was an overestimate, as suggested by the negative IWPUT. As providers of this service, we also believe it is reasonable for this service to have the same work RVU as 93298 with a slightly higher time. The decision-making for this patient population is more complex. We acknowledge this service will still have a negative IWPUT, but aside from recommending an increase in work RVU we see no way to avoid that outcome. For validation, a comparison can be made to slightly shorter and lower-valued code 92548 for computerized posturography, with a work RVU of 0.50 and times of 10 minutes preservice, 15 minutes intraservice, and 15 minutes postservice.

93293 Now that we've addressed the two 30-day remote codes, we shift to 90-day remote codes in rank order. The third remote code we'll present describes transtelephonic rhythm strip pacemaker evaluation of a single, dual, or multi-lead pacemaker. Respondents indicated service times and a work RVU for this code using the table. **We recommend the current work RVU of 0.32 with median survey times of 5 minutes preservice, 5 minutes intraservice, and 5 minutes postservice.** This value is below the 25th-percentile RVU of 0.40. For validation of our recommendations, we suggest comparing 93293 to another common cardiovascular service with slightly shorter times and values, code 93018 for interpretation of a stress test with a work RVU of 0.30 and times of 2 minutes preservice, 5 minutes intraservice, and 4 minutes postservice as presented in the summary spreadsheet.

93294 The next 90-day remote code is another pacemaker service, 90-day remote interrogation evaluation of a single, dual, or multi-lead pacemaker. Respondents indicated service times and a work RVU for this code using the table. It will be helpful for the RUC to be reminded that the current times and RVU for this code was calculated as 150% of the times and value of in-office pacemaker interrogation code 93288. Median survey times for 93294 are 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice. In considering reviewer comments and further scrutinizing our original recommendations, we realized that these times create a rank order issue with in-office interrogation code 93288 that has longer times of 5 minutes preservice, 10 minutes intraservice, and 7 minutes postservice. This suggests to us that survey respondents did not correctly consider the multiple transmissions that occur in a 90-day period. The current assumption that 1.5 transmissions are reviewed per 90 days remains reasonable. As such, **we recommend adding 50% to the times and value from 93288 as a recommendation for 93294. This produces calculated times of 7.5 minutes preservice, 15 minutes intraservice, and 10.5 minutes postservice and maintains the work RVU at 0.65.** This value is just above the survey 25th-percentile value and still makes sense since the current times and value were also imputed. For validation of our recommendations, we suggest comparing 93294 to slightly longer and higher valued code 76872 for transrectal ultrasound with a work RVU of 0.69 and times of 10

minutes preservice, 15 minutes intraservice, and 10 minutes postservice as presented in the summary spreadsheet.

93295 The final remote code is 90-day remote interrogation of a single, dual, or multi-lead ICD. Respondents indicated service times and a work RVU for this code using the table. As with the prior code, it will be helpful for the RUC to be reminded that the current times and RVU for this code were calculated as 150% of the times and value of in-office ICD interrogation code 93289. Median survey times for 93295 are 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice. In considering reviewer comments and further scrutinizing our original recommendations, we realized that these times create a rank order issue with in-office interrogation code 93289 that has longer times of 5 minutes preservice, 10 minutes intraservice, and 8.5 minutes postservice. The 25th-percentile work value would also create a rank order issue with 93289. This suggests to us that survey respondents did not correctly consider the multiple transmissions that occur in a 90-day period. The current assumption that 1.5 transmissions are reviewed per 90 days remains reasonable. As such, **we recommend adding 50% to the times and value from 93289 as a recommendation for 93295. This produces calculated times of 7.5 minutes preservice, 15 minutes intraservice, and 13 minutes postservice and results in a work RVU of 1.13.** This results in a reduction from the current value of 1.29 and incorporates the value of code 93289 where we previously used the 25th-percentile work RVU to improve rank order in the ICD family. For validation of our recommendations, we suggest comparing 93294 to slightly shorter and lower valued MPC code 95819 for awake and asleep EEG with a work RVU of 1.08 and times of 5 minutes preservice, 15 minutes intraservice, and 6 minutes postservice as presented in the summary spreadsheet.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93279 Tracking Number Original Specialty Recommended RVU: **0.65**
Presented Recommended RVU: **0.65**
Global Period: XXX RUC Recommended RVU: **0.65**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old female with chronic atrial fibrillation and complete heart block had a single chamber (SC) rate adaptive ventricular pacemaker (VVIR (ventricular pacing, ventricular sensing, inhibition response and rate-adaptive)) implanted two years ago. The patient contacted her internist because she had "passed out." The physician has the patient come in for a symptom assessment and a programming device evaluation.

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: OReview history for pacing indications and changes in symptoms or development of new symptoms. Review prior records of the implanted pacemaker, lead hardware, and programmed parameters, prior assessments of capture thresholds, sensing thresholds, and pacemaker dependency. Review interim remote monitoring results if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for the lead by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage). Next, the autocapture feature (available for most pacemakers) is evaluated to ensure appropriate function for the lead.

The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.).
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Lead sensing value
    c. Pacing threshold
    d. Lead impedance
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the pacemaker (e.g. episode identified as atrial fibrillation is not double counting far-field ventricular activity on the atrial lead)
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming

a. Based upon the findings above, programmed parameters are adjusted as needed (such as pacing outputs, sensing thresholds, alert parameters, etc.).

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93279				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.31	0.70	**0.88**	1.30	2.50
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**10.00**	15.00	30.00

Immediate Post Service-Time:	**7.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93279	**Recommended Physician Work RVU: 0.65**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**7.00**	**0.00**	**7.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76830	XXX	0.69	**RUC Time**	453,238

CPT Descriptor 1 Ultrasound, transvaginal

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93279	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	7.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**22.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93279

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 418000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 250000 Percentage 59.80 %

Specialty cardiac electrophysiology Frequency 110000 Percentage 26.31 %

Specialty other Frequency 58000 Percentage 13.87 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 209,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 125000 Percentage 59.80 %

Specialty cardiac electrophysiology Frequency 55000 Percentage 26.31 %

Specialty other Frequency 29000 Percentage 13.87 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93279

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93280 Tracking Number Original Specialty Recommended RVU: **0.77**
Presented Recommended RVU: **0.77**
Global Period: XXX RUC Recommended RVU: **0.77**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 70-year-old male with acquired complete heart block had a dual chamber (DC) pacemaker (DC-PM) implanted five years ago. The patient calls his general cardiologist concerned about increasing "shortness of breath" and some "palpitations." The cardiologist orders a programming device evaluation.

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history for pacing indications and changes in symptoms or development of new symptoms. Review prior records of the implanted pacemaker, lead hardware, and programmed parameters, prior assessments of capture thresholds, sensing thresholds, and pacemaker dependency. Review interim remote monitoring results if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage). Next, the autocapture feature (available for most pacemakers) is evaluated to ensure appropriate function for each lead.

The following data is analyzed for both leads:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.).
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Lead sensing values
    c. Pacing thresholds
    d. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the pacemaker (e.g. episode identified as atrial fibrillation is not double counting far-field ventricular activity on the atrial lead)
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming

a. Based upon the findings above, programmed parameters are adjusted as needed (such as pacing outputs, sensing thresholds, alert parameters, etc.).

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93280				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate	0.00	60.00	**250.00**	437.00	2000.00
Survey RVW:	0.35	0.75	**1.00**	1.50	3.00
Pre-Service Evaluation Time:			**7.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	10.00	**15.00**	20.00	45.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93280	**Recommended Physician Work RVU: 0.77**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**7.00**	**0.00**	**7.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93750	XXX	0.92	**RUC Time**

CPT Descriptor Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99213	XXX	0.97	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: An expanded problem focused history; An expanded problem focused examination; Medical decision making of low complexity. Counseling and coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity. Typically, 15 minutes are spent face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76816	XXX	0.85	**RUC Time**	17,762

CPT Descriptor 1 Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93015	XXX	0.75	**RUC Time**	1,075,476

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 18 **% of respondents:** 23.0 **%**

Number of respondents who choose 2nd Key Reference Code: 14 **% of respondents:** 17.9 **%**

TIME ESTIMATES (Median)

	CPT Code: 93280	**Top Key Reference CPT Code:** 93750	**2nd Key Reference CPT Code:** **99213**
Median Pre-Service Time	7.00	0.00	3.00
Median Intra-Service Time	15.00	30.00	15.00
Median Immediate Post-service Time	10.00	0.00	5.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**32.00**	**30.00**	**23.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	**2nd Key Ref Code**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	0.35	-0.21
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	-0.12	-0.21
Urgency of medical decision making	-0.12	0.57

Technical Skill/Physical Effort (Mean)

Technical skill required	0.24	0.57
Physical effort required	-0.24	-0.29

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	0.00	0.43
Outcome depends on the skill and judgment of physician	0.18	0.50
Estimated risk of malpractice suit with poor outcome	0.12	0.50

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity	0.00	0.14

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93280

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 2262000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 1380000 Percentage 61.00 %

Specialty cardiac electrophysiology Frequency 882000 Percentage 38.99 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,131,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 690000 Percentage 61.00 %

Specialty cardiac electrophysiology Frequency 441000 Percentage 38.99 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93280

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93281 Tracking Number Original Specialty Recommended RVU: **0.90**
Presented Recommended RVU: **0.85**
Global Period: XXX RUC Recommended RVU: **0.85**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 75-year-old male with a nonischemic cardiomyopathy, a left ventricular ejection fraction (LVEF) of 35%, and sinus rhythm and QRS duration of 160 ms (millisecond) had a biventricular pacemaker implanted for treatment of moderately severe heart failure symptoms. The patient returns for a programming device evaluation of his pacemaker and lead function one year since his last programming device evaluation.

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history for pacing indications and changes in symptoms or development of new symptoms. Review prior records of the implanted pacemaker, lead hardware, and programmed parameters, prior assessments of capture thresholds, sensing thresholds, and pacemaker dependency. Review interim remote monitoring results if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage). Next, the autocapture feature (available for most pacemakers) is evaluated to ensure appropriate function for each lead.

The following data is analyzed for all three leads:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.).
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Lead sensing values
    c. Pacing thresholds
    d. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the pacemaker (e.g. episode identified as atrial fibrillation is not double counting far-field ventricular activity on the atrial lead)
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming

a. Based upon the findings above, programmed parameters are adjusted as needed (such as pacing outputs, sensing thresholds, alert parameters, etc.).

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93281				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.37	0.89	**1.20**	1.70	3.50
Pre-Service Evaluation Time:			**6.50**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	10.00	**15.00**	20.00	45.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93281	**Recommended Physician Work RVU: 0.85**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**7.00**	**0.00**	**7.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76816	XXX	0.85	**RUC Time**	17,762

CPT Descriptor 1 Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93281	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	7.00	0.00	0.00
Median Intra-Service Time	15.00	0.00	0.00
Median Immediate Post-service Time	10.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**32.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93281

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 116000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 58000 Percentage 50.00 %

Specialty cardiac electrophysiology Frequency 46000 Percentage 39.65 %

Specialty other Frequency 12000 Percentage 10.34 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 58,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 29000 Percentage 50.00 %

Specialty cardiac electrophysiology Frequency 23000 Percentage 39.65 %

Specialty other Frequency 6000 Percentage 10.34 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93281

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93282 Tracking Number Original Specialty Recommended RVU: **0.85**
Presented Recommended RVU: **0.85**
Global Period: XXX RUC Recommended RVU: **0.85**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65-year-old female with sinus rhythm and an ischemic cardiomyopathy with an LVEF of 30% had a SC implantable cardioverter-defibrillator (ICD), a VVI (ventricle pacing, ventricle sensing, and inhibition response) ICD, implanted. The patient tells her cardiologist that she "fainted" without palpitations, warning, or feeling a shock. The cardiologist requests a programming device evaluation.

Percentage of Survey Respondents who found Vignette to be Typical: n/a

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Assess patient history for ICD indications and for changes in symptoms or development of interval symptoms or clinical episodes of ventricular tachyarrhythmia. Review prior arrhythmia history and previous programmed settings of the device as well as interim remote assessments if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage).

The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.), and to determine if any antitachycardia therapies have been delivered.
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Capacitor charge time
    c. Lead sensing value
    d. Pacing threshold
    e. Lead impedance
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ICD and treated by the device.
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming

a. Based upon the findings above, programmed parameters are adjusted as needed (such as ventricular tachycardia and ventricular fibrillation detection zones, time to declare episode as sustained and deliver therapy, and therapies (defibrillation and antitachycardia pacing parameters are adjusted based upon findings of any treated arrhythmias since the previous interrogation.

b. Pacing output, sensing threshold, alert parameters, etc. are also adjusted based upon interrogation findings.

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93282				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.43	0.85	**1.15**	1.75	3.00
Pre-Service Evaluation Time:			**6.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	8.00	**12.00**	15.00	45.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93282	**Recommended Physician Work RVU: 0.85**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**6.00**	**0.00**	**6.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**12.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	987,043

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93282	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	6.00	0.00	0.00
Median Intra-Service Time	12.00	0.00	0.00
Median Immediate Post-service Time	10.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**28.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93282

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 304000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 186000 Percentage 61.18 %

Specialty cardiac electrophysiology Frequency 110000 Percentage 36.18 %

Specialty other Frequency 28000 Percentage 9.21 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 152,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 83000 Percentage 54.60 %

Specialty cardiac electrophysiology Frequency 55000 Percentage 36.18 %

Specialty other Frequency 14000 Percentage 9.21 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93282

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93283 Tracking Number Original Specialty Recommended RVU: **1.15**
Presented Recommended RVU: **1.15**
Global Period: XXX RUC Recommended RVU: **1.15**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 70-year-old male with intermittent complete heart block had a dual chamber pacemaker defibrillator (ddd icd) implanted. the patient had an interrogation device evaluation (remote) that noted a marked elevation of shocking impedance. the icd clinic contacted the patient to assess his current symptoms and to urge him to come to the icd clinic for a programming device evaluation.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Assess patient history for ICD indications and for changes in symptoms or development of interval symptoms or clinical episodes of ventricular tachyarrhythmia. Review prior arrhythmia history and previous programmed settings of the device as well as interim remote assessments if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage). Next, the autocapture feature (available for many ICDs) is evaluated to ensure appropriate function for each lead.

The following data is analyzed for both leads:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.), and to determine if any antitachycardia therapies have been delivered.
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Capacitor charge time
    c. Lead sensing values
    d. Pacing thresholds
    e. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ICD and treated by the device.
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming

a. Based upon the findings above, programmed parameters are adjusted as needed (such as ventricular tachycardia and ventricular fibrillation detection zones, time to declare episode as sustained and deliver therapy, and therapies (defibrillation and antitachycardia pacing parameters are adjusted based upon findings of any treated arrhythmias since the previous interrogation.

b. Pacing outputs, sensing thresholds, alert parameters, etc. are also adjusted based upon interrogation findings.

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93283				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	62.00	**150.00**	450.00	2000.00
Survey RVW:	0.48	0.91	**1.25**	1.90	3.50
Pre-Service Evaluation Time:			**10.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	10.00	**15.00**	20.00	45.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93283	**Recommended Physician Work RVU: 1.15**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**10.00**	**0.00**	**10.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93750	XXX	0.92	**RUC Time**

CPT Descriptor Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99238	XXX	1.28	**RUC Time**

CPT Descriptor Hospital discharge day management; 30 minutes or less

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
70460	XXX	1.13	**RUC Time**	35,427

CPT Descriptor 1 Computed tomography, head or brain; with contrast material(s)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95819	XXX	1.08	**RUC Time**	237,498

CPT Descriptor 2 Electroencephalogram (EEG); including recording awake and asleep

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 12 **% of respondents:** 15.3 **%**

Number of respondents who choose 2nd Key Reference Code: 11 **% of respondents:** 14.1 **%**

TIME ESTIMATES (Median)

	CPT Code: 93283	Top Key Reference CPT Code: 93750	2nd Key Reference CPT Code: **99238**
Median Pre-Service Time	10.00	0.00	8.00
Median Intra-Service Time	15.00	30.00	20.00
Median Immediate Post-service Time	10.00	0.00	10.00
Median Critical Care Time	0.0		
Median Other Hospital Visit Time	0.0		0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**35.00**	**30.00**	**23.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	0.75	0.55
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	0.33	0.73
Urgency of medical decision making	0.33	1.18
Technical Skill/Physical Effort (Mean)		
Technical skill required	0.75	1.36
Physical effort required	0.08	0.18
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	0.08	1.27

Outcome depends on the skill and judgment of physician	0.58	0.91
Estimated risk of malpractice suit with poor outcome	0.42	1.36

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity	0.33	1.09

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93283

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 564000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 306000 Percentage 54.25 %

Specialty cardiac electrophysiology Frequency 258000 Percentage 45.74 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 282,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 153000 Percentage 54.25 %

Specialty cardiac electrophysiology Frequency 129000 Percentage 45.74 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93283

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93284 Tracking Number Original Specialty Recommended RVU: **1.25**
Presented Recommended RVU: **1.25**
Global Period: XXX RUC Recommended RVU: **1.25**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68-year-old male with an ischemic cardiomyopathy, LVEF of 35%, New York Heart Association (NYHA) functional class (FC) III heart failure symptoms, and a complete left bundle branch block had an ICD with biventricular pacemaker stimulation implanted. The patient returns to the ICD clinic for a programming device evaluation six months later because although the patient initially improved he is now feeling more "short of breath."

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Assess patient history for ICD indications and for changes in symptoms or development of interval symptoms or clinical episodes of ventricular tachyarrhythmia. Review prior arrhythmia history and previous programmed settings of the device as well as interim remote assessments if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage). Next, the autocapture feature (available for many ICDs) is evaluated to ensure appropriate function for each lead. Left ventricular lead pacing thresholds are evaluated in multiple vectors (up to 16) to determine optimal threshold and evaluate for phrenic nerve capture.

The following data is analyzed for all three leads:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.), and to determine if any antitachycardia therapies have been delivered.
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Capacitor charge time
    c. Lead sensing values
    d. Pacing thresholds
    e. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ICD and treated by the device.
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).

4. Reprogramming

a. Based upon the findings above, programmed parameters are adjusted as needed (such as ventricular tachycardia and ventricular fibrillation detection zones, time to declare episode as sustained and deliver therapy, and therapies (defibrillation and antitachycardia pacing parameters are adjusted based upon findings of any treated arrhythmias since the previous interrogation.

b. Pacing outputs, sensing thresholds, alert parameters, etc. are also adjusted based upon interrogation findings.

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93284				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.51	0.95	**1.40**	2.00	3.74
Pre-Service Evaluation Time:			**9.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	12.00	**17.50**	25.00	50.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93284	**Recommended Physician Work RVU: 1.25**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**9.00**	**0.00**	**9.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**18.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99238	XXX	1.28	**RUC Time**	3,460,124

CPT Descriptor 1 Hospital discharge day management; 30 minutes or less

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93284	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	9.00	0.00	0.00
Median Intra-Service Time	18.00	0.00	0.00
Median Immediate Post-service Time	10.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**37.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93284

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 570000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 300000 Percentage 52.63 %

Specialty cardiac electrophysiology Frequency 220000 Percentage 38.59 %

Specialty other Frequency 50000 Percentage 8.77 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 285,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 150000 Percentage 52.63 %

Specialty cardiac electrophysiology Frequency 110000 Percentage 38.59 %

Specialty other Frequency 25000 Percentage 8.77 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93284

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93285 Tracking Number Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable loop recorder system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 52-year-old male with coronary artery disease and diabetes who received an implantable loop recorder (ILR) implant two months ago presents for in-office device evaluation of near-syncope and palpitations and adjustment of his rhythm detection parameters with a programming device evaluation.

Percentage of Survey Respondents who found Vignette to be Typical: n/a

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history for cardiac rhythm monitoring indications and for changes in, or the development of, new symptoms. Review programmed parameters and results of prior ILR interrogations and remote monitoring. If available, correlate diary of symptoms with manually triggered recordings.

Description of Intra-Service Work: Intraservice: The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred and if electrograms have been stored.
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery status
    b. Appropriate sensing
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ILR.
    b. Compare arrhythmia to historical events to determine if it is clinically significant and requires further investigation and/or treatment.
4. Programming
    a. As indication and events warrant, reprogramming of the device is performed.

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation and explain any programming changes to the device. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93285				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.27	0.60	**0.85**	1.20	2.60
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**10.00**	15.00	40.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93285	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 1

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
93296	XXX	0.50	**RUC Time**

CPT Descriptor Duplex scan of lower extremity arteries or arterial bypass grafts; unilateral or limited study

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93285	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	5.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**20.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93285

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 46000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 24000 Percentage 52.17 %

Specialty cardiac electrophysiology Frequency 18000 Percentage 39.13 %

Specialty other Frequency 4000 Percentage 8.69 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 23,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 12000 Percentage 52.17 %

Specialty cardiac electrophysiology Frequency 9000 Percentage 39.13 %

Specialty other Frequency 2000 Percentage 8.69 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93285

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93286 Tracking Number Original Specialty Recommended RVU: **0.30**
Presented Recommended RVU: **0.30**
Global Period: XXX RUC Recommended RVU: **0.30**

CPT Descriptor: Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66-year-old patient with history of sustained VT treated with an ICD is followed with interrogation device evaluations (remote) from patient's home. The patient has dyspnea on exertion and intermittent palpitations with light-headedness.

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review available records to determine need for device interrogation in advance of procedure. Obtain device hardware details (pulse generator and lead models). Obtain indications for pacemaker implant.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage).

The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.).
2. Current interrogation results are reviewed for:
    a. Battery voltage, impedance and estimated longevity
    b. Lead sensing values
    c. Pacing thresholds
    d. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the pacemaker (e.g. episode identified as atrial fibrillation is not double counting far-field ventricular activity on the atrial lead)
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming:

a. Preprocedure: The device is programmed to asynchronous mode if indicated based upon planned surgical procedure.

b. Postprocedure: The device is programmed to normal sensing and demand mode if indicated after planned surgical procedure.

Description of Post-Service Work: Prepare and sign final report. Place report in medical record and ensure follow-up with the patient’s treating physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93286				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.28	0.60	**1.00**	1.25	3.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	7.00	**10.00**	15.00	45.00

Immediate Post Service-Time:	**6.50**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93286	**Recommended Physician Work RVU: 0.30**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**7.00**	**0.00**	**7.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 1

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
94726	XXX	0.26	**RUC Time**

CPT Descriptor Plethysmography for determination of lung volumes and, when performed, airway resistance

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93286	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	7.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**22.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93286

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Sometimes

Specialty cardiac electrophysiology How often? Sometimes

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 24000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 16500 Percentage 68.75 %

Specialty cardiac electrophysiology Frequency 6500 Percentage 27.08 %

Specialty other Frequency 1000 Percentage 4.16 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 12,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 8250 Percentage 68.75 %

Specialty cardiac electrophysiology Frequency 3250 Percentage 27.08 %

Specialty other Frequency 500 Percentage 4.16 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93286

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93287 Tracking Number Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.45**

CPT Descriptor: Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67-year-old female with chronic atrial fibrillation and complete heart block had a SC VVIR ICD implanted. The patient requires abdominal aortic aneurysm surgery. To avoid ICD shocks during the surgery related to electrosurgical cautery and manipulation, the surgeon requests evaluation and programming of the ICD to prepare the patient for surgery. After the surgery the surgeon requests a re-evaluation of the ICD system in the intensive care unit (ICU) with appropriate adjustment of the device to permit full protection of the patient from bradycardia and tachycardia events. (Note: The re-evaluation is reported separately from the initial evaluation.)

Percentage of Survey Respondents who found Vignette to be Typical: n/a

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review available records to determine need for device interrogation in advance of procedure. Obtain device hardware details (pulse generator and lead models). Obtain indications for pacemaker implant.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm. Inhibit pacing to record the underlying rhythm. Pacing capture thresholds are determined for each lead individually by iteratively reducing the pacing voltage while maintaining a fixed pulse width (and/or by iteratively reducing the pulse width while maintaining a fixed voltage).

The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.), and to determine if any antitachycardia therapies have been delivered.
2. Current interrogation results are reviewed:
    a. Battery voltage, impedance and estimated longevity
    b. Capacitor charge time
    c. Lead sensing values
    d. Pacing thresholds
    e. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ICD and treated by the device.
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).
4. Reprogramming

a. Preprocedure: Antitachycardia therapies are disabled, and pacing reprogrammed to asynchronous mode if indicated based upon planned surgical procedure.

b. Postprocedure: Antitachycardia therapies are enabled, and pacing reprogrammed to normal sensing and demand mode.

Description of Post-Service Work: Prepare and sign final report. Place report in medical record and ensure follow-up with the patient's treating physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93287				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.30	0.70	**1.00**	1.50	3.50
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	8.00	**10.00**	15.00	45.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93287	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**10.00**	**0.00**	**10.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 1

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
77002	XXX	0.54	**RUC Time**

CPT Descriptor Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device)

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93287	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	10.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**25.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93287

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Sometimes

Specialty cardiac electrophysiology How often? Sometimes

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 20000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 14460 Percentage 72.30 %

Specialty cardiac electrophysiology Frequency 4200 Percentage 21.00 %

Specialty other Frequency 1140 Percentage 5.70 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 10,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 7230 Percentage 72.30 %

Specialty cardiac electrophysiology Frequency 2100 Percentage 21.00 %

Specialty other Frequency 570 Percentage 5.70 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93287

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93288 Tracking Number Original Specialty Recommended RVU: **0.43**
Presented Recommended RVU: **0.43**
Global Period: XXX RUC Recommended RVU: **0.43**

CPT Descriptor: Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 74-year-old patient with a pacemaker for sick sinus syndrome and congestive heart failure (CHF) is followed with interrogation device evaluations (in person) for light-headedness and dyspnea.

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history for pacing indications and changes in symptoms or development of new symptoms. Review prior records of the implanted pacemaker, lead hardware, and programmed parameters, prior assessments of capture thresholds, sensing thresholds, and pacemaker dependency. Review interim remote monitoring results if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm.

The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.).
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Lead sensing values
    c. Pacing thresholds
    d. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the pacemaker (e.g. episode identified as atrial fibrillation is not double counting far-field ventricular activity on the atrial lead)
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93288				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate					
Survey RVW:	0.37	0.60	**0.80**	1.40	3.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	5.00	**10.00**	15.00	45.00

Immediate Post Service-Time:	**7.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93288	**Recommended Physician Work RVU: 0.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**7.00**	**0.00**	**7.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
29540	XXX	0.39	**RUC Time**	249,407

CPT Descriptor 1 Strapping; ankle and/or foot

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93288	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	7.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**22.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93288

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 664000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 480000 Percentage 72.28 %

Specialty cardiac electrophysiology Frequency 100000 Percentage 15.06 %

Specialty other Frequency 84000 Percentage 12.65 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 332,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 240000 Percentage 72.28 %

Specialty cardiac electrophysiology Frequency 50000 Percentage 15.06 %

Specialty other Frequency 42000 Percentage 12.65 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93288

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93289 Tracking Number Original Specialty Recommended RVU: **0.75**
Presented Recommended RVU: **0.75**
Global Period: XXX RUC Recommended RVU: **0.75**

CPT Descriptor: Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 74-year-old patient with an ICD for ventricular tachycardia is followed with interrogation device evaluations (in person) for light-headedness and dyspnea to evaluate the integrity of the device.

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Assess patient history for ICD indications and for changes in symptoms or development of interval symptoms or clinical episodes of ventricular tachyarrhythmia. Review prior arrhythmia history and previous programmed settings of the device as well as interim remote assessments if available.

Description of Intra-Service Work: Connect patient to a single or multi-lead free running ECG monitor. Obtain a communication link between the pacemaker and the programmer. Assess and record current rhythm.

The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred (e.g. stored arrhythmia events, lead function parameter out of normal range, etc.), and to determine if any antitachycardia therapies have been delivered.
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery voltage, impedance and estimated longevity
    b. Capacitor charge time
    c. Lead sensing values
    d. Pacing thresholds
    e. Lead impedances
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ICD and treated by the device.
    b. Out of range parameters are evaluated for accuracy (e.g. abnormal sensing or pacing thresholds recorded by the devices auto-sensing and autocapture algorithms).

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016					
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD					
Specialty(s):	ACC, HRS					
CPT Code:	93289					
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %		
Description of Sample:	random					
	Low	**25th pctl**	**Median***	**75th pctl**	**High**	
Service Performance Rate						
Survey RVW:	0.40	0.75	**1.00**	1.50	3.00	
Pre-Service Evaluation Time:			**5.00**			
Pre-Service Positioning Time:			**0.00**			
Pre-Service Scrub, Dress, Wait Time:			**0.00**			
Intra-Service Time:	1.00	8.00	**10.00**	15.00	45.00	
Immediate Post Service-Time:	**8.50**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**				
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**				
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**				
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**				
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**				
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93289	**Recommended Physician Work RVU: 0.75**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**9.00**	**0.00**	**9.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76817	XXX	0.75	**RUC Time**	19,214

CPT Descriptor 1 Ultrasound, pregnant uterus, real time with image documentation, transvaginal

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93289	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	9.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**24.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93289

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 274000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 174000 Percentage 63.50 %

Specialty cardiac electrophysiology Frequency 70000 Percentage 25.54 %

Specialty other Frequency 30000 Percentage 10.94 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 137,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 87000 Percentage 63.50 %

Specialty cardiac electrophysiology Frequency 35000 Percentage 25.54 %

Specialty other Frequency 15000 Percentage 10.94 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93289

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93290 Tracking Number Original Specialty Recommended RVU: **0.43**
Presented Recommended RVU: **0.43**
Global Period: XXX RUC Recommended RVU: **0.43**

CPT Descriptor: Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 58-year-old patient with prior MI, VT, and CHF had an implantable cardioverter-defibrillator system that monitors physiologic cardiovascular data in addition to the heart rhythm device implanted. The patient has ongoing dyspnea, orthopnea, and peripheral edema and is evaluated in the heart failure clinic with interrogation device evaluations (in person).

Percentage of Survey Respondents who found Vignette to be Typical:

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review patient records to identify the indication for insertable cardiac monitor (ICM) monitoring and therapy, manufacturer and model of the ICM, leads and sensors as appropriate. Review prior records of ICM parameters and compare to prior remote and in-person interrogations.

Description of Intra-Service Work: Interrogate information from the ICM by telemetric communication and either print out for review or review on the programmer or computer monitor. Perform a critical review of the interrogated data with assessment of the appropriateness of the ICM's function and appropriateness of the current programmed parameters.

Data reviewed may include, but are not limited to: (1) weight; (2) systemic BP; (3) right atrial, right ventricular, left atrial, left ventricular, and pulmonary arterial pressures; (4) intrathoracic impedance measurements; and (5) other measures of physiologic parameters.

In addition, review stored episodes of data to assess the history and trends identified by any of the collected data. Also review alerts generated from the ICM along with battery voltage and sensor information to validate the integrity of the ICM system.

Description of Post-Service Work: After physician review of above data, make a decision as to the adequacy of the programmed parameters including the appropriate data collection set-up and the interval for the next scheduled interrogation evaluation. Modify patient's medical regimen as appropriate. Inform patient of test result(s). Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93290				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.30	0.58	**0.80**	1.20	3.50
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**10.00**	15.00	30.00

Immediate Post Service-Time:	**8.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93290	**Recommended Physician Work RVU: 0.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**8.00**	**0.00**	**8.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
29540	XXX	0.39	**RUC Time**	249,407

CPT Descriptor 1 Strapping; ankle and/or foot

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93290	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	8.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**23.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93290

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 248000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 140000 Percentage 56.45 %

Specialty cardiac electrophysiology Frequency 84000 Percentage 33.87 %

Specialty other Frequency 24000 Percentage 9.67 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 124,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 70000 Percentage 56.45 %

Specialty cardiac electrophysiology Frequency 42000 Percentage 33.87 %

Specialty other Frequency 12000 Percentage 9.67 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93290

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93291 Tracking Number Original Specialty Recommended RVU: **0.43**
Presented Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.37**

CPT Descriptor: Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 41-year-old patient receives an ILR for recurrent syncopal spells. The patient has a syncopal episode resulting in a laceration to the head. The patient comes in for an interrogation device evaluation (in person).

Percentage of Survey Respondents who found Vignette to be Typical:

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history for cardiac rhythm monitoring indications and for changes in, or the development of, new symptoms. Review programmed parameters and results of prior ILR interrogations and remote monitoring.

Description of Intra-Service Work: The following data is analyzed:

1. Initial interrogation is reviewed to determine if any alert conditions have occurred and if electrograms have been stored.
2. Current interrogation results are compared to historical values and previous trends.
    a. Battery status
    b. Appropriate sensing
3. Alert conditions are then reviewed in detail
    a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ILR.
    b. Compare arrhythmia to historical events to determine if it is clinically significant and requires further investigation and/or treatment.

Description of Post-Service Work: Assess patient's clinical status for interim health changes, discuss results of the device interrogation. Discuss status of remote monitoring to ensure patient understands importance of maintaining remote transceiver at bedside and plugged in at all times. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93291				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.25	0.50	**0.75**	1.00	2.50
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	5.00	**7.00**	12.00	30.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93291	**Recommended Physician Work RVU: 0.37**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**7.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 1

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
93971	XXX	0.45	**RUC Time**

CPT Descriptor Duplex scan of extremity veins including responses to compression and other maneuvers; unilateral or limited study

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93291	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	7.00	0.00	0.00
Median Immediate Post-service Time	5.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**17.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93291

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 84000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 48000 Percentage 57.14 %

Specialty cardiac electrophysiology Frequency 27000 Percentage 32.14 %

Specialty other Frequency 9000 Percentage 10.71 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 42,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 24000 Percentage 57.14 %

Specialty cardiac electrophysiology Frequency 13500 Percentage 32.14 %

Specialty other Frequency 4500 Percentage 10.71 %

Do many physicians perform this service across the United States? Yes

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93291

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93292 Tracking Number

Original Specialty Recommended RVU: **0.43**
Presented Recommended RVU: **0.43**
RUC Recommended RVU: **0.43**

Global Period: XXX

CPT Descriptor: Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66 year old patient with history of sustained VT treated with an ICD required ICD and lead extraction and IV antibiotics for three months because of a bacterial infection with intracardiac vegetations before an ICD can be reimplanted. The patient returns one month later with her wearable cardioverter defibrillator (WCD) for interrogation device evaluation (in person).

Percentage of Survey Respondents who found Vignette to be Typical:

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Patient records are reviewed to identify the indication for wearable monitoring and therapy, manufacturer and model of the wearable. Prior records of wearable parameters are reviewed and compared to prior remote and in person interrogations.

Description of Intra-Service Work: The information is interrogated from the wearable device by telemetric communication and either printed for review or reviewed on the programmer or computer monitor. Critical review of the interrogated data with the assessment of the appropriateness of the function of the wearable device and appropriateness of the current programmed parameters is performed.

Description of Post-Service Work: Review parameters including the appropriate data collection setup and the interval for the next scheduled interrogation evaluation. Modifications to the patient's medical regimen are made as appropriate. The patient is informed of the test result. Prepare and sign final report.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	10/2016				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93292				
Sample Size:	1500	**Resp N:**	78	**Response:** 5.2 %	
Description of Sample:	random				

	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate					
Survey RVW:	0.20	0.60	**0.85**	1.00	6.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	5.00	**10.00**	14.00	45.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93292	**Recommended Physician Work RVU: 0.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
29540	XXX	0.39	**RUC Time**	249,407

CPT Descriptor 1 Strapping; ankle and/or foot

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
	XXX		**RUC Time**	

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
	XXX		**RUC Time**

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 0 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93292	Top Key Reference CPT Code: ____	2nd Key Reference CPT Code: ____
Median Pre-Service Time	5.00	0.00	0.00
Median Intra-Service Time	10.00	0.00	0.00
Median Immediate Post-service Time	5.00	0.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**20.00**	**0.00**	**0.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES

(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered		
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed		
Urgency of medical decision making		
Technical Skill/Physical Effort (Mean)		
Technical skill required		
Physical effort required		
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality		

Outcome depends on the skill and judgment of physician		
Estimated risk of malpractice suit with poor outcome		

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

PLEASE SEE SEPARATE RATIONALE DOCUMENT.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93292

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Sometimes

Specialty cardiac electrophysiology How often? Sometimes

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 2800
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 2000 Percentage 71.42 %

Specialty cardiac electrophysiology Frequency 450 Percentage 16.07 %

Specialty other Frequency 350 Percentage 12.50 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,400
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 1000 Percentage 71.42 %

Specialty cardiac electrophysiology Frequency 225 Percentage 16.07 %

Specialty other Frequency 175 Percentage 12.50 %

Do many physicians perform this service across the United States? No

---

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93292

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93280	**# of Respondents:**	78
Survey Code Descriptor:	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system		

Top Ref Code:	93750	**# of Respondents:**	18	**% of Respondents:**	23%
Top Ref Code Descriptor:	Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report				

		Survey Code Compared to Top Ref Code — Survey Code is:				
		Much Less	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall Intensity and Complexity:		0%	17%	61%	22%	0%
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	**Less**	**Identical**	**More**		
		6%	56%	38%		
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	**Less**	**Identical**	**More**		
		28%	61%	11%		
	Urgency of medical decision making	**Less**	**Identical**	**More**		
		28%	55%	17%		
Technical Skill:		**Less**	**Identical**	**More**		
		6%	61%	33%		
Physical Effort:		**Less**	**Identical**	**More**		
		16%	78%	6%		
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	**Less**	**Identical**	**More**		
		17%	61%	22%		
	Outcome depends on the skill and judgment of physician	**Less**	**Identical**	**More**		
		11%	56%	33%		
	Estimated risk of malpractice suite with poor outcome	**Less**	**Identical**	**More**		
		17%	56%	27%		

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93283	**# of Respondents:**	78
Survey Code Descriptor:	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system		

Top Ref Code:	93750	**# of Respondents:**	13	**% of Respondents:**	15%
Top Ref Code Descriptor:	Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report				

Survey Code Compared to Top Ref Code

Survey Code is:

	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall Intensity and Complexity:	0%	8%	46%	46%	0%

		Less	Identical	More
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	8%	31%	61%
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	15%	54%	31%
	Urgency of medical decision making	8%	62%	30%
Technical Skill:		8%	31%	61%
Physical Effort:		15%	54%	31%
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	31%	31%	38%
	Outcome depends on the skill and judgment of physician	0%	46%	56%
	Estimated risk of malpractice suite with poor outcome	8%	54%	38%

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93283	**# of Respondents:**	78
Survey Code Descriptor:	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional		

Top Ref Code:	93224	**# of Respondents:**	31	**% of Respondents:**	22%
Top Ref Code Descriptor:	Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report				

Survey Code Compared to Top Ref Code

Survey Code is:

	Much Less	Somewhat Less	Identical	Somewhat More	Much More
Overall Intensity and Complexity:	3%	13%	55%	29%	0%

		Less	Identical	More
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	19%	61%	20%
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	13%	55%	32%
	Urgency of medical decision making	16%	65%	19%
Technical Skill:		13%	48%	39%
Physical Effort:		24%	55%	21%
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	16%	68%	16%
	Outcome depends on the skill and judgment of physician	6%	55%	39%
	Estimated risk of malpractice suite with poor outcome	6%	55%	39%

INSTRUCTIONS

Insert information and data into all applicable cells except IWPUT and TOTAL TIME. These cells will automatically calculate.

Hide columns and rows that do not contain data.

1st REF = Top Key Reference code data

2st REF = Second Highest Key Reference code data

CURRENT = Current data (Harvard or RUC) for code being surveyed. If this is a new code, this row will be blank.

SVY = Survey data - as it appears on the Summary of Recommendation form.

REC = Specialty Society recommended data as it appears on the Summary of Recommendation form.

ISSUE: Cardiac Electrophysiology Device Monitoring

TAB: 25

Pacemaker Office Services

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	93750	Interrogation of ventricular assi	18	0.031			0.92			30						30.0			
2nd REF	99213	Office or other outpatient visit f	14	0.053			0.97			23	3					15.0			5
CURRENT	93280	Programming device evaluation		0.032			0.77			27	5					17.0			5
SVY			78	0.041	0.35	0.75	1.00	1.50	3.00	32	7			2	10	15.0	20	45	10
CURRENT	93280			0.026			0.77			32	7					15.0			10
MPC	93015	Cardiovascular stress test using		0.031			0.75			26	2					20.0			4
MPC	76816	Ultrasound, pregnant uterus, rea		0.033			0.85			31	6					15.0			10

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93279	Programming device evaluation		0.043			0.65			20	5					10.0			5
SVY			78	0.061	0.31	0.70	0.88	1.30	2.50	22	5			2	6	10.0	15	30	7
REC	93279			0.038			0.65			22	5					10.0			7
MPC	76830	Ultrasound, transvaginal		0.040			0.69			23	5					10.0			8

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93288	Interrogation device evaluation		0.021			0.43			20	5					10.0			5
SVY				0.053	0.37	0.60	0.80	1.40	3.00	22	5			1	5	10.0	15	45	7
REC	93288	Interrogation device evaluation (in per		0.016			0.43			22	5					10.0			7
MPC	29540	Strapping; ankle and/or foot		0.021			0.39			18	7					9.0			2

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93281	Programming device evaluation		0.034			0.90			30	5					20.0			5
SVY			78	0.055	0.37	0.89	1.20	1.70	3.50	31.5	6.5			3	10	15.0	20	45	10
REC	93281	Programming device evaluation (in pe		0.031			0.85			32	7					15.0			10
MPC	76816	Ultrasound, pregnant uterus, rea		0.033			0.85			31	6					15.0			10

ICD Office Services

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	93750	Interrogation of ventricular assi	13	0.031			0.92			30						30.0			
2nd REF	99238	Hospital discharge day manage	11	0.044			1.28			38	8					20.0			10
CURRENT	93283	Programming device evaluation		0.050			1.15			33	8					15.0			10
SVY				0.053	0.48	0.91	1.25	1.90	3.50	35	10			3	10	15.0	20	45	10
REC	93283	Programming device evaluation (in pe		0.047			1.15			35	10					15.0			10
MPC	70460	Computed tomography, head or		0.076			1.13			22	5					12.0			5
MPC	95819	Electroencephalogram (EEG); in		0.056			1.08			26	5					15.0			6

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93282	Programming device evaluation		0.037			0.85			28	8					15.0			5
SVY				0.066	0.43	0.85	1.15	1.75	3.00	28	6			2	8	12.0	15	45	10
REC	93282	Programming device evaluation (in pe		0.041			0.85			28	6					12.0			10
MPC	76700	Ultrasound, abdominal, real time		0.053			0.81			21	5					11.0			5

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93289	Interrogation device evaluation		0.046			0.92			25	5					15.0			5
SVY				0.070	0.40	0.75	1.00	1.50	3.00	23.5	5			1	8	10.0	15	45	8.5
REC	93289	Interrogation device evaluation (in per		0.044			0.75			24	5					10.0			9
MPC	76817	Ultrasound, pregnant uterus, rea		0.046			0.75			23	5					10.0			8

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93284	Programming device evaluation		0.056			1.25			33.5	8.5					15.0			10
SVY				0.056	0.51	0.95	1.40	2.00	3.74	36.5	9			3	12	17.5	25	50	10
REC	93284	Programming device evaluation (in pe		0.046			1.25			37	9					18.0			10
MPC	93238	Hospital discharge day manage		0.044			1.28			38	8					20.0			10

Peri-procedural Services

Source	CPT	DESC	Resp	IWPUT	RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93286	Peri-procedural device evaluatio		0.006			0.30			22	5					12.0			5
SVY				0.074	0.28	0.60	1.00	1.25	3.00	21.5	5			1	7	10.0	15	45	6.5
REC	93286	Peri-procedural device evaluation (in p		0.003			0.30			22	5					10.0			7
COMP	94726	Plethysmography for determina		0.007			0.26			15	5					5.0			5

					RVW					Total	PRE-TIME			INTRA-TIME					IMMD
					MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST

Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93287	Peri-procedural device evaluatic		0.013			0.45			26	7.5					13.5			5
SVY				0.066	0.30	0.70	1.00	1.50	3.50	25	5			1	8	10.0	15	45	10
REC	93287	Peri-procedural device evaluation (in p		0.011			0.45			25	5					10.0			10
COMP	77002	Fluoroscopic guidance for need		0.018			0.54			27	7					15.0			5

Other Office Services

Source	CPT	DESC	Resp	IWPUT	RVW MIN	25th	MED	75th	MAX	Total Time	PRE-TIME EVAL	POSIT	SDW	INTRA-TIME MIN	25th	MED	75th	MAX	IMMD POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93290	Interrogation device evaluation		0.012			0.43			25	5					12.0			8
SVY				0.051	0.30	0.58	0.80	1.20	3.50	23	5			2	5	10.0	15	30	8
REC	93290	Interrogation device evaluation (in per		0.014			0.43			23	5					10.0			8
MPC	29540	Strapping; ankle and/or foot		0.021			0.39			18	7					9.0			2

Source	CPT	DESC	Resp	IWPUT	RVW MIN	25th	MED	75th	MAX	Total Time	PRE-TIME EVAL	POSIT	SDW	INTRA-TIME MIN	25th	MED	75th	MAX	IMMD POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93292	Interrogation device evaluation		0.021			0.43			20	5					10.0			5
SVY				0.063	0.20	0.60	0.85	1.00	6.00	20	5			1	5	10.0	14	45	5
REC	93292	Interrogation device evaluation (in per		0.021			0.43			20	5					10.0			5
MPC	29540	Strapping; ankle and/or foot		0.021			0.39			18	7					9.0			2

Source	CPT	DESC	Resp	IWPUT	RVW MIN	25th	MED	75th	MAX	Total Time	PRE-TIME EVAL	POSIT	SDW	INTRA-TIME MIN	25th	MED	75th	MAX	IMMD POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93291	Interrogation device evaluation		0.017			0.43			22	5					12.0			5
SVY				0.075	0.25	0.50	0.75	1.00	2.50	17	5			1	5	7.0	12	30	5
REC	93291	Interrogation device evaluation (in per		0.021			0.37			17	5					7.0			5
COMP	93971	Duplex scan of extremity veins i		0.027			0.45			18	3					10.0			5

Source	CPT	DESC	Resp	IWPUT	RVW MIN	25th	MED	75th	MAX	Total Time	PRE-TIME EVAL	POSIT	SDW	INTRA-TIME MIN	25th	MED	75th	MAX	IMMD POST
1st REF	n/a			#DIV/0!						0									
2nd REF	n/a			#DIV/0!						0									
CURRENT	93285	Programming device evaluation		0.025			0.52			22	5					12.0			5
SVY				0.063	0.27	0.60	0.85	1.20	2.60	20	5			2	5	10.0	15	40	5
REC	93285	Programming device evaluation (in pe		0.030			0.52			20	5					10.0			5
COMP	93926	Duplex scan of lower extremity		0.028			0.50			20	5					10.0			5

SS Rec Summary

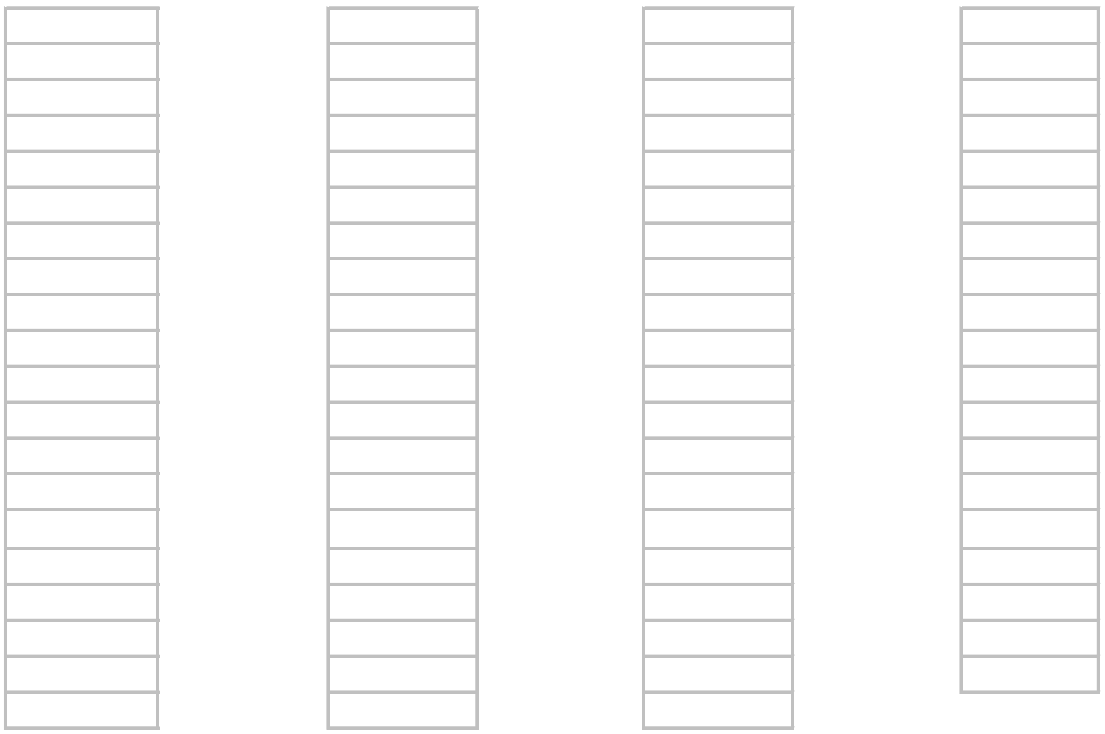
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
13	**ISSUE:** Cardiac Electrophysiology Device Monitoring																			
14	**TAB:** 25																			
15						RVW					Total	PRE-TIME			INTRA-TIME					IMMD
16	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
17	1st REF	n/a			#DIV/0!						0									
18	2nd REF	n/a			#DIV/0!						0									
19	CURRENT	93279	Programming device evaluation		0.043			0.65			20	5					10.0			5
20	SVY			78	0.061	0.31	0.70	0.88	1.30	2.50	22	5			2	6	10.0	15	30	7
21	REC		maintain		0.038			0.65			22	5					10.0			7
22	MPC	76830	Ultrasound, transvaginal		0.040			0.69			23	5					10.0			8
23																				
24						RVW					Total	PRE-TIME			INTRA-TIME					IMMD
25	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time	EVAL	POSIT	SDW	MIN	25th	MED	75th	MAX	POST
26	1st REF	93750	Interrogation of ventricular assis	18	0.031			0.92			30						30.0			
27	2nd REF	99213	Office or other outpatient visit fo	14	0.053			0.97			23	3					15.0			5
28	CURRENT	93280	Programming device evaluation		0.032			0.77			27	5					17.0			5

Code	Desc	2016 wRVU	2016 Intra	2016 Total
93279	PM DEVICE PROGR EVAL SNGL	0.65	10	20
93280	PM DEVICE PROGR EVAL DUAL	0.77	17	27
93281	PM DEVICE PROGR EVAL MULTI	0.90	20	30
93282	ICD DEVICE PROGR EVAL SNGL	0.85	15	28
93283	ICD DEVICE PROGR EVAL DUAL	1.15	15	33
93284	ICD DEVICE PROGR EVAL MULTI	1.25	15	33.5
93285	ILR DEVICE PROGR EVAL	0.52	12	22
93286	PERI-PX PACEMAKER DEVICE EV	0.30	12	22
93287	PERI-PX ICD DEVICE EV	0.45	13.5	26
93288	PM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93289	ICD DEVICE INTERROGATION EVAL IN PERSON	0.92	15	25
93290	ICM DEVICE INTERROGATION EVAL IN PERSON	0.43	12	25
93291	ILR DEVICE INTERROGATION EVAL IN PERSON	0.43	12	22
93292	WCD DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93293	TRANSTELEPHONIC PM PHONE R-STRIP DEVICE EVAL	0.32	10	20
93294	PM DEVICE INTERROGATION REMOTE, 90-DAY	0.65	15	30
93295	ICD DEVICE INTERROGATION REMOTE, 90-DAY	1.29	22.5	37.5
93297	ICM DEVICE INTERROGATION REMOTE, 30-DAY	0.52	24	50
93298	ILR DEVICE INTERROGATION REMOTE, 30-DAY	0.52	24	44

RUC Rationale Notes from 2008	Rec. wRVU
survey times, work neutrality calculated wRVU	0.65
survey times with modification, survey wRVU	0.77
RUC noted increasing intensity	0.90
survey times, survey 25th wRVU	0.85
survey times, survey 25th wRVU 1.18 (later reduced by CMS)	1.15
survey times, survey 25th wRVU	1.25
survey times, survey 25th wRVU; identical time to 93291, but harder	0.52
survey times, roughly half wRVU of 93279 since reported twice	0.30
survey times, roughly half wRVU of 93282 since reported twice	0.45
survey times, work neutrality calculated wRVU	0.43
survey times, wRUV crosswalk to 99213 was below survey 25th of 1.00	0.75
survey times, crosswalk to 93288/93291 wRVU	0.43
survey times, crosswalk to 93288 wRVU	0.43
survey times, crosswalk to 93288/93291/93290 wRVU	0.43
1.9 transmissions per 90 days; 190% of survey times; 190% wRVU of 93010	0.32
1.5 transmissions per 90 days; 150% of 93288 times; 150% wRVU of 93288	0.65
1.5 transmissions per 90 days; 150% of 93289 times; 150% wRVU of 93289 (later reduced by CMS)	1.13
2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228	0.52
2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228	0.52

Rec. Intra	Rec. Total
10	22
15	32
16	33
12	28
15	35
17.5	37.5
10	20
10	21.5
10	25
10	22
10	23.5
10	23
7	17
10	20
5	15
15	33
15	35.5
10	46
10	34

Presentation Notes
Maintain. Below survey 25th 0.70.
Maintain. Above survey 25th 0.75. Time increase.
Maintain. Above survey 25th 0.89. Time increase.
Maintain. Matches survey 25th 0.85.
Maintain. Above survey 25th 0.91. Time increase.
Maintain. Above survey 25th 0.95. Time increase.
Maintain. Below survey 25th 0.60.
Maintain. Below survey 25th 0.60.
Maintain. Below survey 25th 0.70.
Maintain. Below survey 25th 0.60.
Reduce to survey 25th 0.75.
Maintain. Below survey 25th 0.58.
Maintain. Below survey 25th 0.50.
Maintain. Below survey 25th 0.60.
Maintain. Below survey 25th 0.40.
Maintain. RUC derived current times and values as 1.5 of 93288. We propose that method again.
Reduce. RUC derived current times and values as 1.5 of 93289. We propose that method again.
Maintain. Below survey 25th 0.55. RUC derived current times as double 93290. We propose that method again.
Maintain. Matches survey 25th 0.52. RUC derived current times as double 93290. We propose that method again, d





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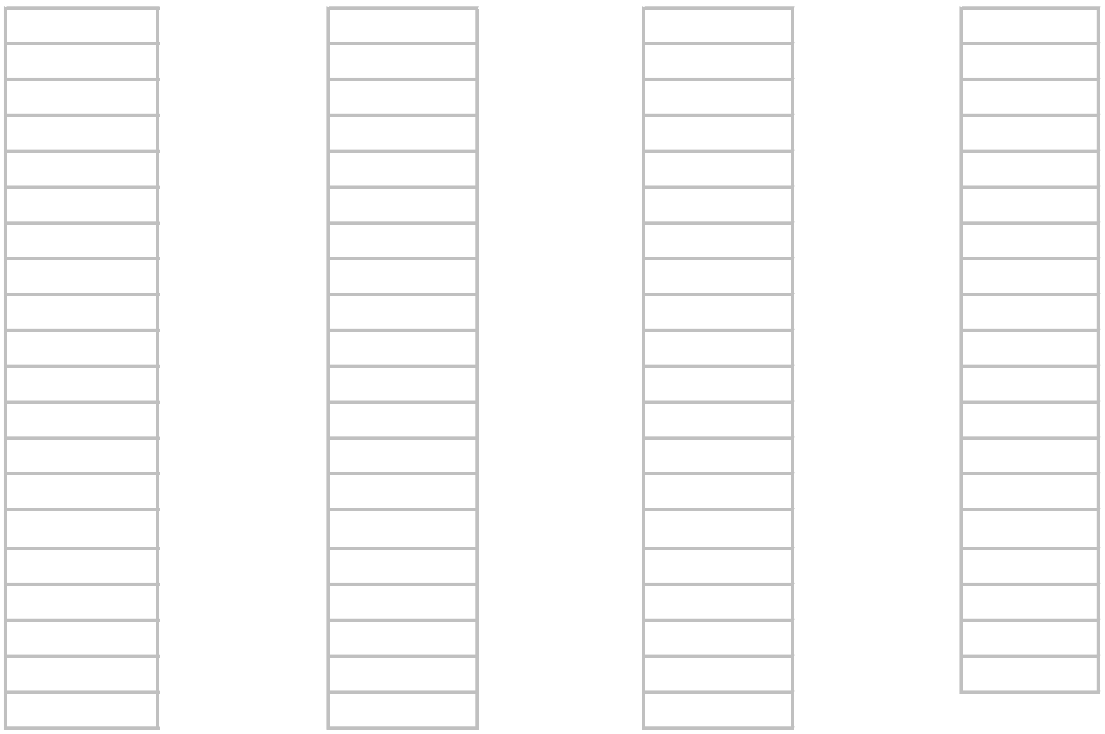
Code	Desc	2016 wRVU	2016 Intra	2016 Total
93279	PM DEVICE PROGR EVAL SNGL	0.65	10	20
93280	PM DEVICE PROGR EVAL DUAL	0.77	17	27
93281	PM DEVICE PROGR EVAL MULTI	0.90	20	30
93282	ICD DEVICE PROGR EVAL SNGL	0.85	15	28
93283	ICD DEVICE PROGR EVAL DUAL	1.15	15	33
93284	ICD DEVICE PROGR EVAL MULTI	1.25	15	33.5
93285	ILR DEVICE PROGR EVAL	0.52	12	22
93286	PERI-PX PACEMAKER DEVICE EV	0.30	12	22
93287	PERI-PX ICD DEVICE EV	0.45	13.5	26
93288	PM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93289	ICD DEVICE INTERROGATION EVAL IN PERSON	0.92	15	25
93290	ICM DEVICE INTERROGATION EVAL IN PERSON	0.43	12	25
93291	ILR DEVICE INTERROGATION EVAL IN PERSON	0.43	12	22
93292	WCD DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93293	TRANSTELEPHONIC PM PHONE R-STRIP DEVICE EVAL	0.32	10	20
93294	PM DEVICE INTERROGATION REMOTE, 90-DAY	0.65	15	30
93295	ICD DEVICE INTERROGATION REMOTE, 90-DAY	1.29	22.5	37.5
93297	ICM DEVICE INTERROGATION REMOTE, 30-DAY	0.52	24	50
93298	ILR DEVICE INTERROGATION REMOTE, 30-DAY	0.52	24	44

2008 RUC Rationale Notes
survey times, work neutrality calculated wRVU
survey times with modification, survey wRVU
RUC noted increasing intensity
survey times, survey 25th wRVU
survey times, survey 25th wRVU 1.18 (later reduced by CMS)
survey times, survey 25th wRVU
survey times, survey 25th wRVU; identical time to 93291, but harder
survey times, roughly half wRVU of 93279 since reported twice
survey times, roughly half wRVU of 93282 since reported twice
survey times, work neutrality calculated wRVU
survey times, wRUV crosswalk to 99213 was below survey 25th of 1.00
survey times, crosswalk to 93288/93291 wRVU
survey times, crosswalk to 93288 wRVU
survey times, crosswalk to 93288/93291/93290 wRVU
1.9 transmissions per 90 days; 190% of survey times; 190% wRVU of 93010
1.5 transmissions per 90 days; 150% of 93288 times; 150% wRVU of 93288
1.5 transmissions per 90 days; 150% of 93289 times; 150% wRVU of 93289 (later reduced by CMS)
2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228
2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228





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Code	Desc	wRVU	Intra	Total
93279	PM DEVICE PROGR EVAL SNGL	0.65	10	22
93280	PM DEVICE PROGR EVAL DUAL	0.77	15	32
93281	PM DEVICE PROGR EVAL MULTI	0.90	16	33
93282	ICD DEVICE PROGR EVAL SNGL	0.85	12	28
93283	ICD DEVICE PROGR EVAL DUAL	1.15	15	35
93284	ICD DEVICE PROGR EVAL MULTI	1.25	17.5	37.5
93285	ILR DEVICE PROGR EVAL	0.52	10	20
93286	PERI-PX PACEMAKER DEVICE EV	0.30	10	21.5
93287	PERI-PX ICD DEVICE EV	0.45	10	25
93288	PM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	22
93289	ICD DEVICE INTERROGATION EVAL IN PERSON	0.75	10	23.5
93290	ICM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	23
93291	ILR DEVICE INTERROGATION EVAL IN PERSON	0.43	7	17
93292	WCD DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93293	TRANSTELEPHONIC PM PHONE R-STRIP DEVICE EVAL, 90-DAY	0.32	5	15
93294	PM DEVICE INTERROGATION REMOTE, 90-DAY	0.65	15	33
93295	ICD DEVICE INTERROGATION REMOTE, 90-DAY	1.13	15	35.5
93297	ICM DEVICE INTERROGATION REMOTE, 30-DAY	0.52	10	46
93298	ILR DEVICE INTERROGATION REMOTE, 30-DAY	0.52	10	34

Notes
Maintain. Below survey 25th 0.70.
Maintain. Above survey 25th 0.75. Time increase.
Maintain. Above survey 25th 0.89. Time increase.
Maintain. Matches survey 25th 0.85.
Maintain. Above survey 25th 0.91. Time increase.
Maintain. Above survey 25th 0.95. Time increase.
Maintain. Below survey 25th 0.60.
Maintain. Below survey 25th 0.60.
Maintain. Below survey 25th 0.70.
Maintain. Below survey 25th 0.60.
Reduce to survey 25th 0.75.
Maintain. Below survey 25th 0.58.
Maintain. Below survey 25th 0.50.
Maintain. Below survey 25th 0.60.
Maintain. Below survey 25th 0.40.
Maintain. RUC derived current times and values as 1.5 of 93288. We propose that method again.
Reduce. RUC derived current times and values as 1.5 of 93289. We propose that method again.
Maintain. Below survey 25th 0.55. RUC derived current times as double 93290. We propose that method again.
Maintain. Matches survey 25th 0.52. RUC derived current times as double 93290. We propose that method again, d

oubling 93291.

CPT Code: 93279-93284, 93288-93292
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93279 Programming device evaluation with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with report; single lead pacemaker system
93280 Programming device evaluation with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with report; dual lead pacemaker system
93281 Programming device evaluation with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with report; multiple lead pacemaker system
93282 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system
93283 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system
93284 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system
93288 Interrogation device evaluation (in person) with physician analysis, review and report, includes connection, recording and disconnection per patient encounter; single, dual or multiple lead pacemaker system
93289 Interrogation device evaluation (in person) with physician analysis, review and report, includes connection, recording and disconnection per patient encounter; single, dual or multiple lead implantable cardioverter defibrillator system, including analysis of heart rhythm derived data elements
93290 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors
93291 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis
93292 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as**

your comparison. You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

-On line 26 we recommend the addition of ~~5~~ 3 minutes for vitals. Blood pressure, heart rate, and weight~~, and height~~ are all obtained. We believe the lack of time for vitals to be an oversight or error.
-On lines 67 and 69 we recommend increasing the number of electrodes and disks from 4 to 5. 5 is the norm, and is already present for other codes in the family (93286, 93287). We believe this to have been an error.
-Increase lines 72 and 73 for not highly technical equipment to include entire service period time.

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

RN/LPN/MTA completes preservice diagnostic & referral forms

Intra-Service Clinical Labor Activities:

Med Tech/Asst greets patient, obtains vitals, prepares room, cleans room, and scans & files ~~PaceArt~~ report. These are clerical tasks less relevant than the highly skilled work performed by the nurse.

RN/LPN/MTA obtains consent, reviews charts, interrogates device and assists physician (line 36) using the physician intraservice time as an approximatation, prints & sends ~~PaceArt~~ report.

Post-Service Clinical Labor Activities:

CPT Code: 93285, 93291
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93285 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable loop recorder system
93291 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

-On line 26 we recommend the addition of 5 minutes for vitals. Blood pressure, heart rate, weight, and height are all obtained. We believe the lack of time for vitals to be an oversight or error.
-On line 28 we recommend increasing staff time from 1 minute to 2 minutes to reflect the RUC standard for room prep.
-On lines 67 and 69 we recommend increasing the number of electrodes and disks from 4 to 5. 5 is the norm, and is already present for other codes in the family (93286, 93287). We believe this to have been an error.
-Increase lines 72 and 73 for not highly technical equipment to include entire service period time.

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

RN/LPN/MTA completes preservice diagnostic & referral forms

Intra-Service Clinical Labor Activities:

Med Tech/Asst greets patient, obtains vitals, cleans room, and scans & files PaceArt report.

RN/LPN/MTA obtains consent, prepares room, reviews charts, interrogates device, prints & sends PaceArt report.

Post-Service Clinical Labor Activities:

CPT Code: 93286-93287
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93286 Peri-procedural device evaluation and programming of device system parameters before or after a surgery, procedure or test with report; single, dual or multiple lead pacemaker system
93287 Peri-procedural device evaluation and programming of device system parameters before or after a surgery, procedure or test with report; single, dual or multiple lead implantable cardioverter defibrillator system

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

-On line 28 we recommend increasing staff time from 0 minute to 2 minutes to reflect the RUC standard for room prep.
- On line 40 we recommend increasing staff time from 0 minute to 3 minutes to reflect the RUC standard for room cleaning.
-Increase lines 72 and 73 for not highly technical equipment to include entire service period time.

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities:

Electrodiagnostic tech receives and reviews remote transmissions, prepares report and distribution of results.

RN/LPN/MTA enrolls patient, educates patient on use of device/service; physician notification

Post-Service Clinical Labor Activities:

CPT Code: 93290, 93292
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93290 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors
93292 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

-On line 26 we recommend the addition of 5 minutes for vitals. Blood pressure, heart rate, weight, height, and oxygen saturation are all obtained. We believe the lack of time for vitals to be an oversight or error.
-On line 28 we recommend increasing staff time from 1 minute to 2 minutes to reflect the RUC standard for room prep.
-On lines 67 and 69 we recommend increasing the number of electrodes and disks from 4 to 5. 5 is the norm, and is already present for other codes in the family (93286, 93287). We believe this to have been an error.
-Increase lines 72 and 73 for not highly technical equipment to include entire service period time.

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

RN/LPN/MTA completes preservice diagnostic & referral forms

Intra-Service Clinical Labor Activities:

Med Tech/Asst greets patient, obtains vitals, prepares room, cleans room, and scans & files PaceArt report.

RN/LPN/MTA obtains consent, reviews charts, interrogates device, prints & sends PaceArt report.

Post-Service Clinical Labor Activities:

CPT Code: 93293
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93293 Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities:

Electrodiagnostic tech receives and reviews remote transmissions, prepares report and distribution of results.

RN/LPN/MTA enrolls patient, educates patient on use of device/service; physician notification

Post-Service Clinical Labor Activities:

CPT Code: 93296, 93299
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93296 Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable cardioverter defibrillator, remote data acquisitions), receipt of transmissions and technician review, technical support and distribution of results
93299 Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor or implantable loop recorder, remote data acquisition9s), receipt of transmissions and technician review, technical support and distribution of results

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence: Code 93299 is carrier priced. We propose to crosswalk inputs from 93296 to 93299.

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities:

Electrodiagnostic tech enrolls patient, educates patient on use of device/service, receives and reviews remote transmissions, prepares report and distribution of results.

~~RN/LPN/MTA enrolls patient, educates patient on use of device/service; physician notification~~

Post-Service Clinical Labor Activities:

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		

Post-Service		
Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

PM Office Codes

REFERENCE CODE				REFERENCE CODE				REFERENCE CODE	
93288		93288		93279		93279		93280	
Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
30.0	0.0	33.0	0.0	33.0	0.0	33.0	0.0	37.0	0.0
20.0	0.0	20.0	0.0	23.0	0.0	20.0	0.0	27.0	0.0
2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0
18.0	0.0	18.0	0.0	21.0	0.0	18.0	0.0	25.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	13.0	0.0	10.0	0.0	13.0	0.0	10.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	13.0	0.0	10.0	0.0	13.0	0.0	10.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		2		2		2		2	
3		3		3		3		3	
		3				3			
3		3		3		3		3	
2		2		2		2		2	
2		2		2		2		2	
10		10		13		10		17	

3		3		3		3		3	
3		3		3		3		3	
2		2		2		2		2	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		1		1		1		1	
4		4		4		4		4	
4		5		4		5		4	
10		10		10		10		15	
4		5		4		5		4	
18		31		21		31		25	
18		31		21		31		25	

		REFERENCE CODE				REFERENCE CODE			
93280		93281		93281		93289		93289	
Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,	
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
38.0	0.0	43.0	0.0	39.0	0.0	38.0	0.0	33.0	0.0
25.0	0.0	33.0	0.0	26.0	0.0	28.0	0.0	20.0	0.0
2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0
23.0	0.0	31.0	0.0	24.0	0.0	26.0	0.0	18.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.0	0.0	10.0	0.0	13.0	0.0	10.0	0.0	13.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.0	0.0	10.0	0.0	13.0	0.0	10.0	0.0	13.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		2		2		2		2	
3		3		3		3		3	
3				3				3	
3		3		3		3		3	
2		2		2		2		2	
2		2		2		2		2	
15		23		16		18		10	

3		3		3		3		3	
3		3		3		3		3	
2		2		2		2		2	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		1		1		1		1	
4		4		4		4		4	
5		4		5		4		5	
15		15		15		15		15	
5		4		5		4		5	
36		31		37		26		31	
36		31		37		18		31	

ICD Office Codes

REFERENCE CODE				REFERENCE CODE				REFERENCE CODE	
93282		93282		93283		93283		93284	
Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to	
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
38.0	0.0	35.0	0.0	44.0	0.0	38.0	0.0	50.0	0.0
28.0	0.0	22.0	0.0	34.0	0.0	25.0	0.0	40.0	0.0
2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0
26.0	0.0	20.0	0.0	32.0	0.0	23.0	0.0	38.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	13.0	0.0	10.0	0.0	13.0	0.0	10.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	13.0	0.0	10.0	0.0	13.0	0.0	10.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		2		2		2		2	
3		3		3		3		3	
		3				3			
3		3		3		3		3	
2		2		2		2		2	
2		2		2		2		2	
18		12		24		15		30	

3		3		3		3		3	
3		3		3		3		3	
2		2		2		2		2	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		1		1		1		1	
4		4		4		4		4	
4		5		4		5		4	
15		15		20		20		20	
4		5		4		5		4	
26		33		32		36		38	
26		33		32		36		38	

		ILR Office Codes							
		REFERENCE CODE				REFERENCE CODE			
93284		93291		93291		93285		93285	
Programming device evaluation (in person) with iterative adjustment of the implantable device to		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to	
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
40.5	0.0	26.0	0.0	26.0	0.0	28.0	0.0	29.0	0.0
27.5	0.0	19.0	0.0	16.0	0.0	21.0	0.0	19.0	0.0
2.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0
25.5	0.0	18.0	0.0	15.0	0.0	20.0	0.0	18.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.0	0.0	7.0	0.0	10.0	0.0	7.0	0.0	10.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.0	0.0	7.0	0.0	10.0	0.0	7.0	0.0	10.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		1		1		1		1	
3		3		3		3		3	
3				3				3	
3		2		2		2		2	
2		1		2		1		2	
2		2		2		2		2	
17.5		11		7		13		10	

3		3		3		3		3	
3		2		2		2		2	
2		1		1		1		1	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		1		1		1		1	
4		4		4		4		4	
5		4		5		4		5	
20		15		15		20		20	
5		4		5		4		5	
38.5		18		25		20		28	
38.5		18		25		20		28	

ICM/WCD Office Codes

REFERENCE CODE		REFERENCE CODE		REFERENCE CODE				REFERENCE CODE	
93290		93290		93292		93292		93286	
Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Peri-procedural device evaluation and programming of device system parameters before or after a	
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
17.0	0.0	27.0	0.0	20.0	0.0	29.0	0.0	19.0	0.0
9.0	0.0	15.0	0.0	12.0	0.0	17.0	0.0	14.0	0.0
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0
8.0	0.0	14.0	0.0	11.0	0.0	16.0	0.0	13.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.0	0.0	12.0	0.0	8.0	0.0	12.0	0.0	5.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.0	0.0	12.0	0.0	8.0	0.0	12.0	0.0	5.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		1		1		1		1	
3		3		3		3		3	
		3				3		1	
1		1		2		2		2	
1		2		1		2			
2		2		2		2		2	
4		10		5		10		5	

3		3		3		3			
1		1		2		2		3	
1		1		1		1		2	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
n/a		n/a		n/a		n/a		n/a	
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		1		1		1		1	
4		4		4		4		4	
4		5		4		5		5	
10		10		10		10		10	
4		5		4		5		5	
								2	
8		26		11		28		13	
8		26		11		28		13	

PM/ICD Periprocedural Codes

		REFERENCE CODE			
93286		**93287**		**93287**	
Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a	
Non Fac	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
28.0	**0.0**	**21.0**	**0.0**	**28.0**	**0.0**
18.0	**0.0**	**16.0**	**0.0**	**18.0**	**0.0**
1.0	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**
17.0	**0.0**	**15.0**	**0.0**	**17.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10.0	**0.0**	**5.0**	**0.0**	**10.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10.0	**0.0**	**5.0**	**0.0**	**10.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
1		**1**		**1**	
3		**3**		**3**	
0		**1**		**0**	
2		**2**		**2**	
2				**2**	
2		**2**		**2**	
10		**7**		**10**	

3				3	
3		3		3	
2		2		2	
n/a		n/a		n/a	
n/a		n/a		n/a	
n/a		n/a		n/a	

# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0

1		1		1	
4		4		4	
5		5		5	
10		10		10	
5		5		5	
2		2		2	
27		15		27	
27		15		27	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

Meeting Date: October 2016 **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	**REFEREN** **932** Transtel rhythn pacer evaluation dual, or mu
LOCATION			**Non Fac**
GLOBAL PERIOD	**XXX**		
TOTAL CLINICAL LABOR TIME			**48.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**9.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**9.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech	**39.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech	**39.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech	**0.0**
PRE-SERVICE			
Start: Following visit when decision for surgery or procedure made			
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	
Coordinate pre-surgery services			
Schedule space and equipment in facility			
Provide pre-service education/obtain consent			
Follow-up phone calls & prescriptions			
Other Clinical Activity - *specify:*			
End: When patient enters office/facility for surgery/procedure			
SERVICE PERIOD			
Start: When patient enters office/facility for surgery/procedure:			
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	
Obtain vital signs	L037D	RN/LPN/MTA	
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	
Prepare room, equipment, supplies	L026A	Med Tech/Asst	
Setup scope (non facility setting only)			
Prepare and position patient/ monitor patient/ set up IV			
Sedate/apply anesthesia			
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	
Intra-service			
Assist physician in performing procedure	L037A	EDX Tech	**39**
Assist physician in performing procedure	L037D	RN/LPN/MTA	**9**

Assist physician/moderate sedation (% of physician time)			
Post-Service			
Monitor pt. following moderate sedation			
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)			
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)			
Clean room/equipment by physician staff	L026A	Med Tech/Asst	
Clean Scope			
Clean Surgical Instrument Package			
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	
Review/read X-ray, lab, and pathology reports			
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions			
Other Clinical Activity - *specify:*			
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**
Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**
Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**
End: Patient leaves office			
POST-SERVICE Period			
Start: Patient leaves office/facility			
Conduct phone calls/call in prescriptions			
Office visits: List Number and Level of Office Visits			**# visits**
99211 16 minutes		16	
99212 27 minutes		27	
99213 36 minutes		36	
99214 53 minutes		53	
99215 63 minutes		63	
Total Office Visit Time			**0.0**
Other Clinical Activity - *specify:*			
End: with last office visit before end of global period			
MEDICAL SUPPLIES*	**CODE**	**UNIT**	
pack, minimum multi-specialty visit	SA048	pack	
swab-pad, alcohol	SJ053	item	
electrode adhesive disk	SJ019	item	
paper, laser printing (each sheet)	SK057	item	**10**
electrode, ECG (single)	SD053	item	
gloves, non-sterile	SB022	pair	
EQUIPMENT	**CODE**		
table, exam	EF023	minutes	
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	
pacemaker interrogation, system	EQ320	minutes	**39**

Transtelephonic			90-Day Remote Codes						
ICE CODE			REFERENCE CODE				REFERENCE CODE		
293	93293		93296		93296		93294		932
ephonic n strip naker (s) single, ultiple lead	Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogati evaluation(s up to 90 da dual or mu pacemake
Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
0.0	48.0	0.0	28.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	9.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	9.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	39.0	0.0	27.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	39.0	0.0	27.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	n/a		n/a		n/a		n/a		n/a
	n/a		n/a		n/a		n/a		n/a
	n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	10		10		10				

	39				28				
	0		27		0				

	REFERENCE CODE				REFERENCE CODE		REFERENCE CODE		
294	93295		93295		93296		93299		932
ion device s) (remote), ays; single, ultiple lead er system	Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead implantable		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead implantable		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor		Interrogati evaluation(s per 30 implar cardiovascu
Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	28.0
0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0	28.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	27.0	0.0	0.0	0.0	28.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
					27				28
					1				0

	n/a		n/a		n/a		n/a		n/a
	n/a		n/a		n/a		n/a		n/a
	n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

					10				10

									28
					27				0

30-Day Remote Codes

	REFERENCE CODE				REFERENCE CODE			
299 ion device s), (remote), days, ntable ular monitor	93297 Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor		93297 Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor		93298 Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,		93298 Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,	
Facility	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

	n/a		n/a		n/a		n/a	
	n/a		n/a		n/a		n/a	
	n/a		n/a		n/a		n/a	

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	A	B	C	D	E	F	G
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93288		93288	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**30.0**	**0.0**	**35.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**20.0**	**0.0**	**20.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**18.0**	**0.0**	**18.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**10**		**10**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	D	E	F	G
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93288		93288	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**10**		**10**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**18**		**33**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**18**		**33**	
75							
76							
77							

	A	B	C	H	I	J	K
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93279		93279	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**33.0**	**0.0**	**35.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**23.0**	**0.0**	**20.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**21.0**	**0.0**	**18.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**13**		**10**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	H	I	J	K
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93279		93279	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**10**		**10**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**21**		**33**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**21**		**33**	
75							
76							
77							

	A	B	C	L	M	N	O
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93280		93280	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**37.0**	**0.0**	**40.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**27.0**	**0.0**	**25.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**25.0**	**0.0**	**23.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**17**		**15**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	L	M	N	O
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93280		93280	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**15**		**15**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**25**		**38**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**25**		**38**	
75							
76							
77							

	A	B	C	P	Q	R	S
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93281		93281	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**43.0**	**0.0**	**41.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**33.0**	**0.0**	**26.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**31.0**	**0.0**	**24.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**23**		**16**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	P	Q	R	S
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93281		93281	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**15**		**15**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**31**		**39**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**31**		**39**	
75							
76							
77							

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				REFEREN
93289		93289		93282		93282		932
Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programm evaluation with ite adjustme implantable
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
38.0	0.0	35.0	0.0	38.0	0.0	37.0	0.0	44.0
28.0	0.0	20.0	0.0	28.0	0.0	22.0	0.0	34.0
2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
26.0	0.0	18.0	0.0	26.0	0.0	20.0	0.0	32.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	15.0	0.0	10.0	0.0	15.0	0.0	10.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	15.0	0.0	10.0	0.0	15.0	0.0	10.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		2		2		2		2
3		3		3		3		3
		5				5		
3		3		3		3		3
2		2		2		2		2
2		2		2		2		2
18		10		18		12		24

3		3		3		3		3
3		3		3		3		3
2		2		2		2		2
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1		1		1		1		1
4		4		4		4		4
4		5		4		5		4
15		15		15		15		20
4		5		4		5		4

26		33		26		35		32
18		33		26		35		32

ICE CODE			REFERENCE CODE			
283	93283		93284		93284	
ing device (in person) erative nt of the e device to	Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to	
Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
0.0	40.0	0.0	50.0	0.0	42.5	0.0
0.0	25.0	0.0	40.0	0.0	27.5	0.0
0.0	2.0	0.0	2.0	0.0	2.0	0.0
0.0	23.0	0.0	38.0	0.0	25.5	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	15.0	0.0	10.0	0.0	15.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	15.0	0.0	10.0	0.0	15.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2		2		2	
	3		3		3	
	5				5	
	3		3		3	
	2		2		2	
	2		2		2	
	15		30		17.5	

	3		3		3		
	3		3		3		Print PaceArt report
	2		2		2		Scan & File
	n/a		n/a		n/a		
	n/a		n/a		n/a		
	n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1		1		1		
	4		4		4		
	5		4		5		
	20		20		20		
	5		4		5		
	38		38		40.5		not highly technical c
	38		38		40.5		not highly technical c

corresponds to total intraservice period
corresponds to total intraservice period

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L037D	RN/LPN/MTA
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				
93291		93291		93285		93285		
Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
26.0	0.0	28.0	0.0	28.0	0.0	31.0	0.0	
19.0	0.0	16.0	0.0	21.0	0.0	19.0	0.0	
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	
18.0	0.0	15.0	0.0	20.0	0.0	18.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7.0	0.0	12.0	0.0	7.0	0.0	12.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7.0	0.0	12.0	0.0	7.0	0.0	12.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
3		3		3		3		
		5				5		
2		2		2		2		2 minutes
1		2		1		2		
2		2		2		2		
11		7		13		10		

3		3		3		3		
								Print Pace
2		2		2		2		Scan & Fil
1		1		1		1		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
4		4		4		4		
4		5		4		5		
15		15		20		20		
4		5		4		5		
								not highly
18		27		20		30		not highly
18		27		20		30		

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				
93290		93290		93292		93292		
Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
17.0	0.0	29.0	0.0	20.0	0.0	31.0	0.0	
9.0	0.0	15.0	0.0	12.0	0.0	17.0	0.0	
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	
8.0	0.0	14.0	0.0	11.0	0.0	16.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8.0	0.0	14.0	0.0	8.0	0.0	14.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8.0	0.0	14.0	0.0	8.0	0.0	14.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
3		3		3		3		
		5				5		
1		1		2		2		
1		2		1		2		2 minutes
2		2		2		2		
4		10		5		10		

3		3		3		3		
1		1		2		2		Print Pace
1		1		1		1		Scan & Fil
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
4		4		4		4		
4		5		4		5		
10		10		10		10		
4		5		4		5		
8		28		11		30		not highly
8		28		11		30		not highly

technical corresponds to total intraservice period
technical corresponds to total intraservice period

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair
EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				
93286		93286		93287		93287		
Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
19.0	0.0	28.0	0.0	21.0	0.0	28.0	0.0	
14.0	0.0	18.0	0.0	16.0	0.0	18.0	0.0	
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	
13.0	0.0	17.0	0.0	15.0	0.0	17.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5.0	0.0	10.0	0.0	5.0	0.0	10.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5.0	0.0	10.0	0.0	5.0	0.0	10.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
3		3		3		3		
1		0		1		0		Vitals are
2		2		2		2		
		2				2		2 minutes
2		2		2		2		
5		10		7		10		

		3				3		3 MINUTE
3		3		3		3		Print Pace
2		2		2		2		Scan & Fil
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
4		4		4		4		
5		5		5		5		
10		10		10		10		
5		5		5		5		
2		2		2		2		
13		27		15		27		not highly
13		27		15		27		not highly

technical corresponds to total intraservice period
technical corresponds to total intraservice period

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037A	EDX Tech
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		

Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes
pacemaker interrogation, system	EQ320	minutes

REFERENCE CODE

93293		93293	
Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead		Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead	
Non Fac	**Facility**	**Non Fac**	**Facility**
48.0	**0.0**	**48.0**	**0.0**
9.0	**0.0**	**9.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
9.0	**0.0**	**9.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
39.0	**0.0**	**39.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
39.0	**0.0**	**39.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
39		**39**	
9		**9**	

n/a		n/a	
n/a		n/a	
n/a		n/a	

# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0

10		10	

39		39	

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify:	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037A	EDX Tech
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		

Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes
pacemaker interrogation, system	EQ320	minutes

REFERENCE CODE				REFERENCE CODE				REFEREN
93296		93296		93294		93294		932
Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogati evaluation(s up to 90 da dual or mu implar
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
28.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

10		10						

27		28						

ICE CODE		
295	93295	
ion device s) (remote), ays; single, ltiple lead ntable	Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead implantable	
Facility	**Non Fac**	**Facility**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**

	n/a	
	n/a	
	n/a	
# visits	# visits	# visits
0.0	0.0	0.0

eport and distribution of results; originally assumed 1.5 transmission per 90 days. Data from industry sho

ows screens are "viewed and/or printed" an average of 2.4 times per 90 days.

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037A	EDX Tech
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		

Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes
pacemaker interrogation, system	EQ320	minutes

REFERENCE CODE		REFERENCE CODE				REFERENCE CODE		
93296		93299		93299		93297		932
Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor		Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor		Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor		Interrogati evaluation(s up to 3(implar cardiovascu
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
28.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27				28				
1				0				

n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

10				10				

27				28				

	REFERENCE CODE			
297	93298		93298	
ion device s), (remote) 0 days; ntable ular monitor	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,		Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,	
Facility	Non Fac	Facility	Non Fac	Facility
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

	n/a		n/a	
	n/a		n/a	
	n/a		n/a	

# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0

s PM/ICD. Data from industry shows screens are "viewed and/or printed" an average of 3.9 times per 3(

0 days.

AMA/Specialty Society RVS Update Committee Summary of Recommendations
CMS High Expenditure Procedures

January 2017

Cardiac Electrophysiology Device Monitoring Services

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. The specialty societies surveyed 93278-93292 at the October 2016 meeting. The specialty societies indicated that the survey respondents may have been unclear and responded per transmission instead of per 30-90 days for all transmissions. The RUC requested that the remote cardiac device monitoring codes 93293-93298 be resurveyed for January 2017 with specific direction that the service includes all transmissions for 30 or 90 days.

The specialty societies surveyed these remote cardiac monitoring services twice and the intra-service times were similar with each survey. The specialties noted and the RUC confirmed that the current intra-service times for these services were not survey times but were extrapolated from other codes in the family and should not be used to compare the time required to perform these services. Comparing the incorrect existing times demonstrate an artificial decrease in time.

93293 ***Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days***
The RUC reviewed the survey responses from 55 cardiologists and determined that the survey 25th percentile work RVU of 0.31 appropriately accounts for the work required to perform this service. The RUC recommends 3 minutes pre-service, 5 minutes intra-service and 5 minutes immediate post-service time. The RUC had previously derived at an appropriate work RVU and time by taking the frequency of reporting this service multiplied by the work RVU for 93010, therefore the previous work and time should not be used as a comparison.

The RUC compared the surveyed code to the top key reference code 93224 *External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional* (work RVU = 0.52 and 15 minutes intra-service time) and agreed with the survey respondents that the surveyed code is slightly more intense and complex to perform, however code 93224 requires 10 more minutes intra-service time and thus is appropriately valued higher. The RUC also compared the surveyed code to the second top key reference service 93018 *Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only* (work RVU = 0.30 and 5 minutes intra-service time) and noted that these services require similar intensity and complexity, physician time

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and work to perform and are valued similarly. For additional support the RUC referenced MPC codes 72114 *Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views* (work RVU = 0.32 and 5 minutes intra-service time) and 92081 *Visual field examination, unilateral or bilateral, with interpretation and report; limited examination (eg, tangent screen, Autoplot, arc perimeter, or single stimulus level automated test, such as Octopus 3 or 7 equivalent)* (work RVU = 0.30 and 7 minutes intra-service time), which provide a good comparison relative to services in the Medicare physician payment schedule. **The RUC recommends a work RVU of 0.31 for CPT code 93293.**

93294 ***Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional***
The RUC reviewed the survey responses from 64 cardiologists and determined that the survey 25th percentile work RVU of 0.60, below the current value, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service, 10 minutes intra-service and 5 minutes immediate post-service time. The RUC had previously derived at an appropriate work RVU and time by taking the frequency of reporting this service multiplied by the work RVU for 93288, therefore the previous work and time should not be used as a comparison.

The RUC compared the surveyed code to the top key reference code 93224 *External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional* (work RVU = 0.52 and 15 minutes intra-service time) and agreed with the survey respondents that the surveyed code is slightly more intense and complex to perform, thus is appropriately valued higher. For additional support the RUC referenced similar MPC codes 76815 *Ultrasound, pregnant uterus, real time with image documentation, limited (eg, fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses* (work RVU = 0.65 and 5.5 minutes intra-service time) and 69210 *Removal impacted cerumen requiring instrumentation, unilateral* (work RVU = 0.61 and10 minutes intra-service time), which provide a good comparison relative to services in the Medicare physician payment schedule. **The RUC recommends a work RVU of 0.60 for CPT code 93294.**

93295 ***Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional***
The RUC reviewed the survey responses from 64 cardiologists and determined that the survey 25th percentile work RVU of 0.69 and median work RVU of 0.95 did not appropriately account for the work required to perform this service. Based on the RUC pre-facilitation comments, the specialty society and the RUC recommends a direct crosswalk to CPT code 76770 *Ultrasound, retroperitoneal (eg, renal, aorta, nodes), real time with image documentation; complete* (work RVU = 0.74 and 10 minutes intra-service time). The RUC recommends 5 minutes pre-service, 10 minutes intra-service and 5 minutes immediate post-service time. The RUC noted that although 93294 and 93295 require the same physician time, there is an increased intensity and amount of information considered when reading ICD interrogations (93295) versus pacemaker interrogations (93294) and thus are valued differently. The RUC noted that the current intra-time of 22.5 minutes is an extrapolated calculation from that of the times of 93289, additionally the April 2008 survey times are incorrect in the RUC database. The April 2008 survey times were 5 minutes pre/15 minutes intra/5 minutes immediate post-service time and the 25th percentile work RVU of 0.78. The RUC confirmed that the previous times and work RVU calculations could not be used as comparison as they reflect an artificial decrease in physician time.

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The RUC compared the surveyed code to the top key reference code 93224 *External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional* (work RVU = 0.52 and 15 minutes intra-service time) and agreed with the survey respondents that the surveyed code is more intense and complex to perform, thus is appropriately valued higher. For additional support the RUC referenced similar MPC codes 99213 *Office or other outpatient visit for the evaluation and management of an established patient,* (work RVU = 0.97 and 15 minutes intra-service time) and 78306 *Bone and/or joint imaging; whole body* (work RVU = 0.86 and 8 minutes intra-service time), which provide a good comparison relative to services in the Medicare physician payment schedule. **The RUC recommends a work RVU of 0.74 for CPT code 93295.**

93297 ***Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional***

The RUC reviewed the survey responses from 56 cardiologists and determined that the current work RVU of 0.52, below the survey 25th percentile, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service, 6 minutes intra-service and 5 minutes immediate post-service time. The RUC noted that the current intra-time of 24 minutes is an extrapolated calculation from that of the times of 93290, additionally the April 2008 survey times are incorrect in the RUC database. The April 2008 survey times were 5 minutes pre/12 minutes intra/8 minutes immediate post-service time. The RUC confirmed that the previous times and work RVU calculations could not be used as comparison as they reflect an artificial decrease in physician time.

The RUC compared the surveyed code to the top key reference code 93224 *External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional* (work RVU = 0.52 and 15 minutes intra-service time) and agreed with the survey respondents that the surveyed code is more intense and complex to perform and requires less physician time. For additional support the RUC referenced similar MPC codes 76536 *Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation* (work RVU = 0.56 and 10 minutes intra-service time) and 76857 *Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)* (work RVU = 0.50 and 7 minutes intra-service time), which provide a good comparison relative to services in the Medicare physician payment schedule. For additional support the RUC reference 92136 *Ophthalmic biometry by partial coherence interferometry with intraocular lens power calculation* (work RVU = 0.54 and 5 minutes intra-service time). **The RUC recommends a work RVU of 0.52 for CPT code 93297.**

93298 ***Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional***

The RUC reviewed the survey responses from 64 cardiologists and determined that the current work RVU of 0.52, which is also the survey 25th percentile, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service, 7 minutes intra-service and 5 minutes immediate post-service time. The RUC noted that the current intra-time of 24 minutes is an extrapolated calculation from

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that of the times of 93290, additionally the April 2008 survey times are incorrect in the RUC database. The April 2008 survey times were 5 minutes pre/10 minutes intra/5 minutes immediate post-service time. The RUC confirmed that the previous times and work RVU calculations could not be used as comparison as they reflect an artificial decrease in physician time.

The RUC compared the surveyed code to the top key reference code 93224 *External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional* (work RVU = 0.52 and 15 minutes intra-service time) and agreed with the survey respondents that the surveyed code is more intense and complex to perform and requires less physician time. For additional support the RUC referenced similar MPC codes 76536 *Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation* (work RVU = 0.56 and 10 minutes intra-service time) and 76857 *Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)* (work RVU = 0.50 and 7 minutes intra-service time), which provide a good comparison relative to services in the Medicare physician payment schedule. For additional support the RUC reference 92136 *Ophthalmic biometry by partial coherence interferometry with intraocular lens power calculation* (work RVU = 0.54 and 5 minutes intra-service time). **The RUC recommends a work RVU of 0.52 for CPT code 93298.**

Affirmation of RUC Recommendations
The RUC affirmed the recent RUC recommendations for CPT codes 93279-93292, previously submitted for the same *CPT 2018* cycle. The relativity within the family remains correct.

Practice Expense
The RUC reviewed the direct practice expense inputs for this entire family at the October 2016 RUC meeting and are attached to this recommendation.

Work Neutrality
The RUC's recommendation for these codes will result in an overall work savings that should be redistributed back to the Medicare conversion factor.

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
93279 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system	XXX	0.65 (No Change) (Affirmed Oct 2016 RUC Recommendation

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93280	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system	XXX	0.77 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93281 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system	XXX	0.85 (Affirmed Oct 2016 RUC Recommendation)
93282 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system	XXX	0.85 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93283 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system	XXX	1.15 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93284 (f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system	XXX	1.25 (No Change) (Affirmed Oct 2016 RUC Recommendation)

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93285(f)	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable loop recorder system	XXX	0.52 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93286 (f)	Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system	XXX	0.30 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93287 (f)	Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system	XXX	0.45 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93288	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system	XXX	0.43 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93289 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements	XXX	0.75 (Affirmed Oct 2016 RUC Recommendation)

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93290 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors	XXX	0.43 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93291 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis	XXX	0.37 (Affirmed Oct 2016 RUC Recommendation)
93292 (f)	Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system	XXX	0.43 (No Change) (Affirmed Oct 2016 RUC Recommendation)
93293	Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days	XXX	0.31
93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	0.60

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93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	0.74
93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX	PE Only
93297 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	0.52 (No Change)
93298 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	0.52 (No Change)
93299 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system or implantable loop recorder system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX	PE Only

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93293 Tracking Number Original Specialty Recommended RVU: **0.32**
Presented Recommended RVU: **0.31**
Global Period: XXX RUC Recommended RVU: **0.31**

CPT Descriptor: Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 69-year-old patient with complete heart block has a six-year old DC-PM that is being monitored for battery depletion with transtelephonic rhythm strip pacemaker evaluations. (Note: this service includes all evaluations received within a 90-day period.)

Percentage of Survey Respondents who found Vignette to be Typical: 93%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review patient records to identify the indication for pacemaker therapy, manufacturer and model of the implanted pacemaker and leads, history of pacemaker dependency, and atrial and ventricular arrhythmias. Review prior records of pacing parameters and compare to prior remote and in-person interrogations.

Description of Intra-Service Work: Record rhythm strip for 30 seconds and evaluate for heart rate, capture and sensing of each of the leads, and atrial or ventricular arrhythmias. Record a second rhythm strip with a magnet located over the pacemaker and evaluate for capture and sensing of each of the leads, for atrial or ventricular arrhythmias, and for the magnet response including paced rate. Physician review of above data produces an assessment of the adequacy of each lead’s sensing and capture and battery function.

Description of Post-Service Work: Inform patient of the test results. Prepare a final report that is reviewed by the attending physician and amend as necessary. Approve, sign, and distribute report to patient’s record, the referring and primary physicians, and the attending physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2017				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93293				
Sample Size:	1000	**Resp N:**	55	**Response:** 5.5 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	10.00	**50.00**	200.00	3000.00
Survey RVW:	0.15	0.31	**0.50**	0.80	5.00
Pre-Service Evaluation Time:			**3.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	0.00	4.00	**5.00**	10.00	30.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93293	**Recommended Physician Work RVU: 0.31**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**3.00**	**0.00**	**3.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**5.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93224	XXX	0.52	**RUC Time**

CPT Descriptor External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93018	XXX	0.30	**RUC Time**

CPT Descriptor Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
72114	XXX	0.32	**RUC Time**	94,995

CPT Descriptor 1 Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92081	XXX	0.30	**RUC Time**	102,308

CPT Descriptor 2 Visual field examination, unilateral or bilateral, with interpretation and report; limited examination (eg, tangent screen, Autoplot, arc perimeter, or single stimulus level automated test, such as Octopus 3 or 7 equivalent)

Other Reference CPT Code	Global	Work RVU	Time Source
11720	000	0.32	**RUC Time**

CPT Descriptor Debridement of nail(s) by any method(s); 1 to 5

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 16 **% of respondents:** 29.0 **%**

Number of respondents who choose 2nd Key Reference Code: 13 **% of respondents:** 23.6 **%**

TIME ESTIMATES (Median)

	CPT Code: 93293	Top Key Reference CPT Code: 93224	2nd Key Reference CPT Code: **93018**
Median Pre-Service Time	3.00	2.00	2.00
Median Intra-Service Time	5.00	15.00	5.00
Median Immediate Post-service Time	5.00	7.00	4.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**13.00**	**24.00**	**11.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	0.31	0.38
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	0.25	0.31
Urgency of medical decision making	0.25	-0.08
Technical Skill/Physical Effort (Mean)		
Technical skill required	0.38	0.54
Physical effort required	0.13	-0.38

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	0.06	-0.08
Outcome depends on the skill and judgment of physician	0.38	0.15
Estimated risk of malpractice suit with poor outcome	0.38	0.15

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity	0.38	0.31

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

CMS identified several cardiac device monitoring services in CY 2016 PFS rulemaking—93280, 93288, 93293, 93294, 93295, and 93296—as potentially misvalued on its high-expenditure screen. Consistent with RUC policy, the societies expanded the review to include the entire family of cardiac device monitoring codes—19 codes with work and PE and 2 PE-only codes. The RUC finalized recommendations on most of those codes at the October 2016 meeting. The times for five codes that we are grouping as "remote EP device monitoring services" did not align with the rest of the code family. It was not clear if the survey participants accounted for the global period associated with the remote services. After consultation with a prefacilitation committee, we proposed, and RUC agreed, that it may make more sense to resurvey those five codes for the January 2017 meeting. That is the sub-family before the RUC in Tab 23.

We worked with the Research Subcommittee to revise vignettes and to add survey language in an attempt to prompt survey respondents to consider the entirety of the 30- or 90-day billing period when performing these services. As you can see in the summary spreadsheet, these steps did not significantly change the survey results. Times continue to be less than we anticipated. These services describe remotes version of services that are also provided with the patient in the office, but data is collected and interpreted on average more than once per billing period. Regardless, values are fairly consistent for four of the five codes. After surveying twice, we've built work RVU recommendations around the survey times. We highlight to the RUC that that the current times were extrapolated from other codes in the family. We are not making a compelling evidence argument for these codes, but note that after surveying these codes twice it seems correct to accept these times as more accurate than the current, calculated times.

92393 describes the work of reading transtelephonic rhythm strip pacemaker evaluation(s) during a period of as much as 90 days. Transtelephonic technology transmits fewer data elements than more modern remote interrogation. Utilization is declining and will continue to do so, as implanted pacemakers no longer rely on the technology. A random survey of 1000 ACC and HRS members was executed with 55 completed surveys.

The key reference service was selected by 16 respondents. Respondents who selected 48-hour EKG (93224) as the key reference service found 93293 to be identical or somewhat more intense, as shown in the table and intensity-complexity addendum. With shorter times from the survey, the IWPUT for 93293 is in fact slightly higher, so this comparison seems reasonable. The second key reference service was selected by 13 respondents. Respondents who selected stress-test interpretation and report only (93018) as the key reference service found 93293 to be slightly more intense in most

measures. While IWPUTs don't demonstrate that increased intensity, the two services have similar times and values, and the comparison is reasonable in that regard.

Reflecting the January and October surveys, **we recommend the current work RVU of 0.32 with times of 3 minutes preservice, 5 minutes intraservice, and 5 minutes postservice**. This value is less than the October survey 25th-percentile value and one one-hundredth higher than the January survey 25th-percentile value. As shown in the summary spreadsheet, we identified MPC codes and one additional comparator code with similar intraservice times, total times, and RVUs to support the recommendation.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93293

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 512000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 280000 Percentage 54.68 %

Specialty cardiac electrophysiology Frequency 12000 Percentage 2.34 %

Specialty other Frequency 112000 Percentage 21.87 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 256,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 140000 Percentage 54.68 %

Specialty cardiac electrophysiology Frequency 60000 Percentage 23.43 %

Specialty other Frequency 56000 Percentage 21.87 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93293

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93294 Tracking Number Original Specialty Recommended RVU: **0.65**
Presented Recommended RVU: **0.60**
Global Period: XXX RUC Recommended RVU: **0.60**

CPT Descriptor: Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 74-year-old patient underwent pacemaker implant 3 months ago for symptomatic sinus node dysfunction. The patient is followed now by wireless remote monitoring which constantly checks both device function and arrhythmias, and sends alerts for any issues, which are then reviewed. (Note: this service includes all evaluations received within a 90-day period.)

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review patient records to identify the indication for pacemaker therapy, manufacturer and model of the implanted pacemaker and leads, history of pacemaker dependency, and atrial and ventricular arrhythmias. Review prior records of pacing parameters and compare to prior remote and in-person interrogations.

Description of Intra-Service Work: Interrogate information from the pacemaker by telemetric communication and either print out for review or review on the programmer or computer monitor. Perform critical review of interrogated data with assessment of the pacemaker's function, safety of current programmed parameters, and determination of whether device function is normal. Data review includes the following items. (1) Presenting EGMs for appropriateness or presence of arrhythmia and appropriate sensing and capture. (2) Review stored episodes of data for appropriate sensing, capture, and appropriate magnet reversion and noise reversions. (3) Alerts generated from the pacemaker device. (4) Battery voltage and impedance, pacing lead impedance, and sensed electrogram voltage amplitude for each lead. (5) Counters of paced and sensed events from each chamber for which there are leads located. (6) Stored episodes of sensed events including arrhythmias, ectopic beats, nonsustained and sustained atrial and ventricular arrhythmias, and, when appropriate, mode switch episodes. Note the frequency, rate, and duration. (7) Heart rate response during activities, rate histograms, and indicators of patient activity level.

Description of Post-Service Work: Prepare final report that is reviewed by attending physician and amend as necessary. Approve, sign, and distribute report to patient's record, the referring and primary physicians, and the attending physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2017				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93294				
Sample Size:	1000	**Resp N:**	64	**Response:** 6.4 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	94.00	**250.00**	500.00	3000.00
Survey RVW:	0.25	0.60	**0.70**	1.00	55.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**10.00**	15.00	60.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93294	**Recommended Physician Work RVU: 0.60**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93224	XXX	0.52	**RUC Time**

CPT Descriptor External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93750	XXX	0.92	**RUC Time**

CPT Descriptor Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76815	XXX	0.65	**RUC Time**	16,683

CPT Descriptor 1 Ultrasound, pregnant uterus, real time with image documentation, limited (eg, fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
69210	000	0.61	**RUC Time**	1,538,900

CPT Descriptor 2 Removal impacted cerumen requiring instrumentation, unilateral

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 25 **% of respondents:** 39.0 **%**

Number of respondents who choose 2nd Key Reference Code: 8 **% of respondents:** 12.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93294	Top Key Reference CPT Code: 93224	2nd Key Reference CPT Code: **93750**
Median Pre-Service Time	5.00	2.00	0.00
Median Intra-Service Time	10.00	15.00	30.00
Median Immediate Post-service Time	5.00	7.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**20.00**	**24.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	0.88	0.38
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	1.00	-0.13
Urgency of medical decision making	0.76	-0.25
Technical Skill/Physical Effort (Mean)		
Technical skill required	0.80	0.25
Physical effort required	0.24	0.25

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	0.68	-0.25
Outcome depends on the skill and judgment of physician	0.80	0.00
Estimated risk of malpractice suit with poor outcome	0.88	0.00

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity	0.84	0.13

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

92394 describes the work of reading pacemaker device interrogation(s) during a period of as much as 90 days. A random survey of 1000 ACC and HRS members was executed with 64 completed surveys.

The key reference service was selected by 25 respondents. Most respondents who selected 48-hour EKG (93224) as the key reference service found 93294 to be somewhat more intense, as shown in the table and intensity-complexity addendum. The second key reference service was selected by 8 respondents. Respondents who selected VAD interrogation (93750) as the key reference service found 93294 to be of similar intensity in most measures.

Reflecting the January and October surveys, **we recommend the current work RVU of 0.65 with times of 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice**. This value is between the survey 25th-percentile and median values from both the October survey the January survey 25th-percentile value. As shown in the summary spreadsheet, we identified MPC codes with similar intraservice times, total times, and RVUs to support the recommendation.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93294

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 1260000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 680000 Percentage 53.96 %

Specialty cardiac electrophysiology Frequency 470000 Percentage 37.30 %

Specialty other Frequency 110000 Percentage 8.73 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 630,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 340000 Percentage 53.96 %

Specialty cardiac electrophysiology Frequency 235000 Percentage 37.30 %

Specialty other Frequency 55000 Percentage 8.73 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93294

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93295 Tracking Number Original Specialty Recommended RVU: **0.95**
Presented Recommended RVU: **0.74**
Global Period: XXX RUC Recommended RVU: **0.74**

CPT Descriptor: Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66-year old patient with coronary artery disease and severely reduced left ventricular function underwent ICD implant 3 months ago for primary prevention of sudden cardiac death. The patient is followed now by wireless remote monitoring which constantly checks both device function and arrhythmias, and sends alerts for any issues, which are then reviewed. (Note: this service includes all evaluations received within a 90-day period.)

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history to identify the indication for ICD therapy. Review records to identify the manufacturer and model of the ICD generator and lead(s). Review prior records of the implanted ICD generator and lead hardware and the programmed parameters as well as the presence or absence of pacemaker dependence. Review prior assessments of capture thresholds, sensing thresholds, and arrhythmia therapies (if any) from prior remote and in-person interrogations. Review patient's arrhythmia history including any recent clinical events. Query changes in antiarrhythmic medications since the last device evaluation.

Description of Intra-Service Work: Interrogate information from the ICD by telemetric communication and either print out for review or review on the programmer or computer monitor. Perform a critical review of the interrogated data with assessment of the appropriateness of the function of ICD, safety of the current programmed pacing and antitachycardia parameters, and assessment of device function. Data reviewed include the following items: (1) Presenting EGMs for appropriateness of pacing and sensing. (2) Review stored episodes of data. (3) Alerts generated from the device. (4) Battery voltage and impedance, pacing and shocking lead impedance, and sensed electrogram voltage amplitude for each lead. (5) Histogram and/or counters of paced and sensed events from each chamber. (6) Note stored episodes of sensed arrhythmia events including the type, frequency, rate and duration. (7) Evaluate adequacy of heart rate response.

Description of Post-Service Work: After physician review of above data, make a decision as to the adequacy of the programmed parameters including the appropriate data collection set-up and the interval for the next scheduled programming or interrogation evaluation. Inform of test results. Prepare final summary report of the interrogation evaluations performed every 90 days. Prepare final report that is reviewed by the attending physician and amend as necessary. Approve, sign, and distribute report to patient's record, the referring and primary physicians, and the attending physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2017				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93295				
Sample Size:	1000	**Resp N:**	64	**Response:** 6.4 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	87.00	**238.00**	500.00	3000.00
Survey RVW:	0.25	0.69	**0.95**	1.40	5.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**10.00**	15.00	90.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93295	**Recommended Physician Work RVU: 0.74**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93224	XXX	0.52	**RUC Time**

CPT Descriptor External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93750	XXX	0.92	**RUC Time**

CPT Descriptor Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99213	XXX	0.97	**RUC Time**	99,675,084

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: An expanded problem focused history; An expanded problem focused examination; Medical decision making of low complexity. Counseling and coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity. Typically, 15 minutes are spent face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
78306	XXX	0.86	**RUC Time**	293,063

CPT Descriptor 2 Bone and/or joint imaging; whole body

Other Reference CPT Code	Global	Work RVU	Time Source
78472	XXX	0.98	**RUC Time**

CPT Descriptor Cardiac blood pool imaging, gated equilibrium; planar, single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing

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RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 15 **% of respondents:** 0.0 **%**

Number of respondents who choose 2nd Key Reference Code: 7 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)

	CPT Code: 93295	**Top Key Reference CPT Code:** 93224	**2nd Key Reference CPT Code:** **93750**
Median Pre-Service Time	5.00	2.00	0.00
Median Intra-Service Time	10.00	15.00	30.00
Median Immediate Post-service Time	5.00	7.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**20.00**	**24.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	**2nd Key Ref Code**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	1.06	0.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	1.12	0.00
Urgency of medical decision making	0.82	0.13

Technical Skill/Physical Effort (Mean)

Technical skill required	0.88	0.25
Physical effort required	0.24	0.25

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	0.82	0.13
Outcome depends on the skill and judgment of physician	1.00	0.13
Estimated risk of malpractice suit with poor outcome	0.88	0.13

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity	1.18	0.25

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

92395 describes the work of reading implanted defibrillator device interrogation(s) during a period of as much as 90 days. A random survey of 1000 ACC and HRS members was executed with 64 completed surveys.

The key reference service was selected by 17 respondents. Most respondents who selected 48-hour EKG (93224) as the key reference service found 93295 to be much more intense, as shown in the table and intensity-complexity addendum. The second key reference service was selected by 8 respondents. Respondents who selected VAD interrogation (93750) as the key reference service found 93295 to be of slightly higher intensity in most measures.

Reflecting the January and October surveys, **we recommend the survey median work RVU of 0.95 with times of 5 minutes preservice, 10 minutes intraservice, and 5 minutes postservice**. While survey times for this code are identical to 93294, we do not believe a value at the 25th-percentile appropriately captures the increased intensity and amount of information considered when reading ICD interrogations versus pacemaker interrogations. As shown in the summary spreadsheet, we identified MPC codes and one additional comparator code with similar intraservice times, total times, and RVUs to support the recommendation.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

- ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
- ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
- ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
- ☐ Multiple codes are used to maintain consistency with similar codes.
- ☐ Historical precedents.
- ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93295

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 884000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 400000 Percentage 45.24 %

Specialty cardiac electrophysiology Frequency 410000 Percentage 46.38 %

Specialty other Frequency 74000 Percentage 8.37 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 442,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 200000 Percentage 45.24 %

Specialty cardiac electrophysiology Frequency 205000 Percentage 46.38 %

Specialty other Frequency 37000 Percentage 8.37 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93295

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93297 Tracking Number Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 71-year-old man with ischemic cardiomyopathy and symptomatic systolic congestive heart failure has undergone implantation of a physiologic monitor to aide in the titration of heart failure therapies. The patient is followed now by wireless remote monitoring which constantly checks both device function and arrhythmias. (Note: this includes all such services within a 30-day period.)

Percentage of Survey Respondents who found Vignette to be Typical: 0%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review patient records to identify the indication for ICM monitoring and therapy, manufacturer and model of the ICM, and leads and sensors (both internal and external) as appropriate. Review prior records of ICM parameters and compare to prior remote and in-person interrogations.

Description of Intra-Service Work: Interrogate information from the ICM by telemetric communication and either print out for review or review on the programmer or computer monitor. Perform a critical review of the interrogated data with assessment of the appropriateness of the ICM's function and appropriateness of the current programmed parameters.
Data reviewed may include, but are not limited to: (1) weight; (2) systemic blood pressure; (3) right atrial, right ventricular, left atrial, left ventricular, and pulmonary arterial pressures; (4) intrathoracic impedance measurements; and (5) other measures of physiologic parameters.

In addition, review stored episodes of data to assess the history and trends identified by any of the collected data. Also review alerts generated from the ICM along with battery voltage and sensor information to validate the integrity of the ICM system.

Description of Post-Service Work: After physician review of above data, make a decision as to the adequacy of the programmed parameters including the appropriate data collection set-up and the interval for the next scheduled interrogation evaluation. Modify patient's medical regimen as appropriate. Inform patient of test results. Prepare a final report that is reviewed by the attending physician and amend as necessary. Approve, sign, and distribute report to patient's record, the referring and primary physicians, and the attending physician.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2017				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93297				
Sample Size:	1000	**Resp N:**	56	**Response:** 5.6 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	5.00	**50.00**	263.00	2000.00
Survey RVW:	0.30	0.57	**0.70**	0.95	4.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**6.00**	15.00	60.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93297	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**6.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93224	XXX	0.52	**RUC Time**

CPT Descriptor External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93750	XXX	0.92	**RUC Time**

CPT Descriptor Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76536	XXX	0.56	**RUC Time**	798,297

CPT Descriptor 1 Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76857	XXX	0.50	**RUC Time**	223,865

CPT Descriptor 2 Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)

Other Reference CPT Code	Global	Work RVU	Time Source
92136	XXX	0.54	**RUC Time**

CPT Descriptor Ophthalmic biometry by partial coherence interferometry with intraocular lens power calculation

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 15 **% of respondents:** 26.7 **%**

Number of respondents who choose 2nd Key Reference Code: 7 **% of respondents:** 12.5 **%**

TIME ESTIMATES (Median)

	CPT Code: 93297	Top Key Reference CPT Code: 93224	2nd Key Reference CPT Code: **93750**
Median Pre-Service Time	5.00	2.00	0.00
Median Intra-Service Time	6.00	15.00	30.00
Median Immediate Post-service Time	5.00	7.00	0.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**16.00**	**24.00**	**30.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	0.73	0.29
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	0.87	0.00
Urgency of medical decision making	0.60	0.14
Technical Skill/Physical Effort (Mean)		
Technical skill required	0.73	0.14
Physical effort required	0.20	0.00

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	0.47	-0.43
Outcome depends on the skill and judgment of physician	0.80	0.14
Estimated risk of malpractice suit with poor outcome	0.60	0.14

INTENSITY/COMPLEXITY MEASURES	Top Key Ref Code	2nd Key Ref Code
Time Segment (Mean)		
Overall intensity/complexity	0.80	0.14

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

92397 describes the work of reading implanted loop recorder device interrogation(s) during a period of as much as 30 days. A random survey of 1000 ACC and HRS members was executed with 56 completed surveys.

The key reference service was selected by 15 respondents. Most respondents who selected 48-hour EKG (93224) as the key reference service found 93297 to be somewhat more intense, as shown in the table and intensity-complexity addendum. The second key reference service was selected by 7 respondents. Respondents who selected VAD interrogation (93750) as the key reference service found 93297 to be of slightly higher or slightly lower intensity, and overall rather similar.

Reflecting the January and October surveys, **we recommend the current work RVU of 0.52 with times of 5 minutes preservice, 6 minutes intraservice, and 5 minutes postservice**. This value is below the 25th-percentile of both the October and January surveys. As shown in the summary spreadsheet, we identified MPC codes and one additional comparator code with similar intraservice times, total times, and RVUs to support the recommendation.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93297

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 464000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 250000 Percentage 53.87 %

Specialty cardiac electrophysiology Frequency 164000 Percentage 35.34 %

Specialty other Frequency 50000 Percentage 10.77 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 232,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 125000 Percentage 53.87 %

Specialty cardiac electrophysiology Frequency 82000 Percentage 35.34 %

Specialty other Frequency 25000 Percentage 10.77 %

Do many physicians perform this service across the United States? Yes

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Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93297

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:93298 Tracking Number Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 41-year-old patient with unexplained recurrent traumatic syncope underwent implantable loop recorder placement 1 month ago. The device is sensing the intrinsic rhythm. The patient is followed now by wireless remote monitoring which constantly checks both device function and arrhythmias, and sends alerts for any issues, which are then reviewed. (Note: this service includes all evaluations received within a 30-day period.)

Percentage of Survey Respondents who found Vignette to be Typical: 97%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Description of Pre-Service Work: Review history for cardiac rhythm monitoring indications and for changes in, or the development of, new symptoms. Review programmed parameters and results of prior ILR interrogations and remote monitoring.

Description of Intra-Service Work: The following data is analyzed:
1. Initial interrogation is reviewed to determine if any alert conditions have occurred and if electrograms have been stored.
2. Current interrogation results are compared to historical values and previous trends.
a. Battery status
b. Appropriate sensing
3. Alert conditions are then reviewed in detail
a. Stored arrhythmic episodes are reviewed to determine if the arrhythmia was accurately identified by the ILR.
b. Compare arrhythmia to historical events to determine if it is clinically significant and requires further investigation and/or treatment.

Description of Post-Service Work: Prepare a final report that is reviewed by the attending physician and amend as necessary. Approve, sign, and distribute report to the patient's record, the referring and primary physicians, and the attending physician. Prepare communication to patient (letter) informing them of the status of their ILR (e.g. normal battery function, no arrhythmias detected). If abnormality is detected on remote interrogation, contact patient to discuss management strategy and document discussion.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	01/2017				
Presenter(s):	Richard Wright, MD; Mark Schoenfeld, MD; Thad Waites, MD; David Slotwiner, MD				
Specialty(s):	ACC, HRS				
CPT Code:	93298				
Sample Size:	1000	**Resp N:**	64	**Response:** 6.4 %	
Description of Sample:	random				

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	29.00	**100.00**	200.00	2000.00
Survey RVW:	0.30	0.52	**0.60**	0.90	52.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**7.00**	15.00	45.00

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process. (Note: your recommended pre time should not exceed your survey median time for any category)

XXX Global Code

CPT Code:	93298	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**7.00**		

Please, pick the post-service time package that best corresponds to the data which was collected in the survey process: (Note: your recommended post time should not exceed your survey median time)

XXX Global Code

	Specialty Recommended Post-Service Time	**Specialty Recommended Post Time Package**	**Adjustments/Recommended Post-Service Time**
Immediate Post Service-Time:	**5.00**	**0.00**	**5.00**

Post-Operative Visits	Total Min**	CPT Code and Number of Visits
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

TOP KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93224	XXX	0.52	**RUC Time**

CPT Descriptor External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional

SECOND HIGHEST KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
93018	XXX	0.30	**RUC Time**

CPT Descriptor Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76536	XXX	0.56	**RUC Time**	798,297

CPT Descriptor 1 Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76857	XXX	0.50	**RUC Time**	223,865

CPT Descriptor 2 Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)

Other Reference CPT Code	Global	Work RVU	Time Source
92136	XXX	0.54	**RUC Time**

CPT Descriptor Ophthalmic biometry by partial coherence interferometry with intraocular lens power calculation

RELATIONSHIP OF CODE BEING REVIEWED TO TOP TWO KEY REFERENCE SERVICES:

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the top two chosen key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Top Key Reference Code: 35 **% of respondents:** 54.6 **%**

Number of respondents who choose 2nd Key Reference Code: 6 **% of respondents:** 9.3 **%**

TIME ESTIMATES (Median)

	CPT Code: 93298	Top Key Reference CPT Code: 93224	2nd Key Reference CPT Code: **93018**
Median Pre-Service Time	5.00	2.00	2.00
Median Intra-Service Time	7.00	15.00	5.00
Median Immediate Post-service Time	5.00	7.00	4.00
Median Critical Care Time	0.0	0.00	0.00
Median Other Hospital Visit Time	0.0	0.00	0.00
Median Discharge Day Management Time	0.0	0.00	0.00
Median Office Visit Time	0.0	0.00	0.00
Prolonged Services Time	0.0	0.00	0.00
Median Subsequent Observation Care Time	0.0	0.00	0.00
Median Total Time	**17.00**	**24.00**	**11.00**
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES
(of those that selected Key Reference codes)

Survey respondents are rating the survey code relative to the key reference code.

Intensity & Complexity Rating Scale: (much less= -2.00, somewhat less= -1.00, identical= 0.00, somewhat more= 1.00, much more= 2.00)

	Top Key Ref Code	2nd Key Ref Code
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	0.29	-0.17
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	0.40	-0.17
Urgency of medical decision making	0.31	0.17
Technical Skill/Physical Effort (Mean)		
Technical skill required	0.49	0.33
Physical effort required	0.11	-0.67

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	0.17	0.17
Outcome depends on the skill and judgment of physician	0.40	0.17
Estimated risk of malpractice suit with poor outcome	0.40	-0.33

INTENSITY/COMPLEXITY MEASURES	**Top Key Ref Code**	**2nd Key Ref Code**
Time Segment (Mean)		
Overall intensity/complexity	0.46	-0.17

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The additional rationale below is the original rationale submitted by the specialty society(ies) prior to the RUC meeting and does not necessarily represent the rationale for the RUC recommendation. To view the RUC's rationale, please review the separate RUC recommendation document.

92398 describes the work of reading implanted cardiac device monitor interrogation(s) during a period of as much as 30 days. A random survey of 1000 ACC and HRS members was executed with 64 completed surveys.

The key reference service was selected by 35 respondents. Most respondents who selected 48-hour EKG (93224) as the key reference service found 93298 to be identical or somewhat more intense, as shown in the table and intensity-complexity addendum. The second key reference service was selected by 6 respondents. Respondents who selected stress test interpretation and report (93018) as the key reference service found 93298 to be of slightly higher or slightly lower intensity, and overall very rather similar.

Reflecting the January and October surveys, **we recommend the current work RVU of 0.52 with times of 5 minutes preservice, 7 minutes intraservice, and 5 minutes postservice**. This value is also the 25th-percentile of both the October and January surveys. As shown in the summary spreadsheet, we identified MPC codes and one additional comparator code with similar intraservice times, total times, and RVUs to support the recommendation.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 93298

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty cardiac electrophysiology How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 300000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Assuming roughly even split of Medicare & non-Medicare, this number is double the Medicare estimate below.

Specialty cardiology Frequency 150000 Percentage 50.00 %

Specialty cardiac electrophysiology Frequency 120000 Percentage 40.00 %

Specialty other Frequency 30000 Percentage 10.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 150,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2015 Medicare data in RUC database.

Specialty cardiology Frequency 75000 Percentage 50.00 %

Specialty cardiac electrophysiology Frequency 60000 Percentage 40.00 %

Specialty other Frequency 15000 Percentage 10.00 %

Do many physicians perform this service across the United States?

Berenson-Eggers Type of Service (BETOS) Assignment

Please pick the appropriate BETOS classification that best corresponds to the clinical nature of this CPT code. Please select the main BETOS classification and sub-classification to the greatest level of specificity possible.

Main BETOS Classification:
Tests

BETOS Sub-classification:
Other tests

BETOS Sub-classification Level II:
Other

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 93298

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93293	**# of Respondents:**	55
Survey Code Descriptor:	Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days		

Top Ref Code:	93224	**# of Respondents:**	16	**% of Respondents:**	29%
Top Ref Code Descriptor:	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional				

		Survey Code Compared to Top Ref Code				
		Survey Code is:				
		Much Less	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall Intensity and Complexity:		0%	0%	69%	25%	6%

Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	**Less**	**Identical**	**More**
		12%	50%	38%
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	**Less**	**Identical**	**More**
		19%	44%	37%
	Urgency of medical decision making	**Less**	**Identical**	**More**
		6%	69%	25%
Technical Skill:		**Less**	**Identical**	**More**
		0%	69%	31%
Physical Effort:		**Less**	**Identical**	**More**
		6%	81%	13%
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	**Less**	**Identical**	**More**
		6%	56%	38%
	Outcome depends on the skill and judgment of physician	**Less**	**Identical**	**More**
		0%	69%	31%
	Estimated risk of malpractice suite with poor outcome	**Less**	**Identical**	**More**
		12%	44%	44%

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93294	**# of Respondents:**	64
Survey Code Descriptor:	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional		

Top Ref Code:	93224	**# of Respondents:**	25	**% of Respondents:**	39%
Top Ref Code Descriptor:	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional				

		Survey Code Compared to Top Ref Code				
		Survey Code is:				
Overall Intensity and Complexity:		**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
		4%	0%	16%	68%	12%
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	**Less**	**Identical**	**More**		
		0%	24%	76%		
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	**Less**	**Identical**	**More**		
		0%	8%	92%		
	Urgency of medical decision making	**Less**	**Identical**	**More**		
		0%	36%	64%		
Technical Skill:		**Less**	**Identical**	**More**		
		0%	40%	60%		
Physical Effort:		**Less**	**Identical**	**More**		
		4%	72%	24%		
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	**Less**	**Identical**	**More**		
		4%	40%	56%		
	Outcome depends on the skill and judgment of physician	**Less**	**Identical**	**More**		
		0%	32%	68%		
	Estimated risk of malpractice suite with poor outcome	**Less**	**Identical**	**More**		
		0%	36%	64%		

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93295	**# of Respondents:**	64
Survey Code Descriptor:	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional		

Top Ref Code:	93224	**# of Respondents:**	17	**% of Respondents:**	27%
Top Ref Code Descriptor:	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional				

	Survey Code Compared to Top Ref Code				
	Survey Code is:				
Overall Intensity and Complexity:	**Much Less**	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
	6%	0%	12%	35%	47%

		Less	Identical	More
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	0%	24%	76%
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	0%	12%	88%
	Urgency of medical decision making	0%	29%	71%
Technical Skill:		0%	41%	59%
Physical Effort:		0%	82%	18%
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	6%	29%	65%
	Outcome depends on the skill and judgment of physician	0%	24%	76%
	Estimated risk of malpractice suite with poor outcome	0%	47%	53%

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93297	**# of Respondents:**	56
Survey Code Descriptor:	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional		

Top Ref Code:	93224	**# of Respondents:**	15	**% of Respondents:**	27%
Top Ref Code Descriptor:	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional				

		Survey Code Compared to Top Ref Code Survey Code is:				
		Much Less	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall Intensity and Complexity:		0%	0%	33%	54%	13%
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	**Less** 0%	**Identical** 33%	**More** 67%		
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	**Less** 0%	**Identical** 20%	**More** 80%		
	Urgency of medical decision making	**Less** 0%	**Identical** 47%	**More** 53%		
Technical Skill:		**Less** 0%	**Identical** 40%	**More** 60%		
Physical Effort:		**Less** 0%	**Identical** 87%	**More** 13%		
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	**Less** 6%	**Identical** 47%	**More** 47%		
	Outcome depends on the skill and judgment of physician	**Less** 0%	**Identical** 33%	**More** 67%		
	Estimated risk of malpractice suite with poor outcome	**Less** 7%	**Identical** 40%	**More** 53%		

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE

Survey Code:	93298	**# of Respondents:**	64
Survey Code Descriptor:	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional		

Top Ref Code:	93224	**# of Respondents:**	35	**% of Respondents:**	55%
Top Ref Code Descriptor:	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional				

		Survey Code Compared to Top Ref Code				
		Survey Code is:				
		Much Less	**Somewhat Less**	**Identical**	**Somewhat More**	**Much More**
Overall Intensity and Complexity:		0%	2%	49%	49%	0%
Mental Effort and Judgment:	The number of possible diagnosis and/or number of management options that must be considered	**Less**	**Identical**	**More**		
		6%	60%	34%		
	The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	**Less**	**Identical**	**More**		
		6%	51%	43%		
	Urgency of medical decision making	**Less**	**Identical**	**More**		
		0%	69%	31%		
Technical Skill:		**Less**	**Identical**	**More**		
		0%	57%	43%		
Physical Effort:		**Less**	**Identical**	**More**		
		3%	83%	14%		
Psychological Stress:	The risk of significant complications, morbidity and/or mortality	**Less**	**Identical**	**More**		
		9%	66%	26%		
	Outcome depends on the skill and judgment of physician	**Less**	**Identical**	**More**		
		3%	57%	40%		
	Estimated risk of malpractice suite with poor outcome	**Less**	**Identical**	**More**		
		3%	57%	40%		

SS Rec Summary

ISSUE: EP Device Monitoring

TAB: 23

Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
1st REF	93224	External electrocardiographic re	16	0.021			0.52			24	2					15			7
2nd REF	93018	Cardiovascular stress test using	13	0.033			0.30			11	2					5			4
CURRENT	93293	Transtelephonic rhythm strip pac		0.010			0.32			20	5					10			5
SVY	93293		55	0.064	0.15	0.31	0.50	0.80	5.00	13	3			0	4	5	10	30	5
REC	93293	25th		0.026			0.31			13	3					5			5
MPC	72114	Radiologic examination, spine, lu		0.051			0.32			8	1					5			2
MPC	92081	Visual field examination, unilater		0.033			0.30			10	3					7			0
COMP	11720	Debridement of nail(s) by any me		0.024			0.32			14	5	2				5			2

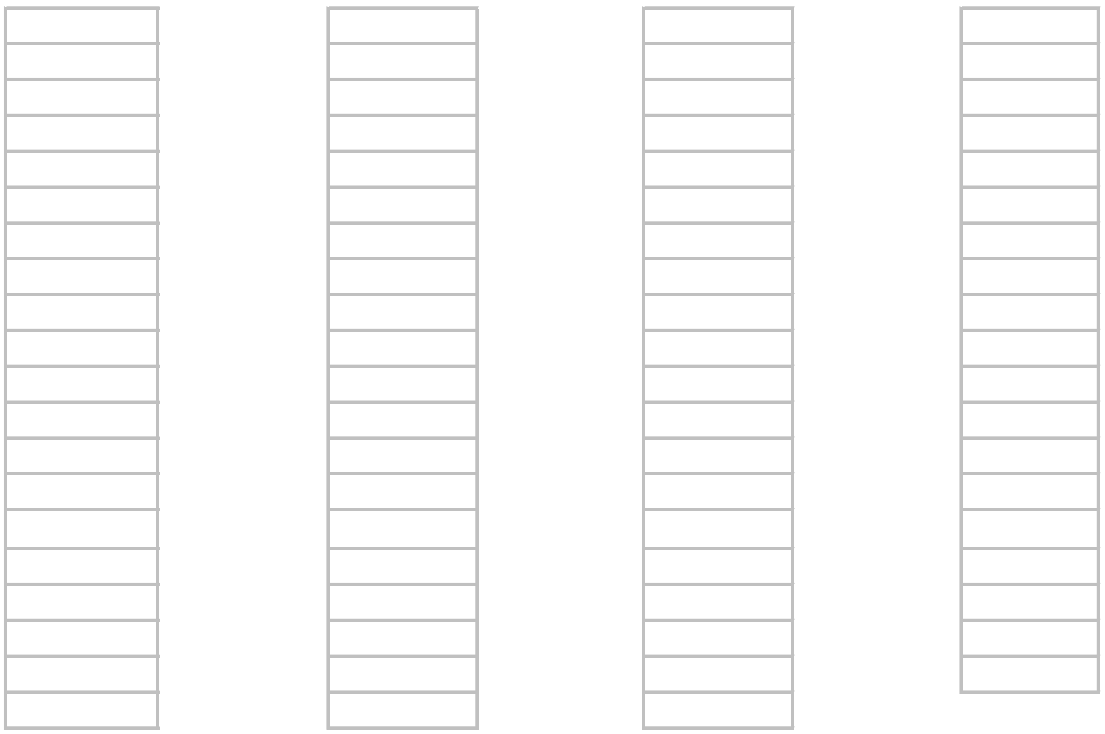
Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
1st REF	93224	External electrocardiographic re	25	0.021			0.52			24	2					15			7
2nd REF	93750	Interrogation of ventricular assis	8	0.031			0.92			30						30			
CURRENT	93294	Interrogation device evaluation(s		0.021			0.65			30	7.5					15			7.5
SVY	93294		64	0.048	0.25	0.60	0.70	1.00	55.00	20	5			2	5	10	15	60	5
REC	93294	25th		0.038			0.60			20	5					10			5
MPC	76815	Ultrasound, pregnant uterus, rea		0.077			0.65			15.5	5					5.5			5
MPC	69210	Removal impacted cerumen requ		0.045			0.61			17	3	2				10			2

Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
1st REF	93224	External electrocardiographic re	17	0.021			0.52			24	2					15			7
2nd REF	93750	Interrogation of ventricular assis	8	0.031			0.92			30						30			
CURRENT	93295	Interrogation device evaluation(s		0.042			1.29			37.5	7.5					22.5			7.5
SVY	93295		64	0.073	0.25	0.69	0.95	1.40	5.00	20	5			2	5	10	15	90	5
REC	93295	76770 crosswalk		0.052			0.74			20	5					10			5
MPC	99213	Office or other outpatient visit fo		0.053			0.97			23	3					15.0			5
MPC	78306	Bone and/or joint imaging; whole		0.080			0.86			18	5					8			5
COMP	78472	Cardiac blood pool imaging, gate		0.076			0.98			20	5					10			5

Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
1st REF	93224	External electrocardiographic re	15	0.021			0.52			24	2					15			7
2nd REF	93750	Interrogation of ventricular assis	7	0.031			0.92			30						30			
CURRENT	93297	Interrogation device evaluation(s		-0.003			0.52			50	10					24			16

Code	Desc	2016 wRVU	2016 Intra	2016 Total
93279	PM DEVICE PROGR EVAL SNGL	0.65	10	20
93280	PM DEVICE PROGR EVAL DUAL	0.77	17	27
93281	PM DEVICE PROGR EVAL MULTI	0.90	20	30
93282	ICD DEVICE PROGR EVAL SNGL	0.85	15	28
93283	ICD DEVICE PROGR EVAL DUAL	1.15	15	33
93284	ICD DEVICE PROGR EVAL MULTI	1.25	15	33.5
93285	ILR DEVICE PROGR EVAL	0.52	12	22
93286	PERI-PX PACEMAKER DEVICE EV	0.30	12	22
93287	PERI-PX ICD DEVICE EV	0.45	13.5	26
93288	PM DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93289	ICD DEVICE INTERROGATION EVAL IN PERSON	0.92	15	25
93290	ICM DEVICE INTERROGATION EVAL IN PERSON	0.43	12	25
93291	ILR DEVICE INTERROGATION EVAL IN PERSON	0.43	12	22
93292	WCD DEVICE INTERROGATION EVAL IN PERSON	0.43	10	20
93293	TRANSTELEPHONIC PM PHONE R-STRIP DEVICE EVAL	0.32	10	20
93294	PM DEVICE INTERROGATION REMOTE, 90-DAY	0.65	15	30
93295	ICD DEVICE INTERROGATION REMOTE, 90-DAY	1.29	22.5	37.5
93297	ICM DEVICE INTERROGATION REMOTE, 30-DAY	0.52	24	50
93298	ILR DEVICE INTERROGATION REMOTE, 30-DAY	0.52	24	44

2008 RUC Rationale Notes
survey times, work neutrality calculated wRVU
survey times with modification, survey wRVU
RUC noted increasing intensity
survey times, survey 25th wRVU
survey times, survey 25th wRVU 1.18 (later reduced by CMS)
survey times, survey 25th wRVU
survey times, survey 25th wRVU; identical time to 93291, but harder
survey times, roughly half wRVU of 93279 since reported twice
survey times, roughly half wRVU of 93282 since reported twice
survey times, work neutrality calculated wRVU
survey times, wRUV crosswalk to 99213 was below survey 25th of 1.00
survey times, crosswalk to 93288/93291 wRVU
survey times, crosswalk to 93288 wRVU
survey times, crosswalk to 93288/93291/93290 wRVU
1.9 transmissions per 90 days; 190% of survey times; 190% wRVU of 93010
1.5 transmissions per 90 days; 150% of 93288 times; 150% wRVU of 93288
1.5 transmissions per 90 days; 150% of 93289 times; 150% wRVU of 93289 (later reduced by CMS)
2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228
2 transmissions per 30 days; 200% of 93290 times; wRVU crosswalk to 93228





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SS Rec Summary

ISSUE: Excision of bone

TAB: 84

source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE EVAL	PRE POSIT	PRE SDW	INTRA MIN	INTRA 25th	INTRA MED	INTRA 75th	INTRA MAX	IMMD POST	FAC-inpt/same day 91	92	33	32	31	38	39	FAC-obs 26	25	24	17	Office 15	14	13	12	11	Prolonged 54	55	56	57
1st REF	11111	xyz	30	0.029			4.25			131	5	5	5			30			5				1	1.0								1							
2nd REF	22222	def	15	0.055			5.15			137	10	5	5			35			5					1.0									1	1					
CURRENT	55555	abc		0.053			5.00			133	17					27			8				1	1.0								1						
SVY	55555	abc	78	0.045	2.00	3.00	5.00	7.00	8.00	146	10	5	10	15	20	30	35	40	10				1	1.0								1						
REC	55555	abc		0.020			4.25			142	17	1	3			30			10									1	1.0			1						

CPT Code: 93293-93295, 93297-93298
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

Global Period: XXX Meeting Date: January 2017

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: **The ACC/HRS reviewer panel has provided the PE inputs approved for these codes at the October meeting in our submission materials. We have no additional materials or recommendations.**

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale:

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities:

Post-Service Clinical Labor Activities:

CPT Code: 93293
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93293 Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead pacemaker system, includes recording with and without magnet application with analysis, review and report(s) by a physician or other qualified health care professional, up to 90 days

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence:

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities:

Electrodiagnostic tech receives and reviews remote transmissions, prepares report and distribution of results.

RN/LPN/MTA enrolls patient, educates patient on use of device/service; physician notification

Post-Service Clinical Labor Activities:

CPT Code: 93296, 93299
Specialty Society('s) ACC, HRS

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

CPT Long Descriptor:

93296 Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable cardioverter defibrillator, remote data acquisitions), receipt of transmissions and technician review, technical support and distribution of results
93299 Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor or implantable loop recorder, remote data acquisition9s), receipt of transmissions and technician review, technical support and distribution of results

Global Period: XXX Meeting Date: October 2016

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee: The ACC and HRS utilized a consensus panel process to develop recommended inputs.

2. You must provide reference code(s) for comparison on your spreadsheet. **If the code you are making recommendations on is a revised code you must use the current PE direct inputs for the code as your comparison.** You must provide an explanation for the selection of reference codes. Reference Code Rationale: Current PE Inputs

3. If you are recommending more minutes than the PE Subcommittee standards you must provide evidence to justify the time:

4. If you are requesting an increase over the current inputs in clinical staff time, supplies or equipment you must provide compelling evidence: Code 93299 is carrier priced. We propose to crosswalk inputs from 93296 to 93299.

5. Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities:

Electrodiagnostic tech enrolls patient, educates patient on use of device/service, receives and reviews remote transmissions, prepares report and distribution of results.

~~RN/LPN/MTA enrolls patient, educates patient on use of device/service; physician notification~~

Post-Service Clinical Labor Activities:

PM Offic

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

			REFERENCE CODE				REFERENCE CODE			
			93288		93288		93279		93279	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with physician analysis, review and report, includes		Interrogation device evaluation (in person) with physician analysis, review and report, includes		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**									
TOTAL CLINICAL LABOR TIME			**30.0**	**0.0**	**33.0**	**0.0**	**33.0**	**0.0**	**33.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**20.0**	**0.0**	**20.0**	**0.0**	**23.0**	**0.0**	**20.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**18.0**	**0.0**	**18.0**	**0.0**	**21.0**	**0.0**	**18.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE										
Start: Following visit when decision for surgery or procedure made										
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**	
Coordinate pre-surgery services										
Schedule space and equipment in facility										
Provide pre-service education/obtain consent										
Follow-up phone calls & prescriptions										
Other Clinical Activity - *specify:*										
End: When patient enters office/facility for surgery/procedure										
SERVICE PERIOD										
Start: When patient enters office/facility for surgery/procedure:										
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**		**3**		**3**	
Obtain vital signs	L026A	Med Tech/Asst			**3**				**3**	
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**		**3**		**3**	
Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**		**2**		**2**	
Setup scope (non facility setting only)										
Prepare and position patient/ monitor patient/ set up IV										
Sedate/apply anesthesia										
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**	

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**									
Intra-service										
Assist physician in performing procedure	L037D	RN/LPN/MTA	**10**		**10**		**13**		**10**	
Assist physician/moderate sedation (% of physician time)										
Post-Service										
Monitor pt. following moderate sedation										
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)										
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)										
Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**		**3**		**3**	
Clean Scope										
Clean Surgical Instrument Package										
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**		**3**		**3**	
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**		**2**		**2**	
Review/read X-ray, lab, and pathology reports										
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions										
Other Clinical Activity - *specify:*										
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**		**n/a**		**n/a**	
Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**		**n/a**		**n/a**	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**		**n/a**		**n/a**	
End: Patient leaves office										
POST-SERVICE Period										
Start: Patient leaves office/facility										
Conduct phone calls/call in prescriptions										
Office visits: List Number and Level of Office Visits			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
99211 16 minutes		16								
99212 27 minutes		27								
99213 36 minutes		36								
99214 53 minutes		53								
99215 63 minutes		63								
Total Office Visit Time			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other Clinical Activity - *specify:*										
End: with last office visit before end of global period										
MEDICAL SUPPLIES*	**CODE**	**UNIT**								
pack, minimum multi-specialty visit	SA048	pack	**1**		**1**		**1**		**1**	
swab-pad, alcohol	SJ053	item	**4**		**4**		**4**		**4**	
electrode adhesive disk	SJ019	item	**4**		**5**		**4**		**5**	
paper, laser printing (each sheet)	SK057	item	**10**		**10**		**10**		**10**	
electrode, ECG (single)	SD053	item	**4**		**5**		**4**		**5**	
EQUIPMENT	**CODE**									
table, exam	EF023	minutes	**18**		**31**		**21**		**31**	
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**18**		**31**		**21**		**31**	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

e Codes

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	CMS Code	Staff Type	REFERENCE CODE 93280		93280		REFERENCE CODE 93281		93281		REFERENCE CODE 93289		93289	
			Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of		Interrogation device evaluation (in person) with physician analysis, review and report, includes		Interrogation device evaluation (in person) with physician analysis, review and report, includes	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**													
TOTAL CLINICAL LABOR TIME			**37.0**	**0.0**	**38.0**	**0.0**	**43.0**	**0.0**	**39.0**	**0.0**	**38.0**	**0.0**	**33.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**27.0**	**0.0**	**25.0**	**0.0**	**33.0**	**0.0**	**26.0**	**0.0**	**28.0**	**0.0**	**20.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**25.0**	**0.0**	**23.0**	**0.0**	**31.0**	**0.0**	**24.0**	**0.0**	**26.0**	**0.0**	**18.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE														
Start: Following visit when decision for surgery or procedure made														
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	
Coordinate pre-surgery services														
Schedule space and equipment in facility														
Provide pre-service education/obtain consent														
Follow-up phone calls & prescriptions														
Other Clinical Activity - *specify:*														
End: When patient enters office/facility for surgery/procedure														
SERVICE PERIOD														
Start: When patient enters office/facility for surgery/procedure:														
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**		**3**		**3**		**3**		**3**	
Obtain vital signs	L026A	Med Tech/Asst			**3**				**3**				**3**	
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**		**3**		**3**		**3**		**3**	
Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**		**2**		**2**		**2**		**2**	
Setup scope (non facility setting only)														
Prepare and position patient/ monitor patient/ set up IV														
Sedate/apply anesthesia														
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**													
Intra-service														
Assist physician in performing procedure	L037D	RN/LPN/MTA	17		15		23		16		18		10	
Assist physician/moderate sedation (% of physician time)														
Post-Service														
Monitor pt. following moderate sedation														
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)														
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)														
Clean room/equipment by physician staff	L026A	Med Tech/Asst	3		3		3		3		3		3	
Clean Scope														
Clean Surgical Instrument Package														
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	3		3		3		3		3		3	
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	2		2		2		2		2		2	
Review/read X-ray, lab, and pathology reports														
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions														
Other Clinical Activity - *specify:*														
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99238) (enter 12 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			n/a		n/a		n/a		n/a		n/a		n/a	
End: Patient leaves office														
POST-SERVICE Period														
Start: Patient leaves office/facility														
Conduct phone calls/call in prescriptions														
Office visits: List Number and Level of Office Visits			# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
99211 16 minutes		16												
99212 27 minutes		27												
99213 36 minutes		36												
99214 53 minutes		53												
99215 63 minutes		63												
Total Office Visit Time			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Clinical Activity - *specify:*														
End: with last office visit before end of global period														
MEDICAL SUPPLIES*	**CODE**	**UNIT**												
pack, minimum multi-specialty visit	SA048	pack	1		1		1		1		1		1	
swab-pad, alcohol	SJ053	item	4		4		4		4		4		4	
electrode adhesive disk	SJ019	item	4		5		4		5		4		5	
paper, laser printing (each sheet)	SK057	item	15		15		15		15		15		15	
electrode, ECG (single)	SD053	item	4		5		4		5		4		5	
EQUIPMENT	**CODE**													
table, exam	EF023	minutes	25		36		31		37		26		31	
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	25		36		31		37		18		31	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

			ICD Office Codes											
			REFERENCE CODE				REFERENCE CODE				REFERENCE CODE			
			93282		93282		93283		93283		93284		93284	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**													
TOTAL CLINICAL LABOR TIME			**38.0**	**0.0**	**35.0**	**0.0**	**44.0**	**0.0**	**38.0**	**0.0**	**50.0**	**0.0**	**40.5**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**28.0**	**0.0**	**22.0**	**0.0**	**34.0**	**0.0**	**25.0**	**0.0**	**40.0**	**0.0**	**27.5**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**	**2.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**26.0**	**0.0**	**20.0**	**0.0**	**32.0**	**0.0**	**23.0**	**0.0**	**38.0**	**0.0**	**25.5**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**	**10.0**	**0.0**	**13.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE														
Start: Following visit when decision for surgery or procedure made														
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	
Coordinate pre-surgery services														
Schedule space and equipment in facility														
Provide pre-service education/obtain consent														
Follow-up phone calls & prescriptions														
Other Clinical Activity - *specify:*														
End: When patient enters office/facility for surgery/procedure														
SERVICE PERIOD														
Start: When patient enters office/facility for surgery/procedure:														
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**		**3**		**3**		**3**		**3**	
Obtain vital signs	L026A	Med Tech/Asst			**3**				**3**				**3**	
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**		**3**		**3**		**3**		**3**	
Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**		**2**		**2**		**2**		**2**	
Setup scope (non facility setting only)														
Prepare and position patient/ monitor patient/ set up IV														
Sedate/apply anesthesia														
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**													
Intra-service														
Assist physician in performing procedure	L037D	RN/LPN/MTA	18		12		24		15		30		17.5	
Assist physician/moderate sedation (% of physician time)														
Post-Service														
Monitor pt. following moderate sedation														
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)														
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)														
Clean room/equipment by physician staff	L026A	Med Tech/Asst	3		3		3		3		3		3	
Clean Scope														
Clean Surgical Instrument Package														
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	3		3		3		3		3		3	
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	2		2		2		2		2		2	
Review/read X-ray, lab, and pathology reports														
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions														
Other Clinical Activity - *specify:*														
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99238) (enter 12 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			n/a		n/a		n/a		n/a		n/a		n/a	
End: Patient leaves office														
POST-SERVICE Period														
Start: Patient leaves office/facility														
Conduct phone calls/call in prescriptions														
Office visits: List Number and Level of Office Visits			# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
99211 16 minutes		16												
99212 27 minutes		27												
99213 36 minutes		36												
99214 53 minutes		53												
99215 63 minutes		63												
Total Office Visit Time			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Clinical Activity - *specify:*														
End: with last office visit before end of global period														
MEDICAL SUPPLIES*	**CODE**	**UNIT**												
pack, minimum multi-specialty visit	SA048	pack	1		1		1		1		1		1	
swab-pad, alcohol	SJ053	item	4		4		4		4		4		4	
electrode adhesive disk	SJ019	item	4		5		4		5		4		5	
paper, laser printing (each sheet)	SK057	item	15		15		20		20		20		20	
electrode, ECG (single)	SD053	item	4		5		4		5		4		5	
EQUIPMENT	**CODE**													
table, exam	EF023	minutes	26		33		32		36		38		38.5	
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	26		33		32		36		38		38.5	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

			ILR Office Codes								ICM/WCD C			
			REFERENCE CODE				REFERENCE CODE				REFERENCE CODE			
			93291		93291		93285		93285		93290		93290	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**													
TOTAL CLINICAL LABOR TIME			**26.0**	**0.0**	**26.0**	**0.0**	**28.0**	**0.0**	**29.0**	**0.0**	**17.0**	**0.0**	**27.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**19.0**	**0.0**	**16.0**	**0.0**	**21.0**	**0.0**	**19.0**	**0.0**	**9.0**	**0.0**	**15.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**18.0**	**0.0**	**15.0**	**0.0**	**20.0**	**0.0**	**18.0**	**0.0**	**8.0**	**0.0**	**14.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**7.0**	**0.0**	**10.0**	**0.0**	**7.0**	**0.0**	**10.0**	**0.0**	**8.0**	**0.0**	**12.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**7.0**	**0.0**	**10.0**	**0.0**	**7.0**	**0.0**	**10.0**	**0.0**	**8.0**	**0.0**	**12.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE														
Start: Following visit when decision for surgery or procedure made														
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**1**		**1**		**1**		**1**		**1**		**1**	
Coordinate pre-surgery services														
Schedule space and equipment in facility														
Provide pre-service education/obtain consent														
Follow-up phone calls & prescriptions														
Other Clinical Activity - *specify:*														
End: When patient enters office/facility for surgery/procedure														
SERVICE PERIOD														
Start: When patient enters office/facility for surgery/procedure:														
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**		**3**		**3**		**3**		**3**	
Obtain vital signs	L026A	Med Tech/Asst			**3**				**3**				**3**	
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**1**		**1**	
Prepare room, equipment, supplies	L026A	Med Tech/Asst	**1**		**2**		**1**		**2**		**1**		**2**	
Setup scope (non facility setting only)														
Prepare and position patient/ monitor patient/ set up IV														
Sedate/apply anesthesia														
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**													
Intra-service														
Assist physician in performing procedure	L037D	RN/LPN/MTA	11		7		13		10		4		10	
Assist physician/moderate sedation (% of physician time)														
Post-Service														
Monitor pt. following moderate sedation														
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)														
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)														
Clean room/equipment by physician staff	L026A	Med Tech/Asst	3		3		3		3		3		3	
Clean Scope														
Clean Surgical Instrument Package														
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	2		2		2		2		1		1	
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	1		1		1		1		1		1	
Review/read X-ray, lab, and pathology reports														
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions														
Other Clinical Activity - *specify:*														
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99238) (enter 12 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			n/a		n/a		n/a		n/a		n/a		n/a	
End: Patient leaves office														
POST-SERVICE Period														
Start: Patient leaves office/facility														
Conduct phone calls/call in prescriptions														
Office visits: List Number and Level of Office Visits			# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
99211 16 minutes		16												
99212 27 minutes		27												
99213 36 minutes		36												
99214 53 minutes		53												
99215 63 minutes		63												
Total Office Visit Time			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Clinical Activity - *specify:*														
End: with last office visit before end of global period														
MEDICAL SUPPLIES*	**CODE**	**UNIT**												
pack, minimum multi-specialty visit	SA048	pack	1		1		1		1		1		1	
swab-pad, alcohol	SJ053	item	4		4		4		4		4		4	
electrode adhesive disk	SJ019	item	4		5		4		5		4		5	
paper, laser printing (each sheet)	SK057	item	15		15		20		20		10		10	
electrode, ECG (single)	SD053	item	4		5		4		5		4		5	
EQUIPMENT	**CODE**													
table, exam	EF023	minutes	18		25		20		28		8		26	
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	18		25		20		28		8		26	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

			Office Codes				PM/ICD Periprocedural Codes							
			REFERENCE CODE				REFERENCE CODE				REFERENCE CODE			
			93292		93292		93286		93286		93287		93287	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Peri-procedural device evaluation and programming of device system parameters before or		Peri-procedural device evaluation and programming of device system parameters before or		Peri-procedural device evaluation and programming of device system parameters before or		Peri-procedural device evaluation and programming of device system parameters before or	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**													
TOTAL CLINICAL LABOR TIME			**20.0**	**0.0**	**29.0**	**0.0**	**19.0**	**0.0**	**28.0**	**0.0**	**21.0**	**0.0**	**28.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**12.0**	**0.0**	**17.0**	**0.0**	**14.0**	**0.0**	**18.0**	**0.0**	**16.0**	**0.0**	**18.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**	**1.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**11.0**	**0.0**	**16.0**	**0.0**	**13.0**	**0.0**	**17.0**	**0.0**	**15.0**	**0.0**	**17.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**8.0**	**0.0**	**12.0**	**0.0**	**5.0**	**0.0**	**10.0**	**0.0**	**5.0**	**0.0**	**10.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**8.0**	**0.0**	**12.0**	**0.0**	**5.0**	**0.0**	**10.0**	**0.0**	**5.0**	**0.0**	**10.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE														
Start: Following visit when decision for surgery or procedure made														
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**1**		**1**		**1**		**1**		**1**		**1**	
Coordinate pre-surgery services														
Schedule space and equipment in facility														
Provide pre-service education/obtain consent														
Follow-up phone calls & prescriptions														
Other Clinical Activity - *specify:*														
End: When patient enters office/facility for surgery/procedure														
SERVICE PERIOD														
Start: When patient enters office/facility for surgery/procedure:														
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**		**3**		**3**		**3**		**3**	
Obtain vital signs	L026A	Med Tech/Asst			**3**		**1**		**0**		**1**		**0**	
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	
Prepare room, equipment, supplies	L026A	Med Tech/Asst	**1**		**2**				**2**				**2**	
Setup scope (non facility setting only)														
Prepare and position patient/ monitor patient/ set up IV														
Sedate/apply anesthesia														
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**		**2**		**2**		**2**		**2**	

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**													
Intra-service														
Assist physician in performing procedure	L037D	RN/LPN/MTA	5		10		5		10		7		10	
Assist physician/moderate sedation (% of physician time)														
Post-Service														
Monitor pt. following moderate sedation														
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)														
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)														
Clean room/equipment by physician staff	L026A	Med Tech/Asst	3		3				3				3	
Clean Scope														
Clean Surgical Instrument Package														
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	2		2		3		3		3		3	
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	1		1		2		2		2		2	
Review/read X-ray, lab, and pathology reports														
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions														
Other Clinical Activity - *specify:*														
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99238) (enter 12 min)			n/a		n/a		n/a		n/a		n/a		n/a	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			n/a		n/a		n/a		n/a		n/a		n/a	
End: Patient leaves office														
POST-SERVICE Period														
Start: Patient leaves office/facility														
Conduct phone calls/call in prescriptions														
Office visits: List Number and Level of Office Visits			# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
99211 16 minutes		16												
99212 27 minutes		27												
99213 36 minutes		36												
99214 53 minutes		53												
99215 63 minutes		63												
Total Office Visit Time			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Clinical Activity - *specify:*														
End: with last office visit before end of global period														
MEDICAL SUPPLIES*	**CODE**	**UNIT**												
pack, minimum multi-specialty visit	SA048	pack	1		1		1		1		1		1	
swab-pad, alcohol	SJ053	item	4		4		4		4		4		4	
electrode adhesive disk	SJ019	item	4		5		5		5		5		5	
paper, laser printing (each sheet)	SK057	item	10		10		10		10		10		10	
electrode, ECG (single)	SD053	item	4		5		5		5		5		5	
							2		2		2		2	
EQUIPMENT	**CODE**													
table, exam	EF023	minutes	11		28		13		27		15		27	
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	11		28		13		27		15		27	

*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

						Transtelephonic							
						REFERENCE CODE				REFERENCE CODE			
						93293		93293		93296		93296	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead		Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable	
LOCATION			**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**		**GLOBAL PERIOD**	**XXX**									
TOTAL CLINICAL LABOR TIME			**TOTAL CLINICAL LABOR TIME**			**48.0**	**0.0**	**48.0**	**0.0**	**28.0**	**0.0**	**28.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**9.0**	**0.0**	**9.0**	**0.0**	**1.0**	**0.0**	**0.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**9.0**	**0.0**	**9.0**	**0.0**	**1.0**	**0.0**	**0.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**TOTAL CLINICAL LABOR TIME**	L037A	EDX Tech	**39.0**	**0.0**	**39.0**	**0.0**	**27.0**	**0.0**	**28.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037A	EDX Tech	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037A	EDX Tech	**39.0**	**0.0**	**39.0**	**0.0**	**27.0**	**0.0**	**28.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037A	EDX Tech	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE			**PRE-SERVICE**										
Start: Following visit when decision for surgery or procedure made			**Start: Following visit when decision for surgery or procedure made**										
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA								
Coordinate pre-surgery services			Coordinate pre-surgery services										
Schedule space and equipment in facility			Schedule space and equipment in facility										
Provide pre-service education/obtain consent			Provide pre-service education/obtain consent										
Follow-up phone calls & prescriptions			Follow-up phone calls & prescriptions										
Other Clinical Activity - *specify:*			Other Clinical Activity - *specify:*										
End: When patient enters office/facility for surgery/procedure			**End: When patient enters office/facility for surgery/procedure**										
SERVICE PERIOD			**SERVICE PERIOD**										
Start: When patient enters office/facility for surgery/procedure:			**Start: When patient enters office/facility for surgery/procedure:**										
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst								
Obtain vital signs	L026A	Med Tech/Asst	Obtain vital signs	L037D	RN/LPN/MTA								
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA								
Prepare room, equipment, supplies	L026A	Med Tech/Asst	Prepare room, equipment, supplies	L026A	Med Tech/Asst								
Setup scope (non facility setting only)			Setup scope (non facility setting only)										
Prepare and position patient/ monitor patient/ set up IV			Prepare and position patient/ monitor patient/ set up IV										
Sedate/apply anesthesia			Sedate/apply anesthesia										
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA								

LOCATION			LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**		**GLOBAL PERIOD**	**XXX**									
Intra-service			**Intra-service**										
Assist physician in performing procedure	L037D	RN/LPN/MTA	Assist physician in performing procedure	L037A	EDX Tech	**39**		**39**		**27**		**28**	
Assist physician/moderate sedation (% of physician time)			Assist physician in performing procedure	L037D	RN/LPN/MTA	**9**		**9**		**1**		**0**	
Post-Service			Assist physician/moderate sedation (% of physician time)										
Monitor pt. following moderate sedation			**Post-Service**										
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)			Monitor pt. following moderate sedation										
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)			Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)										
Clean room/equipment by physician staff	L026A	Med Tech/Asst	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)										
Clean Scope			Clean room/equipment by physician staff	L026A	Med Tech/Asst								
Clean Surgical Instrument Package			Clean Scope										
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	Clean Surgical Instrument Package										
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA								
Review/read X-ray, lab, and pathology reports			Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst								
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions			Review/read X-ray, lab, and pathology reports										
Other Clinical Activity - *specify:*			Check dressings & wound/ home care instructions /coordinate office visits /prescriptions										
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			Other Clinical Activity - *specify:*										
Dischrg mgmt (1.0 x 99238) (enter 12 min)			Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**		**n/a**		**n/a**	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**		**n/a**		**n/a**	
End: Patient leaves office			Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**		**n/a**		**n/a**	
POST-SERVICE Period			**End: Patient leaves office**										
Start: Patient leaves office/facility			**POST-SERVICE Period**										
Conduct phone calls/call in prescriptions			**Start: Patient leaves office/facility**										
Office visits: List Number and Level of Office Visits			Conduct phone calls/call in prescriptions										
99211 16 minutes		16	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
99212 27 minutes		27	99211 16 minutes		16								
99213 36 minutes		36	99212 27 minutes		27								
99214 53 minutes		53	99213 36 minutes		36								
99215 63 minutes		63	99214 53 minutes		53								
Total Office Visit Time			99215 63 minutes		63								
Other Clinical Activity - *specify:*			**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
End: with last office visit before end of global period			Other Clinical Activity - *specify:*										
MEDICAL SUPPLIES*	**CODE**	**UNIT**	**End: with last office visit before end of global period**										
pack, minimum multi-specialty visit	SA048	pack	**MEDICAL SUPPLIES***	**CODE**	**UNIT**								
swab-pad, alcohol	SJ053	item	pack, minimum multi-specialty visit	SA048	pack								
electrode adhesive disk	SJ019	item	swab-pad, alcohol	SJ053	item								
paper, laser printing (each sheet)	SK057	item	electrode adhesive disk	SJ019	item								
electrode, ECG (single)	SD053	item	paper, laser printing (each sheet)	SK057	item	**10**		**10**		**10**		**10**	
			electrode, ECG (single)	SD053	item								
EQUIPMENT	**CODE**		gloves, non-sterile	SB022	pair								
table, exam	EF023	minutes	**EQUIPMENT**	**CODE**									
pacemaker follow-up system (incl software and hardware)	EQ198	minutes	table, exam	EF023	minutes								
			pacemaker follow-up system (incl software and hardware)	EQ198	minutes			**39**				**28**	
			pacemaker interrogation, system	EQ320	minutes	**39**		**0**		**27**		**0**	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

			90-Day Remote Codes							
			REFERENCE CODE				REFERENCE CODE			
			93294		93294		93295		93295	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead implantable		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead implantable	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**									
TOTAL CLINICAL LABOR TIME			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE										
Start: Following visit when decision for surgery or procedure made										
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA								
Coordinate pre-surgery services										
Schedule space and equipment in facility										
Provide pre-service education/obtain consent										
Follow-up phone calls & prescriptions										
Other Clinical Activity - *specify:*										
End: When patient enters office/facility for surgery/procedure										
SERVICE PERIOD										
Start: When patient enters office/facility for surgery/procedure:										
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst								
Obtain vital signs	L026A	Med Tech/Asst								
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA								
Prepare room, equipment, supplies	L026A	Med Tech/Asst								
Setup scope (non facility setting only)										
Prepare and position patient/ monitor patient/ set up IV										
Sedate/apply anesthesia										
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA								

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**									
Intra-service										
Assist physician in performing procedure	L037D	RN/LPN/MTA								
Assist physician/moderate sedation (% of physician time)										
Post-Service										
Monitor pt. following moderate sedation										
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)										
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)										
Clean room/equipment by physician staff	L026A	Med Tech/Asst								
Clean Scope										
Clean Surgical Instrument Package										
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA								
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst								
Review/read X-ray, lab, and pathology reports										
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions										
Other Clinical Activity - *specify:*										
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)										
Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**		**n/a**		**n/a**	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**		**n/a**		**n/a**	
End: Patient leaves office			**n/a**		**n/a**		**n/a**		**n/a**	
POST-SERVICE Period										
Start: Patient leaves office/facility										
Conduct phone calls/call in prescriptions										
Office visits: List Number and Level of Office Visits										
99211 16 minutes		16	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
99212 27 minutes		27								
99213 36 minutes		36								
99214 53 minutes		53								
99215 63 minutes		63								
Total Office Visit Time										
Other Clinical Activity - *specify:*			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
End: with last office visit before end of global period										
MEDICAL SUPPLIES*	**CODE**	**UNIT**								
pack, minimum multi-specialty visit	SA048	pack								
swab-pad, alcohol	SJ053	item								
electrode adhesive disk	SJ019	item								
paper, laser printing (each sheet)	SK057	item								
electrode, ECG (single)	SD053	item								
EQUIPMENT	**CODE**									
table, exam	EF023	minutes								
pacemaker follow-up system (incl software and hardware)	EQ198	minutes								

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	CMS Code	Staff Type	REFERENCE CODE 93296 Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		REFERENCE CODE 93299 Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor		93299 Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**							
TOTAL CLINICAL LABOR TIME			**28.0**	**0.0**	**0.0**	**0.0**	**28.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**1.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**1.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**27.0**	**0.0**	**0.0**	**0.0**	**28.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**27.0**	**0.0**	**0.0**	**0.0**	**28.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE								
Start: Following visit when decision for surgery or procedure made								
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA						
Coordinate pre-surgery services								
Schedule space and equipment in facility								
Provide pre-service education/obtain consent								
Follow-up phone calls & prescriptions								
Other Clinical Activity - *specify:*								
End: When patient enters office/facility for surgery/procedure								
SERVICE PERIOD								
Start: When patient enters office/facility for surgery/procedure:								
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst						
Obtain vital signs	L026A	Med Tech/Asst						
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA						
Prepare room, equipment, supplies	L026A	Med Tech/Asst						
Setup scope (non facility setting only)								
Prepare and position patient/ monitor patient/ set up IV								
Sedate/apply anesthesia								
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA						

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**							
Intra-service								
Assist physician in performing procedure	L037D	RN/LPN/MTA	**27**				**28**	
Assist physician/moderate sedation (% of physician time)			**1**				**0**	
Post-Service								
Monitor pt. following moderate sedation								
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)								
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)								
Clean room/equipment by physician staff	L026A	Med Tech/Asst						
Clean Scope								
Clean Surgical Instrument Package								
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA						
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst						
Review/read X-ray, lab, and pathology reports								
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions								
Other Clinical Activity - *specify:*								
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)								
Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**		**n/a**	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**		**n/a**	
End: Patient leaves office			**n/a**		**n/a**		**n/a**	
POST-SERVICE Period								
Start: Patient leaves office/facility								
Conduct phone calls/call in prescriptions								
Office visits: List Number and Level of Office Visits								
99211 16 minutes		16	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
99212 27 minutes		27						
99213 36 minutes		36						
99214 53 minutes		53						
99215 63 minutes		63						
Total Office Visit Time								
Other Clinical Activity - *specify:*			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
End: with last office visit before end of global period								
MEDICAL SUPPLIES*	**CODE**	**UNIT**						
pack, minimum multi-specialty visit	SA048	pack						
swab-pad, alcohol	SJ053	item						
electrode adhesive disk	SJ019	item						
paper, laser printing (each sheet)	SK057	item						
electrode, ECG (single)	SD053	item	**10**				**10**	
EQUIPMENT	**CODE**							
table, exam	EF023	minutes						
pacemaker follow-up system (incl software and hardware)	EQ198	minutes						
							28	
			27				**0**	

***Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.**

			30-Day Remote Codes							
			REFERENCE CODE				REFERENCE CODE			
			93297		93297		93298		93298	
Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor		Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor		Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,		Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,	
LOCATION			**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
GLOBAL PERIOD	**XXX**									
TOTAL CLINICAL LABOR TIME			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PRE-SERVICE										
Start: Following visit when decision for surgery or procedure made										
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA								
Coordinate pre-surgery services										
Schedule space and equipment in facility										
Provide pre-service education/obtain consent										
Follow-up phone calls & prescriptions										
Other Clinical Activity - *specify:*										
End: When patient enters office/facility for surgery/procedure										
SERVICE PERIOD										
Start: When patient enters office/facility for surgery/procedure:										
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst								
Obtain vital signs	L026A	Med Tech/Asst								
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA								
Prepare room, equipment, supplies	L026A	Med Tech/Asst								
Setup scope (non facility setting only)										
Prepare and position patient/ monitor patient/ set up IV										
Sedate/apply anesthesia										
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA								

LOCATION			Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
GLOBAL PERIOD	**XXX**									
Intra-service										
Assist physician in performing procedure	L037D	RN/LPN/MTA								
Assist physician/moderate sedation (% of physician time)										
Post-Service										
Monitor pt. following moderate sedation										
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)										
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)										
Clean room/equipment by physician staff	L026A	Med Tech/Asst								
Clean Scope										
Clean Surgical Instrument Package										
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA								
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst								
Review/read X-ray, lab, and pathology reports										
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions										
Other Clinical Activity - *specify:*										
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)										
Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**		**n/a**		**n/a**	
Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**		**n/a**		**n/a**	
End: Patient leaves office			**n/a**		**n/a**		**n/a**		**n/a**	
POST-SERVICE Period										
Start: Patient leaves office/facility										
Conduct phone calls/call in prescriptions										
Office visits: List Number and Level of Office Visits										
99211 16 minutes		16	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**	**# visits**
99212 27 minutes		27								
99213 36 minutes		36								
99214 53 minutes		53								
99215 63 minutes		63								
Total Office Visit Time										
Other Clinical Activity - *specify:*			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
End: with last office visit before end of global period										
MEDICAL SUPPLIES*	**CODE**	**UNIT**								
pack, minimum multi-specialty visit	SA048	pack								
swab-pad, alcohol	SJ053	item								
electrode adhesive disk	SJ019	item								
paper, laser printing (each sheet)	SK057	item								
electrode, ECG (single)	SD053	item								
EQUIPMENT	**CODE**									
table, exam	EF023	minutes								
pacemaker follow-up system (incl software and hardware)	EQ198	minutes								

	A	B	C	D	E	F	G
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93288		93288	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**30.0**	**0.0**	**35.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**20.0**	**0.0**	**20.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**18.0**	**0.0**	**18.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**10**		**10**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	D	E	F	G
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93288		93288	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**10**		**10**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**18**		**33**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**18**		**33**	
75							
76							
77							

	A	B	C	H	I	J	K
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93279		93279	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**33.0**	**0.0**	**35.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**23.0**	**0.0**	**20.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**21.0**	**0.0**	**18.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**13**		**10**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	H	I	J	K
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93279		93279	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**10**		**10**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**21**		**33**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**21**		**33**	
75							
76							
77							

	A	B	C	L	M	N	O
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93280		93280	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**37.0**	**0.0**	**40.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**27.0**	**0.0**	**25.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**25.0**	**0.0**	**23.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**17**		**15**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	L	M	N	O
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93280		93280	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**15**		**15**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**25**		**38**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**25**		**38**	
75							
76							
77							

	A	B	C	P	Q	R	S
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93281		93281	
3	**Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
6	**TOTAL CLINICAL LABOR TIME**			**43.0**	**0.0**	**41.0**	**0.0**
7	**TOTAL CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**33.0**	**0.0**	**26.0**	**0.0**
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**2.0**	**0.0**	**2.0**	**0.0**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**31.0**	**0.0**	**24.0**	**0.0**
10	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**0.0**	**0.0**	**0.0**	**0.0**
11	**TOTAL CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
12	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
13	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**10.0**	**0.0**	**15.0**	**0.0**
14	**TOTAL POST-SERV CLINICAL LABOR TIME**	L026A	Med Tech/Asst	**0.0**	**0.0**	**0.0**	**0.0**
15	**PRE-SERVICE**						
16	**Start: Following visit when decision for surgery or procedure made**						
17	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**2**		**2**	
18	Coordinate pre-surgery services						
19	Schedule space and equipment in facility						
20	Provide pre-service education/obtain consent						
21	Follow-up phone calls & prescriptions						
22	Other Clinical Activity - *specify:*						
23	**End: When patient enters office/facility for surgery/procedure**						
24	**SERVICE PERIOD**						
25	**Start: When patient enters office/facility for surgery/procedure:**						
26	Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst	**3**		**3**	
27	Obtain vital signs	L026A	Med Tech/Asst			**5**	
28	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**3**		**3**	
29	Prepare room, equipment, supplies	L026A	Med Tech/Asst	**2**		**2**	
30	Setup scope (non facility setting only)						
31	Prepare and position patient/ monitor patient/ set up IV						
32	Sedate/apply anesthesia						
33	Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA	**2**		**2**	
34	**Intra-service**						
35	Assist physician in performing procedure	L037D	RN/LPN/MTA	**23**		**16**	
36	Assist physician/moderate sedation (% of physician time)						
37	**Post-Service**						
38	Monitor pt. following moderate sedation						
39	Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)						
40	Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)						
41	Clean room/equipment by physician staff	L026A	Med Tech/Asst	**3**		**3**	
42	Clean Scope						
43	Clean Surgical Instrument Package						
44	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**3**		**3**	
45	Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst	**2**		**2**	
46	Review/read X-ray, lab, and pathology reports						
47	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
48	Other Clinical Activity - *specify:*						
49	Dischrg mgmt same day (0.5 x 99238) (enter 6 min)			**n/a**		**n/a**	
50	Dischrg mgmt (1.0 x 99238) (enter 12 min)			**n/a**		**n/a**	
51	Dischrg mgmt (1.0 x 99239) (enter 15 min)			**n/a**		**n/a**	
52	**End: Patient leaves office**						

	A	B	C	P	Q	R	S
1				REFERENCE CODE			
2	*Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.			93281		93281	
3	**Meeting Date: October 2016** **Tab: 25** **Specialty: ACC, HRS**	**CMS Code**	**Staff Type**	Programming device evaluation with iterative adjustment of the implantable device to test the function of		Programming device evaluation with iterative adjustment of the implantable device to test the function of	
4	**LOCATION**			**Non Fac**	**Facility**	**Non Fac**	**Facility**
5	**GLOBAL PERIOD**	**XXX**					
53	**POST-SERVICE Period**						
54	**Start: Patient leaves office/facility**						
55	Conduct phone calls/call in prescriptions						
56	***Office visits: List Number and Level of Office Visits***			**# visits**	**# visits**	**# visits**	**# visits**
57	99211 16 minutes		16				
58	99212 27 minutes		27				
59	99213 36 minutes		36				
60	99214 53 minutes		53				
61	99215 63 minutes		63				
62	**Total Office Visit Time**			**0.0**	**0.0**	**0.0**	**0.0**
63	Other Clinical Activity - *specify:*						
64	**End: with last office visit before end of global period**						
65	**MEDICAL SUPPLIES***	**CODE**	**UNIT**				
66	pack, minimum multi-specialty visit	SA048	pack	**1**		**1**	
67	swab-pad, alcohol	SJ053	item	**4**		**4**	
68	electrode adhesive disk	SJ019	item	**4**		**5**	
69	paper, laser printing (each sheet)	SK057	item	**15**		**15**	
70	electrode, ECG (single)	SD053	item	**4**		**5**	
71							
72	**EQUIPMENT**	**CODE**					
73	table, exam	EF023	minutes	**31**		**39**	
74	pacemaker follow-up system (incl software and hardware)	EQ198	minutes	**31**		**39**	
75							
76							
77							

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				REFEREN
93289		93289		93282		93282		932
Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Interrogation device evaluation (in person) with physician analysis, review and report, includes connection,		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programm evaluation with ite adjustme implantable
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
38.0	0.0	35.0	0.0	38.0	0.0	37.0	0.0	44.0
28.0	0.0	20.0	0.0	28.0	0.0	22.0	0.0	34.0
2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
26.0	0.0	18.0	0.0	26.0	0.0	20.0	0.0	32.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	15.0	0.0	10.0	0.0	15.0	0.0	10.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	15.0	0.0	10.0	0.0	15.0	0.0	10.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		2		2		2		2
3		3		3		3		3
		5				5		
3		3		3		3		3
2		2		2		2		2
2		2		2		2		2
18		10		18		12		24

3		3		3		3		3
3		3		3		3		3
2		2		2		2		2
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1		1		1		1		1
4		4		4		4		4
4		5		4		5		4
15		15		15		15		20
4		5		4		5		4

26		33		26		35		32
18		33		26		35		32

ICE CODE			REFERENCE CODE			
283	93283		93284		93284	
ing device (in person) erative nt of the e device to	Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to	
Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility
0.0	40.0	0.0	50.0	0.0	42.5	0.0
0.0	25.0	0.0	40.0	0.0	27.5	0.0
0.0	2.0	0.0	2.0	0.0	2.0	0.0
0.0	23.0	0.0	38.0	0.0	25.5	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	15.0	0.0	10.0	0.0	15.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	15.0	0.0	10.0	0.0	15.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2		2		2	
	3		3		3	
	5				5	
	3		3		3	
	2		2		2	
	2		2		2	
	15		30		17.5	

	3		3		3		
	3		3		3		Print PaceArt report
	2		2		2		Scan & File
	n/a		n/a		n/a		
	n/a		n/a		n/a		
	n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1		1		1		
	4		4		4		
	5		4		5		
	20		20		20		
	5		4		5		
	38		38		40.5		not highly technical c
	38		38		40.5		not highly technical c

corresponds to total intraservice period
corresponds to total intraservice period

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L037D	RN/LPN/MTA
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				
93291		93291		93285		93285		
Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Programming device evaluation (in person) with iterative adjustment of the implantable device to		Programming device evaluation (in person) with iterative adjustment of the implantable device to		
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
26.0	0.0	28.0	0.0	28.0	0.0	31.0	0.0	
19.0	0.0	16.0	0.0	21.0	0.0	19.0	0.0	
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	
18.0	0.0	15.0	0.0	20.0	0.0	18.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7.0	0.0	12.0	0.0	7.0	0.0	12.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7.0	0.0	12.0	0.0	7.0	0.0	12.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
3		3		3		3		
		5				5		
2		2		2		2		2 minutes
1		2		1		2		
2		2		2		2		
11		7		13		10		

3		3		3		3		
								Print Pace
2		2		2		2		Scan & Fil
1		1		1		1		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
4		4		4		4		
4		5		4		5		
15		15		20		20		
4		5		4		5		
								not highly
18		27		20		30		not highly
18		27		20		30		

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L026A	Med Tech/Asst
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				
93290		93290		93292		93292		
Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		Interrogation device evaluation (in person) with analysis, review and report by a physician or other		
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
17.0	0.0	29.0	0.0	20.0	0.0	31.0	0.0	
9.0	0.0	15.0	0.0	12.0	0.0	17.0	0.0	
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	
8.0	0.0	14.0	0.0	11.0	0.0	16.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8.0	0.0	14.0	0.0	8.0	0.0	14.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8.0	0.0	14.0	0.0	8.0	0.0	14.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
3		3		3		3		
		5				5		
1		1		2		2		
1		2		1		2		2 minutes
2		2		2		2		
4		10		5		10		

3		3		3		3		
1		1		2		2		Print Pace
1		1		1		1		Scan & Fil
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
4		4		4		4		
4		5		4		5		
10		10		10		10		
4		5		4		5		
8		28		11		30		not highly
8		28		11		30		not highly

technical corresponds to total intraservice period
technical corresponds to total intraservice period

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL PRE-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L026A	Med Tech/Asst
TOTAL POST-SERV CLINICAL LABOR TIME	L026A	Med Tech/Asst
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		
Monitor pt. following moderate sedation		

Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair
EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes

REFERENCE CODE				REFERENCE CODE				
93286		93286		93287		93287		
Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		Peri-procedural device evaluation and programming of device system parameters before or after a		
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
19.0	0.0	28.0	0.0	21.0	0.0	28.0	0.0	
14.0	0.0	18.0	0.0	16.0	0.0	18.0	0.0	
1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	
13.0	0.0	17.0	0.0	15.0	0.0	17.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5.0	0.0	10.0	0.0	5.0	0.0	10.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5.0	0.0	10.0	0.0	5.0	0.0	10.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
3		3		3		3		
1		0		1		0		Vitals are
2		2		2		2		
		2				2		2 minutes
2		2		2		2		
5		10		7		10		

		3				3		3 MINUTE
3		3		3		3		Print Pace
2		2		2		2		Scan & Fil
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
n/a		n/a		n/a		n/a		
# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		1		1		1		
4		4		4		4		
5		5		5		5		
10		10		10		10		
5		5		5		5		
2		2		2		2		
13		27		15		27		not highly
13		27		15		27		not highly

technical corresponds to total intraservice period
technical corresponds to total intraservice period

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037A	EDX Tech
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		

Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes
pacemaker interrogation, system	EQ320	minutes

REFERENCE CODE

93293		93293	
Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead		Transtelephonic rhythm strip pacemaker evaluation(s) single, dual, or multiple lead	
Non Fac	**Facility**	**Non Fac**	**Facility**
48.0	**0.0**	**48.0**	**0.0**
9.0	**0.0**	**9.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
9.0	**0.0**	**9.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
39.0	**0.0**	**39.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
39.0	**0.0**	**39.0**	**0.0**
0.0	**0.0**	**0.0**	**0.0**
39		**39**	
9		**9**	

n/a		n/a	
n/a		n/a	
n/a		n/a	

# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0

10		10	

39		39	

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify:	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037A	EDX Tech
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		

Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes
pacemaker interrogation, system	EQ320	minutes

REFERENCE CODE				REFERENCE CODE				REFEREN
93296		93296		93294		93294		932
Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead pacemaker system		Interrogati evaluation(s up to 90 da dual or mu implar
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
28.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

10		10						

27		28						

ICE CODE		
295	93295	
ion device s) (remote), ays; single, ltiple lead ntable	Interrogation device evaluation(s) (remote), up to 90 days; single, dual or multiple lead implantable	
Facility	**Non Fac**	**Facility**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**
0.0	**0.0**	**0.0**

	n/a	
	n/a	
	n/a	
# visits	# visits	# visits
0.0	0.0	0.0

eport and distribution of results; originally assumed 1.5 transmission per 90 days. Data from industry sho

ows screens are "viewed and/or printed" an average of 2.4 times per 90 days.

"Please note: If a supply has a purchase price of $100 or more please bold the item name and CMS code.

Meeting Date: October 2016 Tab: 25 Specialty: ACC, HRS	**CMS Code**	**Staff Type**
LOCATION		
GLOBAL PERIOD	**XXX**	
TOTAL CLINICAL LABOR TIME		
TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL PRE-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL POST-SERV CLINICAL LABOR TIME	L037D	RN/LPN/MTA
TOTAL CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL PRE-SERV CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037A	EDX Tech
TOTAL POST-SERV CLINICAL LABOR TIME	L037A	EDX Tech
PRE-SERVICE		
Start: Following visit when decision for surgery or procedure made		
Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA
Coordinate pre-surgery services		
Schedule space and equipment in facility		
Provide pre-service education/obtain consent		
Follow-up phone calls & prescriptions		
Other Clinical Activity - *specify:*		
End: When patient enters office/facility for surgery/procedure		
SERVICE PERIOD		
Start: When patient enters office/facility for surgery/procedure:		
Greet patient, provide gowning, ensure appropriate medical records are available	L026A	Med Tech/Asst
Obtain vital signs	L037D	RN/LPN/MTA
Provide pre-service education/obtain consent	L037D	RN/LPN/MTA
Prepare room, equipment, supplies	L026A	Med Tech/Asst
Setup scope (non facility setting only)		
Prepare and position patient/ monitor patient/ set up IV		
Sedate/apply anesthesia		
Other Clinical Activity - specify: Review charts	L037D	RN/LPN/MTA
Intra-service		
Assist physician in performing procedure	L037A	EDX Tech
Assist physician in performing procedure	L037D	RN/LPN/MTA
Assist physician/moderate sedation (% of physician time)		
Post-Service		

Monitor pt. following moderate sedation		
Monitor pt. following procedure/check tubes, monitors, drains, multitasking 1:4 (not related to moderate sedation)		
Monitor pt. following procedure/check tubes, monitors, drains, no multitasking 1:1 (not related to moderate sedation)		
Clean room/equipment by physician staff	L026A	Med Tech/Asst
Clean Scope		
Clean Surgical Instrument Package		
Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA
Complete diagnostic forms, lab & X-ray requisitions	L026A	Med Tech/Asst
Review/read X-ray, lab, and pathology reports		
Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		
Other Clinical Activity - *specify:*		
Dischrg mgmt same day (0.5 x 99238) (enter 6 min)		
Dischrg mgmt (1.0 x 99238) (enter 12 min)		
Dischrg mgmt (1.0 x 99239) (enter 15 min)		
End: Patient leaves office		
POST-SERVICE Period		
Start: Patient leaves office/facility		
Conduct phone calls/call in prescriptions		
Office visits: List Number and Level of Office Visits		
99211 16 minutes		16
99212 27 minutes		27
99213 36 minutes		36
99214 53 minutes		53
99215 63 minutes		63
Total Office Visit Time		
Other Clinical Activity - *specify:*		
End: with last office visit before end of global period		

MEDICAL SUPPLIES*	**CODE**	**UNIT**
pack, minimum multi-specialty visit	SA048	pack
swab-pad, alcohol	SJ053	item
electrode adhesive disk	SJ019	item
paper, laser printing (each sheet)	SK057	item
electrode, ECG (single)	SD053	item
gloves, non-sterile	SB022	pair

EQUIPMENT	**CODE**	
table, exam	EF023	minutes
pacemaker follow-up system (incl software and hardware)	EQ198	minutes
pacemaker interrogation, system	EQ320	minutes

REFERENCE CODE		REFERENCE CODE				REFERENCE CODE		
93296		93299		93299		93297		932
Interrogation device evaluation(s), (remote), per 90 days, pacemaker or implantable		Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor		Interrogation device evaluation(s), (remote), per 30 days, implantable cardiovascular monitor		Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor		Interrogati evaluation(s up to 3(implar cardiovascu
Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	Non Fac
28.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27				28				
1				0				

n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a
n/a		n/a		n/a		n/a		n/a

# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

10				10				

27				28				

	REFERENCE CODE			
297	93298		93298	
ion device s), (remote) 0 days; ntable ular monitor	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,		Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system,	
Facility	Non Fac	Facility	Non Fac	Facility
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

	n/a		n/a	
	n/a		n/a	
	n/a		n/a	

# visits	# visits	# visits	# visits	# visits
0.0	0.0	0.0	0.0	0.0

s PM/ICD. Data from industry shows screens are "viewed and/or printed" an average of 3.9 times per 3(

0 days.

AMA/Specialty Society RVS Update Committee Summary of Recommendations
CMS Request

October 2018

Remote Interrogation Device Evaluation(s) (PE Only)

The RUC reviewed the Cardiac Electrophysiology Device Monitoring Services in January 2017. The specialty society submitted practice expense inputs for CPT code 93299 and the PE Subcommittee and RUC accepted the society recommendations. CMS proposed to implement the RUC recommendation for 2018 in the July 2017 Proposed Rule. CMS received comments from the RUC and national specialty societies supporting the CMS proposal. Another commenter supported national pricing and noted the significant variation in contractor pricing and unfair variation in patient co-pays throughout the country. CMS received a comment from Medtronic that complained that implementation of resource-based relative values would lead to a significant reduction in payment in some geographic areas. The average allowed charge for CPT code 99299 was $88 in 2017, while the resource-based practice expense would lead to a $27 national payment rate. In the Final Rule, CMS chose to continue contractor pricing, noting the Medtronic rationale as the reason (resource based inputs lead to lower payment than contractor pricing). It is highly unusual for a code with significant volume (2017 = 468,596) to be contractor priced. AMA staff contacted CMS stating that if CMS believes that there are inaccuracies in the direct practice expense inputs submitted in February 2017, the RUC would be willing to re-examine this code in October 2018.

CMS initially proposed to accept the RUC's recommended practice expense inputs for CPT 93299, and to price the code nationally under the PFS. However, after receiving several comments expressing concern about the payment rate of approximately $27 for this code. As stated in the Final Rule, the Agency was persuaded by these commenters that this payment rate might not sufficiently address the needs of local populations, supply costs, and practice patterns. At least one other commenter expressed support for national pricing of CPT code 93299, but urged additional research so that the code can be adequately valued. The practice expense inputs for CPT code 93299, as stated by the RUC, were based on a crosswalk from CPT 93296, but CMS questioned the appropriateness of this crosswalk, especially because 93299 is a service for up to 30 days and CPT code 93296 is for up to 90 days of remote monitoring.

The specialty societies requested and the RUC agreed to add family codes 93297 and 93298 to be reviewed for practice expense only. These codes are currently work only codes and 93299 is meant to serve as the catch-all for both types of 30-day remote monitoring services. The RUC is unclear why the code family was designed this way, it may have been a way to allow for the possibility that the technical work would be provided by vendors, but that is not how the service is being provided. In the decade since these codes were created, it has become clear that implantable cardiovascular monitor (ICM) and implantable loop recorder (ILR) services are very different services and the PE cannot be appropriately captured for both services in a single technical code. CPT code 93297 is related to the remote monitoring of physiological measures obtained from implantable pacemakers and defibrillators related to heart failure that come at an interval of every 30 days. CPT code 93298 refers to subcutaneous wireless remote monitors that provide data at more frequent interval, requiring more clinical staff work. The specialty society provided recommendations for direct PE inputs for both 93297 and 93298 that align with each of the services.

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Compelling Evidence
PE inputs for 93297-93299 were last evaluated by the RUC in 2017 when work and PE for the large family of cardiac device monitoring services were all revalued. Updating the family of 21 codes with work, PE or both was a daunting task. At that time, the specialty societies identified code 93296 that also describes the technical component of remote monitoring services as a comparison code for PE and recommended it be used as a crosswalk. Stakeholder comments and CMS's decision to maintain contractor pricing for the service suggested that a value for 93299 based on 93296 was incorrect and based on incorrect assumptions. With the ability to focus on this single code rather than a large family, the specialty has been able to better quantify the clinical staff time necessary to perform the technical components of the services. The specialty explained and the PE Subcommittee agreed that compelling evidence had been met based on a flawed crosswalk and that additional data is available.

To better scrutinize the inputs that were a straight crosswalk when these codes were reviewed in January 2017 the specialty society engaged industry and obtained data from one manufacturer that sells the vast majority of ILR devices. It was important to engage industry for these services because there is no single product or electronic record that all practices use, however one consistent work item is that the technologists at each practice log onto the industry server to do their clinical work. Each night the device equipment in the office communicates wirelessly with the patient's device and the data gets uploaded to the industry server. The staff are notified if there is an abnormality and staff would log onto the server to check the abnormality. The data collected on the server includes the number of device-generated event notifications per month, the number of patient-generated manual event transmissions per month, and the amount of time a technologist is logged into the system and engaging with the monitoring reports. That data indicates that over the course of a month, a technologist interacts with patient monitoring reports 1.63 times a month to process device-generated notifications for 17 minutes, 1.74 times a month to process patient-generated notifications for 19 minutes, and once a month to generate a monthly report for 14 minutes. That is 50 minutes per month for alerts and report work. Additionally, the clinical staff engages with the patient throughout the month to perform education about the device and re-education protocols after the initial enrollment (11 minutes), troubleshoot non-connective monitoring hardware (4 minutes), and request manual transmission(s) to incorporate additional device data into reports (11 minutes). That is 26 minutes per month for patient interaction. The table below outlines this time:

Activity	**93298/93299**	**93297**
Automated alert transmissions	17	
Technician requested transmissions	11	
Patient-initiated transmissions	19	11
Monthly report	14	14
Education/re-education	11	11
Troubleshooting	4	4
Sum	**76**	**40**

While acknowledging that extant data is often used to determine practice expense, some PE Subcommittee members expressed concern about data obtained from industry sources. There is concern that the goal of industry to sell the product does not align with the interests of the RUC process. RUC members wanted assurance that when industry data is used it is the full data set and not a favorable subset. The specialty society assured the

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Subcommittee and the RUC that the data obtained is unbiased and not used for sales purposes. The industry server collects data to assist in the monitoring process and is representative of many more patients in various regions of the country then an expert panel could be

The PE Subcommittee reviewed and approved the direct practice expense inputs as submitted by the specialty society without modification.

New Technology/New Services
CPT codes 93297-93299 will be placed on the New Technology/New Services list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

Referral to CPT
The specialty society intends to submit a coding proposal to the CPT Editorial Panel to delete CPT code 93299, as it will no longer be necessary to have a separate code for practice expense once CPT codes 93297 and 93298 are allocated direct practice expense inputs in 2020. **The RUC recommends that CPT code 93299 be referred to CPT for deletion.**

CPT Code	CPT Descriptor	Global Period	Work RVU Recommendation
93297 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	0.52 (Reviewed for PE Only)
93298 (f)	Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional	XXX	0.52 (Reviewed for PE Only)
93299	Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results	XXX	0.00 (PE Only)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

CPT Code: 93298, 93297, 93299
Specialty Society: HRS, ACC

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation (SoR)
Non Facility Direct Practice Expense (PE) Inputs

CPT Long Descriptor: **93298** Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, analysis, review(s) and report(s) by a physician or other qualified health care professional

Global Period: XXX Meeting Date: October 2018

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The ACC and HRS utilized a consensus panel process to develop recommended inputs. As noted in the cover sheet for these codes, CMS opted to allow carrier pricing after hearing concerns from stakeholders that the RUC-recommended inputs would underpay in comparison. ACC and HRS are revisiting the inputs after the RAW executed a screen of carrier-priced codes with utilization over 10,000. To better scrutinize the inputs that were a straight crosswalk when these codes were reviewed in January 2017 as part of a large family, we engaged industry to see whether some information may be available the inform recommendations.

2. You must provide reference code(s) for comparison on your spreadsheet. If the code you are making recommendations on is not new, you must use the current direct PE inputs as your reference code. You can provide one additional reference code if you are required to use the current direct PE inputs. Provide an explanation for the selection of reference code(s) here:

   93296 is the 90-day remote pacemaker and ICD device monitoring technical code that has similarities to this service.

3. Is this code(s) typically billed with an E/M service? no
   Is this code(s) typically billed with the E/M service in the nonfacility? no
   (Please see provided data in PE Subcommittee folder)

4. What specialty is the dominant provider in the nonfacility? cardiology, cardiac EP
   What percent of the time does the dominant provider provide the service(s) in the nonfacility? 45%, 44%
   Is the dominant provider in the nonfacility different then for the global? no
   (Please see provided data in PE Subcommittee folder)

5. If you are recommending more minutes than the PE Subcommittee standards for clinical activities you must provide rationale to justify the time:

6. If you are requesting an increase over the aggregate current cost for clinical staff time, equipment and supplies (This does not include minutes to assist physician and the number of post-op visits, as they are directly related to physician work), you must provide compelling evidence. Please explain if the increase can be entirely accounted for because of an increase in physician time.

   The PE for this code is currently contained in 93299 that was originally meant to be a catch-all for both types of 30-day remote monitoring services. In the following decade, it has become clear that ICM and ILR services are different and cannot be appropriately captured in a single technical code. We present recommendations for incorporating direct PE inputs to both 93297 and 93298 that align with each of those services. We have not been able to identify exactly why they were designed that way in 2007. It

could have been to allow for the possibility that the technical work would be provided by vendors, but that is not how the service is being provided. It would have also be somewhat in parallel with other remote monitoring/diagnostic services, such as Holter monitors, to compartmentalize these aspects. Regardless, we thought it made sense to create PE inputs for each code directly since 93299 is an awkward mix of technical work of two different services that both happen to have a 30-day interval.

Compelling Evidence

PE inputs for 93297-93299 were last evaluated by the RUC in 2016/2017 when work and PE for the large family of cardiac device monitoring services were all revalued. Updating that family of 21 codes with work, PE or both was a daunting task. As is still the case, 93299 was carrier priced at that time. Societies identified code 93296 that also describes the technical component of remote monitoring services as a comparison code and recommended it be used as a crosswalk. Stakeholder comments and CMS's decision to maintain carrier pricing for the service suggested that a value for 93299 based on 93296 was incorrect and based on incorrect assumptions. With the ability to focus on this single code rather than a large family, we have been able to better quantify the clinical staff time necessary to perform the technical components of 93299/93298/93297 and agree that the current valuation was based on a "flawed crosswalk" and "analysis of additional data."

93298
We were able to obtain data from one manufacturer that sells the vast majority of ILR devices on the number of device-generated event notifications per month, the number of patient-generated manual event transmissions per month, and the amount of time a technologist is logged into the system and engaging with the monitoring reports. That data indicates that over the course of a month, a technologist interacts with patient monitoring reports 1.63 times a month to process device-generated notifications for 17 minutes, 1.74 times a month to process patient-generated notifications for 19 minutes, and once a month to generate a monthly report for 14 minutes. That is 50 minutes per month for alerts and report work.

Additionally, the clinical staff engages with the patient throughout the month to perform education about the device and re-education protocols after the initial enrollment (11 minutes), troubleshoot non-connective monitoring hardware (4 minutes), and request manual transmission(s) to incorporate additional device data into reports (11 minutes). That is a separate and additional 26 minutes.

Activity	**93298/93299**	**93297**
Automated alert transmissions	17	
Technician requested transmissions	11	
Patient-initiated transmissions	19	11
Monthly report	14	14
Education/re-education	11	11
Troubleshooting	4	4
Sum	**76**	**40**

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and listed in tab 2, please explain the difference here: n/a

8. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? (please use this time rather than 5 minutes in your reference code) 0

The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here: no vital signs are obtained

9. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *Assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

   The electrodiagnostic technologist educates the patient about the device and transmittal protocols, troubleshoots hardware/connectivity issues, receives and reviews remote transmissions, distributes results, and prepares a report.

10. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived. n/a

11. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities: n/a

12. If you wish to identify a new staff type, please include a very specific staff description, a salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov. n/a

13. If you wish to include a supply that is not on the list please provide a paid invoice. Identify and explain the invoice here: n/a

14. If you wish to include an equipment item that is not on the list please provide a paid invoice. Identify and explain the invoice here: n/a

15. List all the equipment included in your recommendation and the equipment formula chosen (see document titled "Calculating equipment time"). If you have selected "other formula" for any of the equipment please explain here:

    EQ198: default formula

16. If there is any other item(s) on your spreadsheet not covered in the categories above that require greater detail please include here:

17. If there is any other item on your spreadsheet that needs further explanation please include here:

18. Please include an explanation of each line item:

Line 52, CA021: clinical staff assists the patient, processes remote transmissions, and creates reports as described in Question 6.

Line 102, SK057: paper is used to print reports to facilitate interpretation

Line 112, EQ198: a pacemaker follow-up system is used by the clinical staff

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation (SoR)
Non Facility Direct Practice Expense (PE) Inputs

CPT Long Descriptor: **93297** Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, analysis, review(s) and report(s) by a physician or other qualified health care professional

Global Period: XXX Meeting Date: October 2018

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The ACC and HRS utilized a consensus panel process to develop recommended inputs. As noted in the cover sheet for these codes, CMS opted to allow carrier pricing after hearing concerns from stakeholders that the RUC-recommended inputs would underpay in comparison. ACC and HRS are revisiting the inputs after the RAW executed a screen of carrier-priced codes with utilization over 10,000. To better scrutinize the inputs that were a straight crosswalk when these codes were reviewed in January 2017 as part of a large family, we engaged industry to see whether some information may be available the inform recommendations.

2. You must provide reference code(s) for comparison on your spreadsheet. If the code you are making recommendations on is not new, you must use the current direct PE inputs as your reference code. You can provide one additional reference code if you are required to use the current direct PE inputs. Provide an explanation for the selection of reference code(s) here:

   93296 is the 90-day remote pacemaker and ICD device monitoring technical code that has similarities to this service.

3. Is this code(s) typically billed with an E/M service? no
   Is this code(s) typically billed with the E/M service in the nonfacility? no
   (Please see provided data in PE Subcommittee folder)

4. What specialty is the dominant provider in the nonfacility? cardiology, cardiac EP
   What percent of the time does the dominant provider provide the service(s) in the nonfacility? 48%, 40%
   Is the dominant provider in the nonfacility different then for the global? no
   (Please see provided data in PE Subcommittee folder)

5. If you are recommending more minutes than the PE Subcommittee standards for clinical activities you must provide rationale to justify the time:

6. If you are requesting an increase over the aggregate current cost for clinical staff time, equipment and supplies (This does not include minutes to assist physician and the number of post-op visits, as they are directly related to physician work), you must provide compelling evidence. Please explain if the increase can be entirely accounted for because of an increase in physician time.

   The PE for this code is currently contained in 93299 that was originally meant to be a catch-all for both types of 30-day remote monitoring services. In the following decade, it has become clear that ICM and ILR services are different and cannot be appropriately captured in a single technical code. We present recommendations for incorporating direct PE inputs to both 93297 and 93298 that align with each of

those services. We have not been able to identify exactly why they were designed that way in 2007. It could have been to allow for the possibility that the technical work would be provided by vendors, but that is not how the service is being provided. It would have also be somewhat in parallel with other remote monitoring/diagnostic services, such as Holter monitors, to compartmentalize these aspects. Regardless, we thought it made sense to create PE inputs for each code directly since 93299 is an awkward mix of technical work of two different services that both happen to have a 30-day interval.

Compelling Evidence

PE inputs for 93297-93299 were last evaluated by the RUC in 2016/2017 when work and PE for the large family of cardiac device monitoring services were all revalued. Updating that family of 21 codes with work, PE or both was a daunting task. As is still the case, 93299 was carrier priced at that time. Societies identified code 93296 that also describes the technical component of remote monitoring services as a comparison code and recommended it be used as a crosswalk. Stakeholder comments and CMS's decision to maintain carrier pricing for the service suggested that a value for 93299 based on 93296 was incorrect and based on incorrect assumptions. With the ability to focus on this single code rather than a large family, we have been able to better quantify the clinical staff time necessary to perform the technical components of 93299/93298/93297 and agree that the current valuation was based on a "flawed crosswalk" and "analysis of additional data."

93297
We were able to obtain data from one manufacturer quantifying ILR notifications, transmissions, a1nd reports. Such information was not available for ICM. Should that change we will update these recommendations accordingly.

The expert panel considered that the data for ILR direct PE, being informed by data based on 18 months of monitoring services, to be accurate and in alignment with their clinical experience. Applying that clinical experience, the expert panel believes it would be appropriate to the ILR clinical staff and equipment time for ICM PE from the following components: 14 minutes for a monthly report, 11 minutes for a once a month average patient-generated notification (this is an expert panel recommendation), 4 minutes for troubleshooting non-connective monitoring hardware, and 11 minutes to perform education about the device and re-education protocols after initial enrollment for a sum of 40 minutes. This results in clinical staff time of about half what we recommend for ILRs.

Activity	**93298/93299**	**93297**
Automated alert transmissions	17	
Technician requested transmissions	11	
Patient-initiated transmissions	19	11
Monthly report	14	14
Education/re-education	11	11
Troubleshooting	4	4
Sum	**76**	**40**

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and listed in tab 2, please explain the difference here: n/a

8. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? (please use this time rather than 5 minutes in your reference code) 0
   The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here: Vitals are not obtained.

9. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *Assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

   The electrodiagnostic technologist educates the patient about the device and transmittal protocols, troubleshoots hardware/connectivity issues, receives and reviews remote transmissions, distributes results, and prepares a report.

10. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived. n/a

11. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities: n/a

12. If you wish to identify a new staff type, please include a very specific staff description, a salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov. n/a

13. If you wish to include a supply that is not on the list please provide a paid invoice. Identify and explain the invoice here: n/a

14. If you wish to include an equipment item that is not on the list please provide a paid invoice. Identify and explain the invoice here: n/a

15. List all the equipment included in your recommendation and the equipment formula chosen (see document titled "Calculating equipment time"). If you have selected "other formula" for any of the equipment please explain here:

    EQ198: Default formula

16. If there is any other item(s) on your spreadsheet not covered in the categories above that require greater detail please include here: n/a

17. If there is any other item on your spreadsheet that needs further explanation please include here: n/a

18. Please include an explanation of each line item:

Line 52, CA021: clinical staff assists the patient, processes remote transmissions, and creates reports as described in Question 6.

Line 102, SK057: paper is used to print reports to facilitate interpretation

Line 112, EQ198: a pacemaker follow-up system is used by the clinical staff

CPT Code: 93298, 93297, 93299
Specialty Society: HRS, ACC

CPT Code: 93298, 93297, 93299
Specialty Society: HRS, ACC

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation (SoR)
Non Facility Direct Practice Expense (PE) Inputs

CPT Long Descriptor: **93299** Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular physiologic monitor system or subcutaneous cardiac rhythm monitor system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

Global Period: XXX Meeting Date: October 2018

1. Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society RVS Committee Expert Panel:

   The ACC and HRS utilized a consensus panel process to develop recommended inputs. As noted in the cover sheet for these codes, CMS opted to allow carrier pricing after hearing concerns from stakeholders that the RUC-recommended inputs would underpay in comparison. ACC and HRS are revisiting the inputs after the RAW executed a screen of carrier-priced codes with utilization over 10,000. To better scrutinize the inputs that were a straight crosswalk when these codes were reviewed in January 2017 as part of a large family, we engaged industry to see whether some information may be available the inform recommendations.

2. You must provide reference code(s) for comparison on your spreadsheet. If the code you are making recommendations on is not new, you must use the current direct PE inputs as your reference code. You can provide one additional reference code if you are required to use the current direct PE inputs. Provide an explanation for the selection of reference code(s) here:

   93296 is the 90-day remote pacemaker and ICD device monitoring technical code that has similarities to this service.

3. Is this code(s) typically billed with an E/M service? no
   Is this code(s) typically billed with the E/M service in the nonfacility? no
   (Please see provided data in PE Subcommittee folder)

4. What specialty is the dominant provider in the nonfacility? cardiology, cardiac EP
   What percent of the time does the dominant provider provide the service(s) in the nonfacility? 44%, 39%
   Is the dominant provider in the nonfacility different then for the global? no
   (Please see provided data in PE Subcommittee folder)

5. If you are recommending more minutes than the PE Subcommittee standards for clinical activities you must provide rationale to justify the time:

6. If you are requesting an increase over the aggregate current cost for clinical staff time, equipment and supplies (This does not include minutes to assist physician and the number of post-op visits, as they are directly related to physician work), you must provide compelling evidence. Please explain if the increase can be entirely accounted for because of an increase in physician time. We have not been able to identify exactly why they were designed that way in 2007. It could have been to allow for the possibility that the technical work would be provided by vendors, but that is not how the service is being provided. It would have also be somewhat in parallel with other remote monitoring/diagnostic services, such as Holter monitors, to compartmentalize these aspects. Regardless, we thought it made sense to create PE inputs for each code directly since 93299 is an awkward mix of technical work of two different services that both happen to have a 30-day interval.

Compelling Evidence

PE inputs for 93297-93299 were last evaluated by the RUC in 2016/2017 when work and PE for the large family of cardiac device monitoring services were all revalued. Updating that family of 21 codes with work, PE or both was a daunting task. As is still the case, 93299 was carrier priced at that time. Societies identified code 93296 that also describes the technical component of remote monitoring services as a comparison code and recommended it be used as a crosswalk. Stakeholder comments and CMS's decision to maintain carrier pricing for the service suggested that a value for 93299 based on 93296 was incorrect and based on incorrect assumptions. With the ability to focus on this single code rather than a large family, we have been able to better quantify the clinical staff time necessary to perform the technical components of 93299/93298/93297 and agree that the current valuation was based on a "flawed crosswalk" and "analysis of additional data."

93299
93299 is a technical code meant to capture the PE for remote monitoring of implantable cardiac monitors (93297) and implantable loop recorders (93298). Both are 30-day codes. But in the decade since these codes were created we now see a bifurcation in the way each is used and the amount of PE each requires. We are presenting recommendations to create direct PE inputs for both 30-day remote interrogation codes. Unless/until a change is made to 93299 at CPT, since 93298 is the service typically and most commonly (54%) billed with 93299, we recommend the same inputs for 93298 be applied to 93299.

Activity	**93298/93299**	**93297**
Automated alert transmissions	17	
Technician requested transmissions	11	
Patient-initiated transmissions	19	11
Monthly report	14	14
Education/re-education	11	11
Troubleshooting	4	4
Sum	**76**	**40**

7. If a clinical activity in your reference code(s) is being rolled into a similar clinical activity approved by the PE Subcommittee and listed in tab 2, please explain the difference here:

8. How much time was allocated to clinical activity, *obtain vital signs* (CA010) prior to CMS increasing the clinical activity to 5 minutes for calendar year 2018? (please use this time rather than 5 minutes in your reference code) 0
   The standard for clinical activity, obtains vital signs remains 0, 3 and 5 based on the number of vital signs taken. Please provide a rationale for the clinical staff time that you are requesting for obtain vital signs here: No vitals are obtained.

9. Please provide granular detail regarding what the clinical staff is doing during the intra-service (of service period) clinical activity, *Assist physician or other qualified healthcare professional---directly related to physician work time* or *Perform procedure/service---NOT directly related to physician work time:*

   The electrodiagnostic technologist educates the patient about the device and transmittal protocols, troubleshoots hardware/connectivity issues, receives and reviews remote transmissions, distributes results, and prepares a report.

10. If you have used a percentage of the physician intra-service work time other then 100 or 67 percent for the intra-service (of service period) clinical activity, please indicate the percentage and explain why the alternate percentage is needed and how it was derived. n/a

11. If you are recommending a new clinical activity, please provide a detailed explanation of why the new clinical activity is needed and cannot conform to any of the existing clinical activities: n/a

12. If you wish to identify a new staff type, please include a very specific staff description, a salary estimate and its source. Staff types or an identified and appropriate proxy must be listed by the Bureau of Labor Statistics (BLS). You can find the BLS database at http://www.bls.gov.

13. If you wish to include a supply that is not on the list please provide a paid invoice. Identify and explain the invoice here: n/a

14. If you wish to include an equipment item that is not on the list please provide a paid invoice. Identify and explain the invoice here: n/a

15. List all the equipment included in your recommendation and the equipment formula chosen (see document titled "Calculating equipment time"). If you have selected "other formula" for any of the equipment please explain here:

    EQ198: default formula

16. If there is any other item(s) on your spreadsheet not covered in the categories above that require greater detail please include here: n/a

17. If there is any other item on your spreadsheet that needs further explanation please include here: n/a

18. Please include an explanation of each line item:

Line 52, CA021: clinical staff assists the patient, processes remote transmissions, and creates reports as described in Question 6.

Line 102, SK057: paper is used to print reports to facilitate interpretation

Line 112, EQ198: a pacemaker follow-up system is used by the clinical staff

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		CURRENT		RECOMMENDED			REFERENCE CODE		CURRENT		RECOMMENDED		
2		*Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.				93296		93298		93298			93296		93297		93297		
3		RUC Collaboration Website				Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable			Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		
4	Clinical Activity Code	Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute														
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility		Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
6		GLOBAL PERIOD																	
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
8		TOTAL CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
12		TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
13		PRE-SERVICE PERIOD																	
14		Start: Following visit when decision for surgery or procedure made																	
15	CA001		L037D																
16	CA002		L037D																
17	CA003		L037D																
18	CA004		L037D																
19	CA005		L037D																
20	CA006		L037D																
21	CA007		L037D																
22	CA008		L037D																
29		End: When patient enters office/facility for surgery/procedure																	
30		SERVICE PERIOD																	
31		Start: When patient enters office/facility for surgery/procedure:																	
32		Pre-Service (of service period)																	
33	CA009		L037D																
34	CA010		L037D																
35	CA011		L037D																
36	CA012		L037D																
37	CA013		L037D																
38	CA014		L037D																
39	CA015		L037D																
40	CA016		L037D																

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		CURRENT		RECOMMENDED			REFERENCE CODE		CURRENT		RECOMMENDED		
2		*Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.				93296		93298		93298			93296		93297		93297		
3		RUC Collaboration Website				Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable			Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		
4	Clinical Activity Code	Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute														
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility		Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
6		GLOBAL PERIOD																	
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
8		TOTAL CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
41	CA017		L037D																
48		Intra-service (of service period)																	
49	CA018		L037A			28							28						
50	CA019		L037D																
51	CA020		L037D																
52	CA021		L037A							76							40		
59		Post-Service (of service period)																	
60	CA022		L037D																
61	CA023		L037D																
62	CA024		L037D																
63	CA025		L037D																
64	CA026		L037D																
65	CA027		L037D																
66	CA028		L037D																
67	CA029		L037D																
68	CA030		L037D																
69	CA031		L037D																
70	CA032		L037D																
71	CA033		L037D																
72	CA034		L037D																
73	CA035		L037D																
74	CA036		L037D			n/a		n/a		n/a			n/a		n/a		n/a		
81		End: Patient leaves office																	

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		CURRENT		RECOMMENDED			REFERENCE CODE		CURRENT		RECOMMENDED		
2		*Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.				93296		93298		93298			93296		93297		93297		
3		RUC Collaboration Website				Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable			Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		
4	Clinical Activity Code	Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute														
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility		Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
6		GLOBAL PERIOD																	
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
8		TOTAL CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
82		POST-SERVICE PERIOD																	
83		Start: Patient leaves office/facility																	
84	CA037		L037D																
85	CA038		L037D																
92	CA039		L037D			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
99		End: with last office visit before end																	

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		CURRENT		RECOMMENDED			REFERENCE CODE		CURRENT		RECOMMENDED		
2		*Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.				93296		93298		93298			93296		93297		93297		
3		*RUC Collaboration Website*				Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable			Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		
4	Clinical Activity Code	Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute														
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility		Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
6		GLOBAL PERIOD																	
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
8		TOTAL CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
100	Supply Code	MEDICAL SUPPLIES	PRICE	UNIT															
101		TOTAL COST OF SUPPLY QUANTITY x PRICE				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
102	SK057					10				10			10				10		
103																			
104																			
105																			
106																			
107																			
108		*Other supply item: please include the name of the item consistent with the paid invoice here and type new in column A*																	
110	Equipment Code	EQUIPMENT	Purchase Price	Equipment Formula	Cost Per Minute														
111		TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
112	EQ198			Default						76							40		
113	EQ320			Default		28							28						
114																			
115																			
116																			
117																			

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	RUC Practice Expense Spreadsheet					REFERENCE CODE		CURRENT		RECOMMENDED			REFERENCE CODE		CURRENT		RECOMMENDED		
2		*Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.				93296		93298		93298			93296		93297		93297		
3		*RUC Collaboration Website*				Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable			Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable		
4	Clinical Activity Code	Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC	Clinical Staff Type Code	Clinical Staff Type	Clinical Staff Type Rate Per Minute														
5		LOCATION				Non Fac	Facility	Non Fac	Facility	Non Fac	Facility		Non Fac	Facility	Non Fac	Facility	Non Fac	Facility	
6		GLOBAL PERIOD																	
7		TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME				$ -	$ -	$ -	$ -	$ -	$ -		$ -	$ -	$ -	$ -	$ -	$ -	
8		TOTAL CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
9		TOTAL PRE-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
10		TOTAL SERVICE PERIOD CLINICAL STAFF TIME	L037A			28.0	0.0	0.0	0.0	76.0	0.0		28.0	0.0	0.0	0.0	40.0	0.0	
11		TOTAL POST-SERVICE CLINICAL STAFF TIME	L037A			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
118		*Other equipment item: please include the name of the item consistent with the paid invoice here and type new in column A*																	

	A	B	U	V	W	X	Y	Z
1	RUC Practice Expense Spreadsheet		REFERENCE CODE		RUC-October 2016		RECOMMENDED	
2		***Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.***	**93296**		**93299**		**93299**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**						
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12		**TOTAL COST OF CLINICAL STAFF TIME x RATE PER MINUTE**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
13		**PRE-SERVICE PERIOD**						
14		**Start: Following visit when decision f**						
15	CA001							
16	CA002							
17	CA003							
18	CA004							
19	CA005							
20	CA006							
21	CA007							
22	CA008							
29		**End: When patient enters office/facilit**						
30		**SERVICE PERIOD**						
31		**Start: When patient enters office/facili**						
32		**Pre-Service (of service period)**						
33	CA009							
34	CA010							
35	CA011							
36	CA012							
37	CA013							
38	CA014							
39	CA015							
40	CA016							

	A	B	U	V	W	X	Y	Z
1	RUC Practice Expense Spreadsheet		REFERENCE CODE		RUC-October 2016		RECOMMENDED	
2		***Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.***	**93296**		**93299**		**93299**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**						
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
41	CA017							
48		**Intra-service (of service period)**						
49	CA018		28					
50	CA019							
51	CA020							
52	CA021				28		76	
59		**Post-Service (of service period)**						
60	CA022							
61	CA023							
62	CA024							
63	CA025							
64	CA026							
65	CA027							
66	CA028							
67	CA029							
68	CA030							
69	CA031							
70	CA032							
71	CA033							
72	CA034							
73	CA035							
74	CA036		**n/a**		**n/a**		**n/a**	
81		**End: Patient leaves office**						

	A	B	U	V	W	X	Y	Z
1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**RUC-October 2016**		**RECOMMENDED**	
2		***Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.***	**93296**		**93299**		**93299**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**						
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
82		**POST-SERVICE PERIOD**						
83		**Start: Patient leaves office/facility**						
84	CA037							
85	CA038							
92	CA039		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
99		**End: with last office visit before end**						

	A	B	U	V	W	X	Y	Z
1	**RUC Practice Expense Spreadsheet**		**REFERENCE CODE**		**RUC-October 2016**		**RECOMMENDED**	
2		***Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.***	**93296**		**93299**		**93299**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**						
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
100	**Supply Code**	**MEDICAL SUPPLIES**						
101		**TOTAL COST OF SUPPLY QUANTITY x PRICE**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
102	SK057		10		10		10	
103								
104								
105								
106								
107								
108		*Other supply item: please include the name of the item consistent with the paid invoice here and type new in column A*						
110	**Equipment Code**	**EQUIPMENT**						
111		**TOTAL COST OF EQUIPMENT TIME x COST PER MINUTE**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
112	EQ198				28		76	
113	EQ320		28					
114								
115								
116								
117								

	A	B	U	V	W	X	Y	Z
1	RUC Practice Expense Spreadsheet		REFERENCE CODE		RUC-October 2016		RECOMMENDED	
2		***Please see brief summaries of the standards/guidelines in column C. For more complete information about summaries and guidelines please see the PE reference materials at the RUC Collaboration Website at the link in the cell below. *Please do not modify formulas in gray shaded cells *Total dollar amounts are included to indicate whether or not compelling evidence is needed and are not direct indicators of an increase or decrease in PE RVU or payment.***	**93296**		**93299**		**93299**	
3		***RUC Collaboration Website***	Interrogation device evaluation(s) (remote), up to 90 days; single, dual,		Interrogation device evaluation(s), (remote) up to 30 days; implantable		Interrogation device evaluation(s), (remote) up to 30 days; implantable	
4	**Clinical Activity Code**	**Meeting Date: October 2018 Tab: 22 Specialty: HRS, ACC**						
5		**LOCATION**	**Non Fac**	**Facility**	**Non Fac**	**Facility**	**Non Fac**	**Facility**
6		**GLOBAL PERIOD**						
7		**TOTAL COST OF CLINICAL ACTIVITY TIME, SUPPLIES AND EQUIPMENT TIME**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
8		**TOTAL CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
9		**TOTAL PRE-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10		**TOTAL SERVICE PERIOD CLINICAL STAFF TIME**	**28.0**	**0.0**	**28.0**	**0.0**	**76.0**	**0.0**
11		**TOTAL POST-SERVICE CLINICAL STAFF TIME**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
118		*Other equipment item: please include the name of the item consistent with the paid invoice here and type new in column A*						

AMA/Specialty Society RVS Update Committee **Tab 22**
Practice Expense Subcommittee
January 11, 2023

Members Present: Scott Manaker, MD, PhD, (Chair), Amy Aronsky, DO, Gregory Barkley, MD, John Blebea, MD, Michael Booker, MD, Eileen Brewer, MD, Joseph Cleveland, MD, Neal Cohen, MD, Leisha Eiten, AuD, William Gee, MD, David Han, MD, Mollie MacCormack, MD, Dheeraj Mahajan, MD, Bradley Marple, MD, Tye Ouzounian, MD, Richard Rausch, DPT, MBA, Donald Selzer, MD, Elisabeth Volpert, DNP, APRN, Thomas J. Weida, MD, Adam Weinstein, MD, and Lawrence Simon, MD (CPT Resource)

I. Skin Adhesives Workgroup

In September 2022, the RUC determined that the PE Subcommittee should convene a workgroup to further review the issue of skin adhesives. Doctor Leisha Eiten, AuD, Chair, summarized the report and recommendations of the workgroup.

The Workgroup focused on wound closure and agreed that there are multiple skin adhesive products at different price points that work similar to Dermabond:

Type	Trade name examples	Characteristic
2-Octyl-cyanoacrylate	Dermabond SurgiSeal Liquiband Exceed	Weaker, less brittle, less dehiscence, more flexible Takes longer to dry Octyl esters provide weaker bond but are more flexible.
n-Butyl-2-cyanoacrylate	Histoacryl Indermil PeriAcryl LiquiBand Swiftset	Stronger, brittle, more dehiscence Butyl esters provide stronger bond but are rigid.
n-Butyl and 2-Octyl-cyanoacrylate COMBINED TOGETHER	GluStitch / GluSeal	Available in high & low viscosity formulations
Ethyl-2-cyanoacrylate	Epiglu SuperGlue	

The type of skin adhesive utilized depends on the procedure and the clinical setting; for example, in surgery, single dose pens or ampules/pipettes are used for sterility, rather than multi-use vials. Therefore, it is best for the specific specialty to justify which adhesive is typical. The Workgroup also believes that generic alternatives should be used in place of brand names unless further justified. In addition, invoices are encouraged to be submitted in order to ensure that CMS pricing of skin adhesives is accurate.

The PE Subcommittee agreed with the following recommendations of the PE Skin Adhesives Workgroup:

1. **The PE Subcommittee review the six codes on the Medicare Payment Schedule with Dermabond (64590, 64595, G0168, G0516, G0517, G0518) to identify justification for its use versus the generic version and present its findings to the RUC for approval. As part of this review, the specialty should submit a letter to the RUC regarding any corrections to the vignettes for CPT codes 64590 and 64595.**

2. **The PE Subcommittee request that the RUC recommend to CMS that Dermabond be replaced with its generic cyanoacrylate skin adhesive alternative on the CMS Direct PE Inputs Medical Supplies Listing.**

3. **The PE Subcommittee request that the RUC recommend to CMS that new medical supply item codes be created to encompass the generic formulations of cyanoacrylate skin adhesive in multidose form and single use sterile application.**

4. **The PE Subcommittee request that the RUC recommend to CMS that generic alternatives be used in place of brand names on the CMS Direct PE Inputs Medical Supplies Listing.**

II. New Business

High-Cost Supplies
The PE Subcommittee discussed the ongoing issue of high-cost supply items as several tabs at this meeting contained new expensive supplies. **The Subcommittee agreed to request that the RUC recommend that CPT consider including a question on high-cost disposable supplies on its Coding Change Application (CCA).** It is important for the CPT Editorial Panel to understand if a high-cost supply (eg, >$500) may warrant a discussion regarding its implication on coding. The PE Subcommittee also emphasized its continued support for the long-standing RUC recommendation that CMS separately identify and pay for high-cost disposable supplies using appropriate HCPCS codes due to the impact on the indirect practice expense RVUs and the ability to appropriately update the cost on a more frequent basis.

Post-Operative Patient Communications
During discussion of Tab 07, Posterior Nasal Nerve Ablation, the PE Subcommittee noted the additional 3 minutes for CA037 *Conduct patient communications* in CPT codes 30117 and 30118. The specialty society indicated that this call to a patient is typical 1-2 days post-op. The Subcommittee recognized that a phone call is outside of the 090-day global standard:

- All phone calls, standardized to 3 minutes. No phone calls are allowed in the post-operative period for 010 and 90 day global codes.

Discussion indicated that the recent revisions to the Evaluation and Management code set may have prompted this change in post-op communications. PE members agreed that this type of communication is evolving and reflects best practice that will be applied to other 090-day global codes.

The PE Subcommittee agreed to discuss the issue of post-operative patient communications at its next meeting to determine if the PE Benchmark needs to be modified in light of the Evaluation and Management code revisions. AMA staff will review all of the E/M standards and prepare a staff note for consideration at the April 2023 PE meeting.

CPT Assistant Article
Also during discussion of Tab 07, **the PE Subcommittee suggested that the RUC recommend to CPT that a CPT Assistant article be created for CPT code 30117** to address the number of typical units of service performed on the same date which should be 1 moving forward not 2, and also to address possible inappropriate coding.

Pricing of Packs
During discussion of Tab 13, Pelvic Exam (PE Only), a PE Subcommittee member noted that SA051 *pack, pelvic exam* is priced at $20.16 which seemed high for the four items included therein.

DESCRIPTION	Code	Unit	Item Qty	Unit price
pack, pelvic exam	**SA051**	**pack**		**20.16**
lubricating jelly (K-Y) (5gm uou)		item	1	
pad, feminine mini		item	1	
swab, procto 16in		item	2	
specula, vaginal		item	1	

As listed below, the individual pack items from the 2023 CMS Direct PE Inputs Medical Supplies Listing totaled separately equal $2.81.

lubricating jelly (K-Y) (5gm uou): $ 0.54
pad, feminine mini: $ 0.37
swab, procto 16in: $.27 (x2) = $ 0.54
specula, vaginal: $ 1.36

Deconstruction of packs and trays in other tabs at this meeting also revealed similar discrepancies between the aggregated cost of a pack or tray and the individual item components.

AMA staff will review pack pricing and prepare a staff note for consideration at the next PE Subcommittee meeting in April 2023.

III. Practice Expense Recommendations for CPT 2024:

Tab	Title	PE Input Changes	Consent Calendar
4	Dorsal Sacroiliac Joint Arthrodesis	Modifications	
5	Vertebral Body Tethering	No Changes	
6	Phrenic Nerve Stimulation System	Modifications	
7	Posterior Nasal Nerve Ablation	No Changes	

Tab	Title	PE Input Changes	Consent Calendar
8	Cystourethroscopy with Urethral Therapeutic Drug Delivery	Modifications	
9	Transcervical RF Ablation of Uterine Fibroids	Modifications	
10	Suprachoroidal Injection	No Changes	
11	Fractional Flow Reserve with CT	No Changes	
12	Percutaneous Coronary Interventions	No Direct PE Inputs recommended – Facility-only services	
13	Pelvic Exam (PE Only)	No Changes	
14	Venography Services	No Direct PE Inputs recommended – Facility-only services	X
15	Hyperthermic Intraperitoneal Chemotherapy (HIPEC)	No Direct PE Inputs recommended – Facility-only services	X
16	Hyperbaric Oxygen Under Pressure (PE Only)	No Changes	
17	Telehealth Consultation – ED or Initial Inpatient	No Specialty Society Interest	X
18	Ocular Surface Amniotic Membrane Placement/Reconstruction	No Changes	
19	Neuromuscular Ultrasound (PE Only)	Modifications	
20	Remote Interrogation Device Evaluation – Cardiovascular	Modifications	

RUC Practice Expense Subcommittee
Skin Adhesives Workgroup
October 17, 2022

Workgroup Report

Workgroup Members Present: Leisha Eiten, AuD, CCC-A (Chair), Megan Adamson, MD, John Blebea, MD, Mollie MacCormack, MD, and David Slotwiner, MD

The RUC determined in April 2022 that the Practice Expense PE Subcommittee should further review the issue of skin adhesives, specifically Dermabond, at its September meeting after accepting the use of SG007 adhesive, skin (Dermabond) as part of Tab 7 Neurostimulator Services-Bladder Dysfunction. In September 2022, the PE Subcommittee discussed that Dermabond is not typically used and is only included in four G codes. The Subcommittee raised further questions on adhesive alternatives and the price of $57.67 for Dermabond compared to the generic version. Members also questioned why a brand name was specified. The RUC agreed that a PE workgroup should be created to further review the issue of skin adhesives.

Accordingly, the PE Workgroup on Skin Adhesives was created and convened a virtual meeting in October 2022. The staff note identified a list of 78 codes that contain one of the 11 supply codes with "adhesive" or "adherent" or "glue" in the supply description (see attached table). The Workgroup members reviewed the list of codes and determined that they would focus on wound closure. They identified the following generic alternatives to Dermabond:

Type	Trade name examples	Characteristic
2-Octyl-cyanoacrylate	Dermabond SurgiSeal Liquiband Exceed	Weaker, less brittle, less dehiscence, more flexible Takes longer to dry Octyl esters provide weaker bond but are more flexible.
n-Butyl-2-cyanoacrylate	Histoacryl Indermil PeriAcryl LiquiBand Swiftset	Stronger, brittle, more dehiscence Butyl esters provide stronger bond but are rigid.
n-Butyl and 2-Octyl-cyanoacrylate COMBINED TOGETHER	GluStitch / GluSeal	Available in high & low viscosity formulations
Ethyl-2-cyanoacrylate	Epiglu SuperGlue	

The Workgroup agreed that there are multiple skin adhesive products at different price points available that work similar to Dermabond. The type of skin adhesive selected depends on the procedure and the clinical setting; for example, in surgery, the single dose pens or ampules/pipettes are used for sterility, rather than multi-use vials. The Workgroup believes that it is best left to the specific specialty to justify which adhesive is typical. The Workgroup determined that the PE Subcommittee should recommend that

CMS create new medical supply item codes to encompass the generic formulations of skin adhesives, such as 2-Octyl-cyanoacrylate and n-Butyl-2-cyanoacrylate, and that the generic alternative should replace Dermabond. There should also be a distinction between the multi-use form and single use sterile application. The specialty societies should continue to help the PE Subcommittee understand the landscape and explain why a particular product may be most appropriate for their particular procedure. Moreover, the Workgroup recommends that the PE Subcommittee request overall that the RUC recommend to CMS that generic alternatives be used in place of brand names on the CMS Direct PE Inputs Medical Supplies Listing.

While acknowledging that, in April, the RUC approved the use of Dermabond for CPT code 64590 *Insertion or replacement of peripheral, sacral, or gastric neurostimulator pulse generator or receiver, requiring pocket creation and connection between electrode array and pulse generator or receiver* and 64595 *Revision or removal of peripheral, sacral, or gastric neurostimulator pulse generator or receiver, with detachable connection to electrode array*, there was much discussion around whether its use is typical. During the discussion, a RUC Alternate Advisor reiterated that reduction in infection is paramount in this particular anatomical area, and a Workgroup member noted that studies specifically with Dermabond have shown an advantage in its resistance to infection. However, the vignette for CPT code 64595 differs from what the RUC had established to be the typical patient for this service, that is, one wherein the generator pocket was infected and removal was required. The advisor indicated that the typical patient would be undergoing removal and replacement for the end of IPG/stimulator life. The Workgroup noted that the vignette should be corrected in order to justify the use of the Dermabond product.

Finally, the Workgroup noted that the CMS price of $57.67 for Dermabond does not seem to reflect accurate current pricing. The Workgroup determined that the 6 codes identified with Dermabond should be reviewed to justify its use versus a generic alternative. In addition, invoices are encouraged to be submitted in order that the Agency can ensure that the pricing of skin adhesives is accurate.

The PE Skin Adhesives Workgroup recommends that:

1. **The PE Subcommittee review the six codes on the Medicare Payment Schedule with Dermabond (64590, 64595, G0168, G0516, G0517, G0518) to identify justification for its use versus the generic version and present its findings to the RUC for approval. As part of this review, the specialty should submit a letter to the RUC regarding any corrections to the vignettes for CPT codes 64590 and 64595.**

2. **The PE Subcommittee request that the RUC recommend to CMS that Dermabond be replaced with its generic cyanoacrylate skin adhesive alternative on the CMS Direct PE Inputs Medical Supplies Listing.**

3. **The PE Subcommittee request that the RUC recommend to CMS that new medical supply item codes be created to encompass the generic formulations of cyanoacrylate skin adhesive in multidose form and single use sterile application.**

4. **The PE Subcommittee request that the RUC recommend to CMS that generic alternatives be used in place of brand names on the CMS Direct PE Inputs Medical Supplies Listing.**

RUC Practice Expense Subcommittee
Skin Adhesives Workgroup
October 2022

Staff Note

At the April 2022 RUC meeting, the Practice Expense (PE) Subcommittee considered the use of SG007 *adhesive, skin (Dermabond)* as part of Tab 7 Neurostimulator Services-Bladder Dysfunction. The PE Subcommittee considered and approved the use of SG007 for CPT code 64590 *Insertion or replacement of peripheral, sacral, or gastric neurostimulator pulse generator or receiver, requiring pocket creation and connection between electrode array and pulse generator or receiver* and 64595 *Revision or removal of peripheral, sacral, or gastric neurostimulator pulse generator or receiver, with detachable connection to electrode array*.

There was much discussion around why Dermabond is being used for codes 64590 and 64595. The specialty societies stated that it was typical for their practice in order to preserve the sterility of the chronically implanted prosthetic device as the specific anatomical area is highly susceptible to infection. It was pointed out that Dermabond is not typically used in any of the other CPT codes and, in fact, is only used in four G codes. Concern was raised that there is potential for distortion in relativity given the vast number of surgical codes that include insertion of chronic devices and prostheses. The surgeons on the PE Subcommittee concurred that, although not typical in their specialty, the Dermabond should remain for the two codes in question as recommended by the presenting societies. The PE Subcommittee also discussed the high cost of Dermabond ($57.67/item) as it produces a 50% increase in the supply costs for 64590 and accounts for just under half of the costs in supplies for 64595.

The RUC determined that the PE Subcommittee should further review the issue of Dermabond as this could potentially have substantial impact on multiple codes. The specialties reiterated that reduction in infection is paramount in this particular anatomical area and therefore, in terms of trying to improve the application of the device, the use of Dermabond is typical. Others commented that there are substitute adhesives available that are less expensive and that the CMS price of $57.67 does not seem to reflect accurate current pricing. RUC members also questioned why a brand name was specified in the supply input SG007. For these reasons, the issue of dermal adhesives was discussed at the September 2022 PE meeting and the Subcommittee agreed that it was appropriate to form a Workgroup to review skin adhesives broadly (skin, wound, dressing) and potentially identify general principles for their use.

The Workgroup should consider the question of when is the use of Dermabond justified given the cost. The generic form of Dermabond is 2-octyl cyanoacrylate. It is used as a topical skin adhesive to hold closed easily approximated skin edges of wounds. When should Dermabond be used or is the generic 2-octyl cyanoacrylate appropriate. Are there other alternatives? Should the RUC request that a new supply item be created and/or if the pricing is accurate?

This staff note includes a list of 78 codes that contain one of the 11 supply codes with “adhesive” or “adherent” or “glue” in the supply description (see attached table). Please review the attached analysis in preparation for further discussion of this issue.

The Workgroup should also discuss whether the PE inputs for CPT codes 64590 and 64595 need to be reconsidered at the January 2023 meeting. Another point that was raised in relation to CPT code 64595 is whether an adhesive would be used at all given that the typical patient for this service was one wherein the generator pocket was *infected* and removal was required.

CPT_Code	Short Descriptor	Long Descriptor	2020 Medicare Frequency	2020 Medicare Non-Facility Frequency (Global & TC)	CMS Supply Code Category	Supply_Code	DESCRIPTION	Unit_of_Measure	Purchase_Price	Non_Fac_Quantity	Fac_Quantity	Non_Fac_Cost	Fac_Cost
11055	TRIM SKIN LESION	Paring or cutting of beni	717,784	681,683	Wound Care, Dressings	SG001	adherent, pre-tape spray	oz	0.9	1	0	$ 0.90	$ -
11056	TRIM SKIN LESIONS 2 TO 4	Paring or cutting of beni	1,666,621	1,619,325	Wound Care, Dressings	SG001	adherent, pre-tape spray	oz	0.9	1	0	$ 0.90	$ -
11057	TRIM SKIN LESIONS OVER 4	Paring or cutting of beni	292,269	285,780	Wound Care, Dressings	SG001	adherent, pre-tape spray	oz	0.9	1	0	$ 0.90	$ -
29540	STRAPPING OF ANKLE AND/OR F	Strapping; ankle and/or	167,744	165,374	Wound Care, Dressings	SG001	adherent, pre-tape spray	oz	0.9	0.5	0	$ 0.45	$ -
29550	STRAPPING OF TOES	Strapping; toes	44,200	43,463	Wound Care, Dressings	SG001	adherent, pre-tape spray	oz	0.9	0.25	0	$ 0.23	$ -
97760	ORTHOTIC MGMT&TRAING 1ST EN	Orthotic(s) managemen	47,325	46,742	Wound Care, Dressings	SG002	adhesive bonder, orthotic	oz	0.375	0.5		$ 0.19	$ -
97763	ORTHC/PROSTC MGMT SBSQ ENC	Orthotic(s)/prosthetic(s)	30,959	30,889	Wound Care, Dressings	SG002	adhesive bonder, orthotic	oz	0.375	0.5		$ 0.19	$ -
11055	TRIM SKIN LESION	Paring or cutting of beni	717,784	681,683	Wound Care, Dressings	SG003	adhesive foam	inch	0.71	4	0	$ 2.84	$ -
11056	TRIM SKIN LESIONS 2 TO 4	Paring or cutting of beni	1,666,621	1,619,325	Wound Care, Dressings	SG003	adhesive foam	inch	0.71	6	0	$ 4.26	$ -
11057	TRIM SKIN LESIONS OVER 4	Paring or cutting of beni	292,269	285,780	Wound Care, Dressings	SG003	adhesive foam	inch	0.71	8	0	$ 5.68	$ -
11300	SHAVE SKIN LESION 0.5 CM/<	Shaving of epidermal or	82,507	79,380	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11301	SHAVE SKIN LESION 0.6-1.0 C	Shaving of epidermal or	175,815	170,266	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11302	SHAVE SKIN LESION 1.1-2.0 C	Shaving of epidermal or	97,980	95,131	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11303	SHAVE SKIN LESION >2.0 CM	Shaving of epidermal or	14,452	14,035	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11305	SHAVE SKIN LESION 0.5 CM/<	Shaving of epidermal or	86,124	84,237	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11306	SHAVE SKIN LESION 0.6-1.0 C	Shaving of epidermal or	89,198	87,320	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11307	SHAVE SKIN LESION 1.1-2.0 C	Shaving of epidermal or	46,559	45,578	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11308	SHAVE SKIN LESION >2.0 CM	Shaving of epidermal or	14,490	14,294	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11310	SHAVE SKIN LESION 0.5 CM/<	Shaving of epidermal or	55,330	53,183	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11311	SHAVE SKIN LESION 0.6-1.0 C	Shaving of epidermal or	81,049	78,598	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11312	SHAVE SKIN LESION 1.1-2.0 C	Shaving of epidermal or	37,360	36,313	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
11313	SHAVE SKIN LESION >2.0 CM	Shaving of epidermal or	6,566	6,349	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13100	CMPLX RPR TRUNK 1.1-2.5 CM	Repair, complex, trunk;	4,629	4,048	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13101	CMPLX RPR TRUNK 2.6-7.5 CM	Repair, complex, trunk;	80,932	69,281	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13120	CMPLX RPR S/A/L 1.1-2.5 CM	Repair, complex, scalp, a	10,142	9,041	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13121	CMPLX RPR S/A/L 2.6-7.5 CM	Repair, complex, scalp, a	175,826	155,055	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13131	CMPLX RPR F/C/C/M/N/AX/G/H/	Repair, complex, forehe	31,462	27,798	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13132	CMPLX RPR F/C/C/M/N/AX/G/H/	Repair, complex, forehe	243,613	214,018	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13151	CMPLX RPR E/N/E/L 1.1-2.5 C	Repair, complex, eyelids	27,588	24,033	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
13152	CMPLX RPR E/N/E/L 2.6-7.5 C	Repair, complex, eyelids	46,608	39,316	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
17311	MOHS 1 STAGE H/N/HF/G	Mohs micrographic tech	755,119	699,057	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
17312	MOHS ADDL STAGE	Mohs micrographic tech	457,601	426,220	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
17313	MOHS 1 STAGE T/A/L	Mohs micrographic tech	140,420	131,592	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
17314	MOHS ADDL STAGE T/A/L	Mohs micrographic tech	56,304	53,497	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
21320	CLSD TX NSL FX W/MNPJ&STABL	Closed treatment of nas	1,703	221	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
42810	EXCISION OF NECK CYST	Excision branchial cleft c	41	8	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	1	0	$ 2.40	$ -
95044	ALLERGY PATCH TESTS	Patch or application test	1,114,590	1,109,780	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	0.028		$ 0.07	$ -
95052	PHOTO PATCH TEST	Photo patch test(s) (spe	307	307	Wound Care, Dressings	SG004	adhesive liquid (Mastisol) (0.67ml uou)	item	2.4	0.028		$ 0.07	$ -
65286	REPAIR OF EYE WOUND	Repair of laceration; app	604	325	Pharmacy, Rx	SH076	adhesive, cyanoacrylate (2ml uou).doc	item	31.35	1	0	$ 31.35	$ -
G0168	WOUND CLOSURE BY ADHESIVE	Wound closure utilizing	35,030	6,159	Wound Care, Dressings	SG007	adhesive, skin (Dermabond)	item	57.67	1	0	$ 57.67	$ -
G0516	INSERT DRUG DEL IMPLANT, >=	Insertion of non-biodegr	2	-	Wound Care, Dressings	SG007	adhesive, skin (Dermabond)	item	57.67	1	0	$ 57.67	$ -
G0517	REMOVE DRUG IMPLANT	Removal of non-biodegr	1	-	Wound Care, Dressings	SG007	adhesive, skin (Dermabond)	item	57.67	1	0	$ 57.67	$ -
G0518	REMOVE W INSERT DRUG IMPLAN	Removal with reinsertio	4	1	Wound Care, Dressings	SG007	adhesive, skin (Dermabond)	item	57.67	2	0	$ 115.34	$ -
0446T	INSJ IMPLTBL GLUCOSE SENSOR	Creation of subcutaneou	17	10	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
0447T	RMVL IMPLTBL GLUCOSE SENSOR	Removal of implantable	10	9	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
0448T	REMVL INSJ IMPLTBL GLUC SEN	Removal of implantable	20	15	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
11730	REMOVAL OF NAIL PLATE	Avulsion of nail plate, pa	325,804	306,373	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
11750	REMOVAL OF NAIL BED	Excision of nail and nail	168,490	156,365	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	2	1	$ 3.18	$ 1.59
11755	BIOPSY NAIL UNIT	Biopsy of nail unit (eg, p	51,856	51,007	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
11981	INSERTION DRUG DLVR IMPLANT	Insertion, drug-delivery	9,550	783	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
11982	REMOVE DRUG IMPLANT DEVICE	Removal, non-biodegrad	3,025	722	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
11983	REMOVE/INSERT DRUG IMPLANT	Removal with reinsertio	1,684	574	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
24075	EXC ARM/ELBOW LES SC < 3 CM	Excision, tumor, soft tiss	2,322	843	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
25075	EXC FOREARM LES SC < 3 CM	Excision, tumor, soft tiss	2,669	1,100	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
26115	EXC HAND LES SC < 1.5 CM	Excision, tumor or vascu	3,521	604	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
27327	EXC THIGH/KNEE LES SC < 3 C	Excision, tumor, soft tiss	1,310	471	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -
27618	EXC LEG/ANKLE TUM < 3 CM	Excision, tumor, soft tiss	835	273	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$ 1.59	$ -

28039	EXC FOOT/TOE TUM SC 1.5 CM/	Excision, tumor, soft tiss	1,209	253	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$	1.59	$	-
28043	EXC FOOT/TOE TUM SC < 1.5 C	Excision, tumor, soft tiss	1,712	701	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$	1.59	$	-
28045	EXC FOOT/TOE TUM DEEP <1.5C	Excision, tumor, soft tiss	1,184	278	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1	0	$	1.59	$	-
36514	APHERESIS PLASMA	Therapeutic apheresis; f	25,754	375	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	12	0	$	19.08	$	-
36516	APHERESIS IMMUNOADS SLCTV	Therapeutic apheresis; v	978	616	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	12	0	$	19.08	$	-
36522	PHOTOPHERESIS	Photopheresis, extracor	8,511	15	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	12	0	$	19.08	$	-
96360	HYDRATION IV INFUSION INIT	Intravenous infusion, hy	211,384	211,380	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1		$	1.59	$	-
96374	THER/PROPH/DIAG INJ IV PUSH	Therapeutic, prophylact	231,198	231,150	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1		$	1.59	$	-
99195	PHLEBOTOMY	Phlebotomy, therapeuti	72,551	72,550	Wound Care, Dressings	SG014	bandage, elastic, self-adherent wrap 1in (Coban)	item	1.59	1		$	1.59	$	-
11042	DEB SUBQ TISSUE 20 SQ CM/<	Debridement, subcutan	1,874,785	856,247	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	72	0	$	5.76	$	-
11055	TRIM SKIN LESION	Paring or cutting of beni	717,784	681,683	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	6	0	$	0.48	$	-
11056	TRIM SKIN LESIONS 2 TO 4	Paring or cutting of beni	1,666,621	1,619,325	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	6	0	$	0.48	$	-
11057	TRIM SKIN LESIONS OVER 4	Paring or cutting of beni	292,269	285,780	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	6	0	$	0.48	$	-
15271	SKIN SUB GRAFT TRNK/ARM/LEG	Application of skin subst	115,628	37,936	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	72	0	$	5.76	$	-
15275	SKIN SUB GRAFT FACE/NK/HF/G	Application of skin subst	133,737	68,699	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	72	0	$	5.76	$	-
97597	RMVL DEVITAL TIS 20 CM/<	Debridement (eg, high p	768,106	454,217	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	72	0	$	5.76	$	-
97610	LOW FREQUENCY NON-THERMAL U	Low frequency, non-con	16,743	15,505	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	36	0	$	2.88	$	-
G0247	ROUTINE FOOTCARE PT W LOPS	Routine foot care by a p	5,349	5,019	Wound Care, Dressings	SG052	gauze, self-adherent roll 0.5in to 2in (Fabco, Gauztex)	inch	0.08	72	0	$	5.76	$	-
21320	CLSD TX NSL FX W/MNPJ&STABL	Closed treatment of nas	1,703	221	Wound Care, Dressings	SG073	splint, adhesive nasal (Denver)	item	23.67	1	0	$	23.67	$	-
31634	BRONCH W/BALLOON OCCLUSION	Bronchoscopy, rigid or f	222	1	Wound Care, Dressings	SG094	Tisseel Fibrin Glue, 1 ml	ml	262.01	4	0	$	1,048.04	$	-
36482	ENDOVEN THER CHEM ADHES 1ST	Endovenous ablation th	40,760	38,701	Accessory, Procedure	SD323	Venaseal (glue)	item	1495	1	0	$	1,495.00	$	-

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May 18, 2022

The Honorable Chiquita Brooks-LaSure
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services
7500 Security Boulevard
Baltimore, MD 21244-1850

Subject: RUC Recommendations

Dear Administrator Brooks-LaSure,

The American Medical Association (AMA)/Specialty Society RVS Update Committee (RUC) submits the enclosed recommendations for work relative values and direct practice expense inputs to the Centers for Medicare & Medicaid Services (CMS). These recommendations relate to new and revised codes for *CPT 2023, CPT 2024* and to existing services identified by the RUC's Relativity Assessment Workgroup and CMS.

Enclosed are the RUC recommendations for all the CPT codes reviewed at the April 27-29, 2022, RUC meeting.

CPT 2023 New and Revised Codes – *April 2022 RUC Submission*
The submission contains RUC recommendations for CPT 2023, Total Disc Arthroplasty (22857, 228XX). **The RUC submits work value and practice expense inputs for 2 CPT codes, one revised and one new, from the April 2022 RUC meeting.**

CPT 2024 New and Revised Codes – *April 2022 RUC Submission*
The RUC submits work value and/or practice expense inputs for 5 new/revised/related family CPT codes for *CPT 2024* from the April 2022 RUC meeting.

Existing Services Identified by RUC and CMS for Review
In addition to the new/revised CPT code submission, the RUC referred 3 codes to the CPT Editorial Panel for revision and submits recommendations for 2 services identified by the RUC or CMS as potentially misvalued and reviewed at the April 2022 RUC meeting.

Office and Hospital Visits Included in Codes with a Surgical Global Period
The RUC strongly believes that the changes in valuation of the office and hospital E/M visits be incorporated to the visits in the surgical global periods. Since CMS did not apply the office E/M visit increases to the visits bundled into global surgery payment, it is disadvantaging specialties who perform these important services.

An example of the shortcomings of this policy decision became apparent during discussion of CPT code 67141 *Prophylaxis of retinal detachment (eg, retinal break, lattice degeneration) without drainage; cryotherapy, diathermy* (RUC recommended work RVU = 2.53 and 2-99213 office visits) at the October 2020 RUC meeting. The RUC questioned whether the specialties had considered changing the global

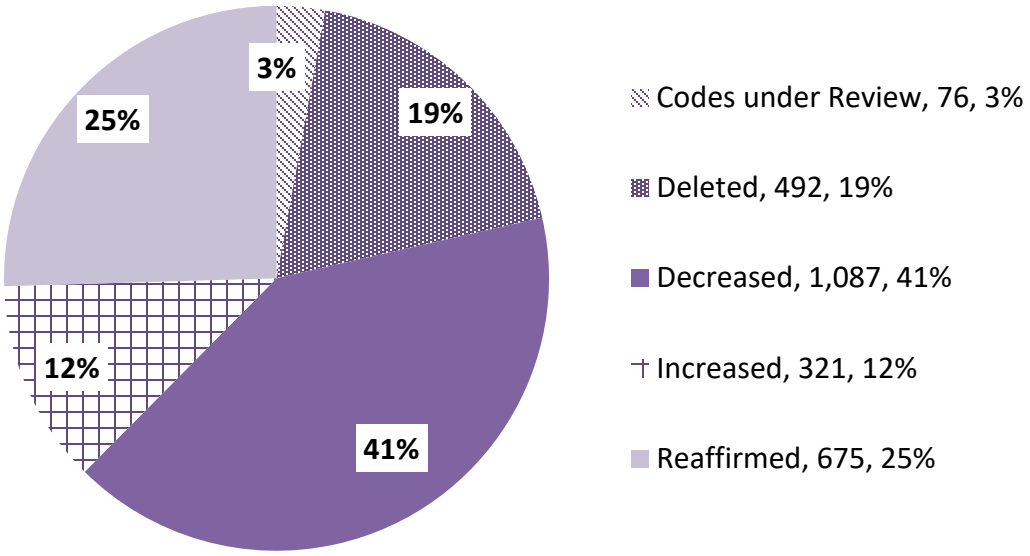
period to a 000-day global given that the intensity will be low and the office visits in 2021 will be of a different value. The specialties explained it is routine and typical that the two postoperative visits occur as part of the work within the 10 days following the procedure. The survey code is a good fit for the 010-day global and is in alignment with the other retinal laser codes and ophthalmic laser codes for other diseases. Relativity is therefore better maintained by keeping the 010-day global designation even though the intensity is low. The RUC noted that these codes were being valued too low considering that office visits for the surgical global period were not going to be increased in the 2021 office E/M codes. Considering that the 99213 office visit is valued at 1.30 RVUs, two 99213 office visits are valued higher than the 2.53 value of CPT code 67141. Therefore, the CMS policy is disadvantageous to the ophthalmologists and an example of shortcomings and rank order anomalies the flawed policy creates. The Agency's position implies that the physician work for office visits is not the same when performed in a surgical global period, which is an inaccurate assumption.

The RUC recommends that CMS apply the office visit and hospital visit valuation changes uniformly across all services and specialties. CMS should not hold specific specialties to a different standard than others. The RUC urges CMS to apply the office visit and hospital visit changes to the office and hospital visits included in surgical global payment, as it has applied historically.

RUC Progress in Identifying and Reviewing Potentially Misvalued Codes

Since 2006, the RUC has identified 2,651 potentially misvalued services through objective screening criteria and has completed review of 2,575 of these services. The RUC has recommended that 60% of the services reviewed be decreased or deleted (Figure 1). The RUC has worked vigorously to identify and address mis-valuations in the RBRVS through the provision of revised physician time data and resource recommendations to CMS. The RUC looks forward to working with CMS on a concerted effort to address potentially misvalued services.

Figure 1: AMA/Specialty Society RVS Update Committee (RUC) Potentially Misvalued Services Project



Source: American Medical Association

Breast Tomosynthesis
CPT codes 77061, 77062 and 77063 were on the New Technology/New Services list for examination by the Relativity Assessment Workgroup. During discussion, the specialty societies noted that CMS has not deleted code G0279 *Diagnostic digital breast tomosynthesis, unilateral or bilateral (list separately in addition to 77065 or 77066)*. **The specialty societies indicated and the RUC agreed, to again request that CMS delete code G0279, since it may be reported with CPT code 77061 *Diagnostic digital breast tomosynthesis; unilateral* or 77062 *Diagnostic digital breast tomosynthesis; bilateral*.**

Ultrasonic guidance for placement of radiation therapy fields
In October 2020, the RUC identified G6001 *Ultrasonic guidance for placement of radiation therapy fields* via the CMS/Other Medicare utilization over 20,000 screen. In January 2021, the RUC recommended to refer G6001 to CPT to develop new code(s) that reflect the different process of care between the two specialties (dermatology and radiation oncology). To date, a Category I code has not been created, therefore this issue was placed back on the Relativity Assessment Workgroup list for review at the April 2022 Workgroup meeting. **The RUC agreed with the specialty society that the specialty should work with CMS to develop an MLN Matters article to clarify correct coding and that the Relativity Assessment Workgroup will re-review in two years.**

Compelling Evidence
CMS and the RUC have a long history of reviewing potentially misvalued codes, first through the statutorily mandated five-year review processes and more recently from continuous annual reviews. As statute requires CMS to modify relative values to account for changes in medical practice, coding changes, new data on relative values, CMS worked with the RUC during the first five-year process and the years after to develop the compelling evidence criteria to demonstrate a change in physician services. Since the inception of the RBRVS, CMS has discussed compelling evidence in rulemaking as the Agency reviewed RUC recommendations.

Excerpts from the November 2004, 2009, and 2011, Federal Registers on the Medicare Physician Payment Schedules are attached to illustrate that CMS has indeed codified the RUC's compelling evidence standards in rulemaking *(Attachments 01-03)*.

In April 2022, the RUC made some clarifying changes to the compelling evidence guidelines. **The RUC submits the revised compelling evidence guidelines therefore CMS may continue to consider and codify in rulemaking.** *(Attachment 04 RUC Rules Regarding Presentation & Evaluation of Work Relative Values).*

Practice Expense Subcommittee
The attached materials include direct practice expense input (clinical staff, medical supplies and equipment) recommendations for each code reviewed. As a reminder, cost estimates for proposed new clinical staff types, medical supplies and medical equipment (not listed as part of the CMS labor, supply, and equipment lists) are based on provided source(s), such as paid invoices and may not reflect the wholesale prices, quantity, cash discounts, and prices for used equipment or any other factors that may alter the cost estimates. The RUC shares this information with CMS without making specific recommendations on the pricing.

New Pre-Service Clinical Staff Time Package
The RUC determined that the addition of a pre-service clinical staff time package is warranted for major surgical procedures that are 000 or 010-day global periods yet require greater time than provided by the standard extensive clinical staff times package. The RUC considered CMS' action in the Final Rule for the 2022 Medicare Physician Payment Schedule for CPT codes 28820, 28825, 46020, 61736 and 61737

where the RUC recommended pre-service clinical staff times were reduced from 60 minutes to 30 minutes. CMS stated, "We continue to believe that setting and maintaining clinical labor standards provides greater consistency among codes that share the same clinical labor tasks and could improve relativity of values among codes." While acknowledging that the RUC process of handling the pre-service time for code conversions on a case-by-case basis is effective and allows for the specialties to advocate for the most appropriate times for their procedures, the RUC also understands the value in establishing an additional 000 and 010-day global period pre-service time package as an option for those procedures in the facility-setting that require pre-service clinical staff time corresponding with a 090-day procedure. The RUC concurred that a new "comprehensive" category reasonably follows "extensive use" and appropriately accounts for the comprehensive care required for the patients involved in these major surgical procedures. The new package would also encompass the global conversions from 090-day to 000 or 010-day global periods. **Therefore, the RUC has established an additional pre-service clinical staff time package, "Comprehensive Use of Clinical Staff" as an option for those procedures in the facility-setting that are assigned 000 or 010-day global periods yet require pre-service clinical staff time commensurate with a 090-day procedure**. (*Attachment 05 Pre-Service Clinical Staff Time Packages).*

High Cost Disposable Supplies

The RUC calls on CMS to separately identify and pay for high cost disposable supplies (i.e., priced more than $500). The RUC makes this recommendation to address the outsized impact that high cost disposable supplies have within the current practice expense RVU methodology. The 2022 Medicare Physician Payment Schedule includes 73 supply items with a purchase price of more than $500. These high cost supplies represent $1.17 billion in direct costs for 2022 and 18 percent of all practice expense supply costs in the non-facility setting. The current system not only accounts for a large amount of direct practice expense for these supplies but also allocates a large amount of indirect practice expense into the PE RVU for the procedure codes that include these supplies. Because of specialty pools and how the PE formula derives the code-level indirect practice expense in part as a multiple of the code-level direct practice expense inputs, when CPT codes include a high-cost disposable supply, a larger portion of indirect practice expense is allocated to the subset of practices performing the service which is subsidized by the broader specialty and all other Medicare providers. If high costs supplies were paid separately with appropriate HCPCS codes, the indirect expense would no longer be associated with that service. The result would be that indirect PE RVUs would be redistributed throughout the specialty practice expense pool and the practice expense for all other services. **The RUC recommends that CMS separately identify and pay for high cost disposable supplies priced more than $500 using appropriate HCPCS codes. The pricing of these supplies should be based on a transparent process, where items are annually reviewed and updated.**

Enclosed Recommendations and Supporting Materials:

- RUC Recommendation Status Report for New and Revised Codes for *CPT 2024.*
- RUC Recommendation Summary of Existing Codes Identified by CMS or the Relativity Assessment Workgroup.
- RUC Recommendation Progress and Status Reports for 2,651 services identified to date by the Relativity Assessment Workgroup and CMS as potentially misvalued.

- RUC Referrals to the CPT Editorial Panel – both for CPT nomenclature revisions and *CPT Assistant* articles.

- Physician Time File – A list of the physician time data for each of the CPT codes reviewed at the April 2022 RUC meeting.

- Pre-Service and Post-Service Time Packages Definitions – The RUC developed physician pre-service and post-service time packages which have been incorporated into these recommendations. The intent of these packages is to streamline the RUC review process as well as create standard pre-service and post-service time data for all codes reviewed by the RUC.

- Professional Liability Insurance (PLI) Crosswalk Table – The RUC has committed to selecting appropriate PLI crosswalks for new and revised codes and existing codes under review. We have provided a PLI Crosswalk Table listing the reviewed code and its crosswalk code for easy reference. We hope that the provision of this table will assist CMS in reviewing and implementing the RUC recommendations.

- BETOS Assignment Table – The RUC, for each meeting, provides CMS with suggested BETOS classification assignments for new/revised codes. Furthermore, if an existing service is reviewed and the specialty believes the current assignment is incorrect, this table will reflect the desired change.

- Utilization Data Crosswalk – A table estimating the flow of claims data from existing codes to the new/revised codes. This information is used to project the work relative value savings to be included in the 2024 conversion factor increase.

- New Technology List and Timeline – In April 2006, the RUC adopted a process to identify and review codes that represent new technology or services that have the potential to change in value. To date, the RUC has identified 758 of these procedures through the review of new CPT codes. A table of these codes identified as new technology services and the date of review is enclosed, as well as a flow chart providing a detailed description of the process to be utilized to review these services.

- RUC Recommendations on Modifications to Visits in the Global Period – This includes changes in work RVUs and time by incorporating the increase of office visits and hospital visits in the surgical global periods.

We appreciate your consideration of these RUC recommendations. If you have any questions regarding the attached materials, please contact Sherry Smith at Sherry.Smith@ama-assn.org.

Sincerely,



Ezequiel Silva III, MD
Chair, AMA/Specialty Society RVS Update Committee

Enclosures

cc: RUC Participants
Perry Alexion, MD
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Gift Tee

Pre-Service Clinical Staff Time Packages

Specialties need to justify to the RUC in writing that a code should have clinical staff time greater than the package.

Pre-service time for 000 and 010 day codes is presumed to be zero unless the specialty provides evidence in writing to justify that any pre-service time is warranted.

For 000 and 010-day global codes, specialties need to justify to the RUC in writing that a code should have clinical staff time greater than zero.

If any pre-service time is found to be warranted, please use the time packages below as a guide.

Description of Clinical Activities	000 and 010 Day	000 and 010	000 and 010 Day Extensive Use of Clinical Staff		000 and 010	090 Day Use of Clinical Staff		090 Day	090 Day	Use of Clinical Staff for Endoscopy	
	Non-Facility & Facility Use of Clinical Staff	**Facility** Minimal Use of Clinical Staff	**Non-Facility**	**Facility**	**Facility** Comprehensive Use of Clinical Staff	**Non-Facility**	**Facility**	**Facility** Use of Clinical Staff +Additional	**Facility** Emergent	**Non-Facility**	**Facility**
CA001 Complete pre-service diagnostic & referral form	0	3	5	5	5	5	5	5	5	3	3
CA002 Coordinate pre-surgery services/review test/exam results	0	3	3	10	20	10	20	20	7	3	5
CA003 Schedule space and equipment in facility	0	3	0	5	8	0	8	8	4	0	3
CA004 Provide pre-service education/obtain consent	0	3	7	7	20	10	20	20	0	0	5
CA005 Complete pre-procedure phone calls & prescription	0	3	3	3	7	10	7	7	4	3	3
CA008 Perform regulatory mandated quality assurance activity (pre-service)	0	0	0	0	0	0	0	15	0	0	0
Total Time	**0**	**15**	**18**	**30**	**60**	**35**	**60**	**75**	**20**	**9**	**19**
CPT Code Examples	CPT code 17000	62323	12032	52356	33361	14060	66984	61312	34706	43239	45380
Common CPT codes for each pre-service clinical staff time package based on Medicare utilization	Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses); first lesion	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 2.6 cm to 7.5 cm	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy including insertion of indwelling ureteral stent (eg, Gibbons or double-J type)	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; percutaneous femoral artery approach	Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification); without endoscopic cyclophotocoagulation	Craniectomy or craniotomy for evacuation of hematoma, supratentorial; extradural or subdural *Assignment of the 15 additional minutes to CA008 aligns with CMS precedent in the 2019 Final Rule [CMS-1693-F].	Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for rupture including temporary aortic and/or iliac balloon occlusion, when performed (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer, traumatic disruption)	Esophagogastroduodenoscopy (EGD), flexible, transoral; with biopsy, single or multiple	Colonoscopy, flexible; with biopsy, single or multiple

Pre-Service Clinical Staff Time for 000 and 010 Day Global presumed to be zero unless the specialty provides evidence to justify that any pre-service time is warranted – Approved February 2002

Pre-Service Clinical Staff Time for 090 Day Global – Approved March 2001, Affirmed February 2002, Submitted May 2003 Recommendations

Pre-Service Clinical Staff Time for 000 and 010 Day Global – Approved October 2012

Pre-Service Clinical Staff Time for Emergent 090 Day Global – Approved January 2016

Pre-Service Clinical Staff Time for 000 and 010 Day Global Facility Comprehensive Use of Clinical Staff – Approved April 2022