

**AMA/Specialty Society RVS Update Committee
Sanibel Harbour Marriott Resort
January 16-19, 2019**

Meeting Minutes

I. Welcome and Call to Order

Doctor Peter Smith called the meeting to order on Friday, January 18, 2019 at 8:30 a.m. The following RUC Members were in attendance:

Peter K. Smith, MD
Jennifer Aloff, MD
Allan Anderson, MD
Margie C. Andreae, MD
Michael D. Bishop, MD
James Blankenship, MD
Robert Dale Blasier, MD
Jimmy Clark, MD
Joseph Cleveland, MD
Scott Collins, MD
Gregory DeMeo, MD
Jeffrey P. Edelstein, MD
David C. Han, MD
David F. Hitzeman, DO
Katharine Krol, MD
Walter Larimore, MD
Alan Lazaroff, MD
M. Douglas Leahy, MD, MACP
Alnoor Malick, MD
Scott Manaker, MD, PhD
Bradley Marple, MD
Daniel McQuillen, MD
Dee Adams Nikjeh, PhD
John H. Proctor, MD, MBA
Marc Raphaelson, MD
Christopher K. Senkowski, MD, FACS
Ezequiel Silva III, MD
Norman Smith, MD
Stanley W. Stead, MD, MBA
G. Edward Vates, MD
James C. Waldorf, MD

Amr Abouleish, MD, MBA*
Gregory L. Barkley, MD*
Eileen Brewer, MD*
William D. Donovan, MD, MPH*
William F. Gee, MD*
Michael J. Gerardi, MD, FACEP*
Gregory Harris, MD*
John Heiner, MD*
Peter Hollmann, MD*
Gwenn V. Jackson, MD*
Thomas Kintanar, MD*
Gregory Kwasny, MD*
John Lanza, MD*
Mollie MacCormack, MD, FAAD*
Francis Nichols, MD*
Scott D. Oates, MD*
Joseph Schlecht, DO*
M. Eugene Sherman, MD*
Michael J. Sutherland, MD, FACS*
Donna Sweet, MD*
Timothy H. Tillo, DPM*
Thomas J. Weida, MD*
David Wilkinson, MD, PhD*
Robert M. Zwolak, MD, PhD*

*Alternate

II. Chair's Report

- Doctor Smith welcomed everyone to the RUC Meeting.
- Doctor Smith welcomed the Centers for Medicare & Medicaid Services (CMS) staff and deferred introducing the CMS representatives to Doctor Hambrick during her report.

- Doctor Smith welcomed the following Contractor Medical Directors:
 - Charles Haley, MD, MS, FACP
 - Richard W. Whitten, MD

- Doctor Smith welcomed the following Members of the CPT Editorial Panel:
 - Kathy Krol, MD – CPT RUC Member
 - Observing CPT Members:
 - Linda Barney, MD
 - Jordan Pritzker, MD

- Doctor Smith congratulated the following new RUC Members:
 - Jeffrey Paul Edelstein, MD – American Academy of Ophthalmology (AAO)
 - John H. Proctor, MD – American College of Emergency Medicine (ACEP)

- Doctor Smith congratulated the following new RUC Alternate Members:
 - Gregory Kwasny, MD – American Academy of Ophthalmology (AAO)

- Doctor Smith wished a fond farewell to the following departing RUC Members:
 - Alnoor Malick, MD – American College of Allergy, Asthma and Immunology (ACAAI) /American Academy of Allergy, Asthma and Immunology (AAAAI)
 - David C. Han, MD – Society for Vascular Surgery (SVS)
 - Kathy Krol, MD – CPT Member

- Doctor Smith explained the following RUC established thresholds for the number of survey responses required:
 - Codes with ≥ 1 million Medicare claims = 75 respondents
 - Codes with Medicare claims between 100,000-999,999 = 50 respondents
 - Codes with $< 100,000$ Medicare claims = 30 respondents
 - Surveys below the established thresholds for services with Medicare claims greater than 100,000 will be reviewed as interim and specialty societies will need to resurvey for the next meeting.

- Doctor Smith conveyed the following guidelines related to Confidentiality:
 - All RUC attendees/participants are obligated to adhere to the RUC confidentiality policy. (All signed an agreement electronically prior to this meeting).
 - This confidentiality is critical because CPT® codes and our deliberations are preliminary. It is irresponsible to share this information with media and others until CMS has formally announced their decisions in rulemaking.

- Doctor Smith shared the following procedural rules for RUC members:
 - Before a presentation, any RUC member with a conflict will state their conflict. That RUC member will not discuss or vote on the issue and it will be reflected in the minutes.
 - RUC members or alternates sitting at the table may not present or debate for their society.
 - Expert Panel – RUC members exercise their independent judgment and are not advocates for their specialty.
 - RUC members should address the Chair directly throughout the meeting.

- Doctor Smith conveyed the following procedural guidelines to the Facilitation Committee process:

- Ideal Composition:
 - Knowledgeable regarding the issues at hand
 - Primary and Secondary Reviewers
 - Alternates who serve in the seat during presentation
 - Representative of the RUC as a whole
 - Without conflict of interest
- RUC alternate members may participate in substitution of a RUC member during facilitations, but should not serve in addition to the RUC member.
- RUC members should attend facilitations for tabs in which he/she is the primary reviewer and serve as a vice-chair of that facilitation.
- RUC members or alternates should not serve on facilitation for an issue in which their specialty society has a primary interest (surveyed). If assigned to that facilitation, speak with RUC staff.
- To enhance the fairness and accuracy of the facilitation process, RUC staff may alter the composition of the facilitation committee to more closely approximate an ideal deliberative body.
- The Chair and Vice-Chair of the facilitation committee will meet briefly with RUC staff prior to proceeding to facilitation.
- Doctor Smith conveyed the following procedural guidelines related to RUC Ballots:
 - If a tab fails, all RUC Members/Alternates must complete a ballot to aid the facilitation committee.
 - Alternates should identify themselves on the ballots, and may be asked to serve on the facilitation committee.
 - The RUC will suspend deliberation to allow sufficient time to ensure that all 28 ballots are completed. The function of the facilitation committee will be enhanced greatly by the small amount of time and work as each member carefully considers their estimation of appropriate work value(s).
 - Revised ballots include:
 - Space for more codes per ballot
 - Suggested work RVU (do not provide wRVU ranges)
 - Suggested pre/intra/post times
 - Applicable reference codes
 - Additional comments
- Doctor Smith laid out the following procedural guidelines related to specialty society staff/consultants:
 - Specialty Society Staff or Consultants should not present/speak to issues at the RUC Subcommittee, Workgroup or Facilitation meetings – other than providing a point of clarification.
- Doctor Smith conveyed the following procedural guidelines related to commenting specialty societies:
 - In October 2013, the RUC determined which members may be “conflicted” to speak to an issue before the RUC:
 1. a specialty surveyed (LOI=1) or
 2. a specialty submitted written comments (LOI=2).RUC members from these specialties are not assigned to review those tabs.

- The RUC also recommended that the RUC Chair welcome the RUC Advisor for any specialty society that submitted written comments (LOI=2), to come to the table to verbally address their written comments. It is the discretion of that society if they wish to sit at the table and provide further verbal comments.
- Doctor Smith relayed the following procedural guideline related to presentations:
 - If RUC Advisors/presenters need time to review new resources/data brought up during discussion of a tab, they should notify the RUC Chair.
- Doctor Smith shared the following procedural guidelines related to voting:
 - RUC votes are published annually on the AMA RBRVS website each July for the previous CPT cycle.
 - The RUC votes on every work RVU, including facilitation reports.
 - If members are going to abstain from voting because of a conflict or otherwise, please notify AMA staff so we may account for all 28 votes.
 - Please share voting remote with your alternate if you step away from the table to ensure 28 votes.
- Doctor Smith announced that all meetings are recorded for AMA staff to accurately summarize recommendations to CMS.

III. Director's Report

Sherry L. Smith, MS, CPA, Director of Physician Payment Policy and Systems, AMA provided the following points of information:

- Check handouts and revised PE spreadsheets available on the RUC Collaboration site.
- The RUC app is available for download and tab numbers will be updated throughout the meeting.
- Locations for the next two winter RUC meetings: Phoenix, AZ in 2020 and Naples, FL in 2021.
- The AMA Board of Trustees has re-appointed Doctor Peter Smith as RUC Chair for an additional two-year term through February 2021. In addition, nine specialties have re-appointed their RUC members and alternates, as listed under the Directors Report tab.

IV. Approval of Minutes from October 2018 RUC Meeting

- The RUC approved the October 2018 RUC meeting minutes as submitted.

V. CPT Editorial Panel Update (Informational)

Doctor Krol provided the following update on the CPT Editorial Panel:

- Introduced CPT Editorial Panel members Linda Barney, MD and Jordan Pritzker, MD (Doctor Krol's replacement) and CPT staff, Desiree Rozell.
- The Panel last met September 2018. The RUC held its meeting on October 3-6, 2018. The Executive Committee of the Panel considered the following items from the RUC October 2018 meeting:
 - In response to RUC's discussion of somatic nerve injection codes 64400, 64405, 64408,

64415-64418, 64420, 64421, 64425, 64430, 64435, and 64445-64450, the specialties stated that codes 64415, 64416, 64417, 64446, 64447, and 64448 were billed together with code ultrasound guidance code 76942 more than 50% of the time. The societies indicated they would submit a code change application to bundle 76942 into codes 64415, 64416, 64417, 64446, 64447, and 64448 for the 2021 cycle. To date, no code change request has been submitted.

- In response to RUC's discussion of remote interrogation device evaluation codes 93297, 93298 and 93299, the specialty societies recommended that code 93299 be deleted. The Panel received a code change request for deletion of code 93299 for consideration at the February 2019 Panel meeting (Tab 20).
- In response to RUC's discussion concerns around urography code 74425, the specialty societies agreed to review 74425 and bring it back to the Panel to clarify its descriptor, including considering inclusion of the injection of contrast nomenclature and to review the related codes to be sure there are not overlapping codes that could be used to report the same service. To date, no code change request has been submitted.
- In response to the RAW discussions and review and agreement of action plans submitted by specialty societies that codes 17004, 93451, 93456, 95992 be removed from Appendix E, noting these codes were placed in error, The RAW noted that the CPT Editorial Panel may be reviewing Appendix E at its February 2019 meeting. This issue is on the February 2019 Executive Committee agenda for consideration of creating a workgroup to address these and other issues.
- The Panel's next meeting is February 7-9, 2019, in Tucson AZ.
 - RUC member James Waldorf, MD will attend the meeting as the RUC representative.
 - Codes on the February 2019 agenda that have been identified by RAW screens are auditory evoked potential code 92585, cardiac device evaluation code 93299.
- The next application submission deadline is February 12, 2019 for the May 2019 Panel meeting.
- CPT will conduct its Annual CPT/HCPAC Advisory Committee meeting in conjunction with the February 2019 Panel meeting
- Doctor Krol thanked the RUC for its collegiality and support during her time as CPT RUC member.

CPT/RUC Workgroup on E/M

Co-Chairs: Barbara Levy, MD and Peter Hollmann, MD

- In early August 2018, the Chairs of the CPT Editorial Panel and the AMA/Specialty Society RVS Update Committee (RUC) created the CPT/RUC Workgroup on E/M to:
 - Capitalize on the CMS proposal and solicit suggestions feedback on the best coding structure to foster burden reduction, while ensuring appropriate valuation.
 - Consider a code change application to be submitted to the CPT Editorial Panel for consideration at their February 7-8, 2019 meeting.
- The Workgroup is made up of 12 experts in both coding and valuation (6 members each from each of the CPT and RUC processes).
- In addition to the 12 Workgroup members, roughly 300 additional stakeholders from national medical specialty societies, CMS and other health care related organizations have participated.

The Workgroup solicited their opinion through open feedback during each conference call and several direct surveys in between calls.

- The Workgroup held its 7th open meeting on Monday, January 14, 2019. The primary objective was to review the E/M code proposals that were submitted to the Panel.
- Dr. Hollmann will give an overview of the proposed coding changes at the Emerging Issues Workgroup meeting Thursday at 3:30-4:30 in Queen/Royal/Sabel.
- The Workgroup will also hold a one hour overview session at the CPT/HCPAC Advisors Annual Meeting.
- The Panel will consider two CCAs that were submitted by the E/M workgroup (Tabs 6 and 7) at our upcoming February meeting

VI. Centers for Medicare & Medicaid Services Update (Informational)

Doctor Edith Hambrick, MD, JD, MPH, CMS Medical Officer, provided the report of the Centers for Medicare & Medicaid Services (CMS):

- Introduced staff from CMS attending this meeting:
 - Liane Grayson, PhD, MPH, CPH, CCC-SLP - Social Science Research Analyst
 - Karen Nakano, MD – Medical Officer
 - Michael Soracoe, PhD – Research Analyst
 - Gift Tee – Acting Director, Division of Practitioner Services
- CMS is working on the NPRM for the Medicare Physicians’ Payment Schedule for CY2020. Please make an appointment to discuss any issues regarding codes or policy proposals as soon as possible.
- Professional Liability Insurance (PLI) Expected Specialty Overrides for Low Volume Services: Concerns were raised to CMS by AANS and STS representatives that the low-volume overrides for CY2019 were not being utilized as many of the PLI RVUs changed substantially even though the override specialty did not change. There are twenty services that have a 2.0 or more reduction in PLI RVU. STS commented that their codes are high-risk cardiac operations that can only be performed by congenital surgeons. In 2015, 34 congenital cardiac codes were corrected. They respectfully requested that CMS *ensure* that the list of expected specialties is applied for the low volume service-level overrides *each year*. CMS asked for the codes in writing. **[This information was submitted as part of the February recommendations to CMS. The RUC requested that the CMS issue an immediate technical correction for the twenty codes most greatly impacted by this error.]**

VII. Contractor Medical Director Update (Informational)

Doctor Charles E. Haley, Medicare Contractor Medical Director, Noridian Healthcare Solutions, provided the Contractor Medical Director update:

- The 21st Century Cures Act (Public Law 114-255) contains language modifying how contractors develop their local coverage determinations (LCDs). The CMS recently issued Change Request (CR)10901 which implements these changes to the statutory basis for the LCDs. The purpose of this Change Request is to notify the Medicare Administrative Contractors (MACs) that the Medicare Program Integrity Manual is being updated with detailed changes to the LCD process. Doctor Haley highlighted the extensive changes related to chapter 13, “Local Coverage Determinations (LCDs)” manual instructions.

- A RUC member inquired how the RUC's contribution to the LCD process will be impacted, namely, whether updates to CPT codes and/or ICD-10 diagnosis codes, since those are being separated from the process, will reopen the entire LCD process to the new requirements. Doctor Haley explained that the codes have been removed from the policy such that it will make any changes to coding much simpler and they will not have to go through any sort of LCD reconsideration process.

VIII. Relative Value Recommendations for CPT 2020

Pericardiocentesis and Pericardial Drainage (Tab 4)

Richard Wright, MD (ACC); Daniel Wessell, MD, PhD (ACR); Thad Waites, MD (ACC); Ed Tuohy, MD (ACC); Kurt Schoppe, MD (ACR); Lauren Golding, MD (ACR); Clifford J. Kavinsky, MD (SCAI); Curtis Anderson, MD (SIR)

In September 2018, CPT replaced four codes with four new codes to describe pericardiocentesis drainage procedures to differentiate by age and to include imaging guidance. CPT Code 33015 was originally identified by the RUC's Relativity Assessment Workgroup for review due to its negative IWPUT.

Compelling Evidence

The RUC reviewed the specialty's presented argument for compelling evidence. While CPT code 33010 was on the RUC's first Five-Year Review agenda, no action was taken. The work RVU and times are from the Harvard study. Since that time, other similar services that involve a lower amount of physician work reviewed by the RUC and CMS, and now have higher values. This creates a rank order anomaly across families of cardiology services. The top key reference service 32557 *Pleural drainage, percutaneous, with insertion of indwelling catheter; with imaging guidance* (work RVU = 3.12) is one example of a service that involves less physician work yet is valued higher than code 33010 currently. Code 33015 currently has a very general code descriptor, was most recently valued under the Harvard study and has a negative IWPUT. Since code 33010 and 33015 were last valued, there has been a change in the patient population; patients who receive these services have become more complex, acute, and heterogeneous. These used to typically be patients who had chronic effusions during renal failure and dialysis. Today this is a heterogeneous population, including malignancies, infections, iatrogenic effusions with tapenade, and other complications of implanted therapeutic devices like pacemakers and ICDs. The RUC accepted compelling evidence based on incorrect assumptions in prior valuation, rank order anomaly and a change in patient population.

33016 Pericardiocentesis, including imaging guidance, when performed

The RUC reviewed the survey results from 97 interventional cardiologists and agreed on the following physician time components: 18 minutes of pre-service evaluation, 1 minute of pre-service positioning, 6 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 20 minutes of immediate post-service time. Although this procedure is typically urgent to perform, it is not emergent.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the 25th percentile work RVU of 5.00. The RUC noted that this procedure is one of the more intense procedures that interventional cardiologists perform, with two of the most common complications being either lacerating the coronary artery or sticking the catheter into the right ventricle. To justify a work RVU of 5.00, the RUC compared the survey code to CPT code 45385 *Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique* (work RVU= 4.57, intra-service time of 30 minutes, total time of 68 minutes) and noted that both services have identical intra-service time and

involve a similar intensity of physician work — the survey code involves approximately 10 percent more total time, supporting a higher valuation. The RUC also compared the survey code to CPT code 31276 *Nasal/sinus endoscopy, surgical, with frontal sinus exploration, including removal of tissue from frontal sinus, when performed* (work RVU= 6.75, intra-service time of 45 minutes, total time of 98 minutes) and noted that the reference code involves more time, and is appropriately valued higher. In addition, the RUC compared the survey code to CPT code 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* (work RVU= 4.46, intra-service time of 30 minutes, total time of 73 minutes) and noted that although both services involve identical intra-service time, the survey code is clinically a much more intense service to perform, placing these services in the proper rank order. **The RUC recommends a work RVU of 5.00 for CPT code 33016.**

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
The RUC reviewed the survey results from 50 interventional cardiologists and agreed on the following physician time components: 18 minutes of pre-service evaluation, 1 minute of pre-service positioning, 6 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 22 minutes of immediate post-service time. The RUC agreed with the specialty society that although 33016 and 33017 involve the same amount of intra-service time and similar amounts of total time, the pericardial drainage procedure with insertion of indwelling catheter is a more intense service to perform, justifying a higher work value for a similar amount of time. This procedure includes all of the work of CPT code 33016, with the addition of suturing an indwelling catheter in place as well as the work of managing that catheter. This service is typically emergent as the patient is hemodynamically unstable. Even though this service is emergent, it is typically performed in the cardiac catheter lab and not at the bedside. With the drain left in place, the physician must provide additional documentation and additional instructions for care of the drain relative to 33016.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the 25th percentile work RVU of 5.50. To justify a work RVU of 5.50, the RUC compared the survey code to CPT code 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* (work RVU= 5.90, intra-service time of 40 minutes, total time of 108 minutes) and noted that the reference code involves more intra-service time and total time, justifying a higher valuation than the survey code. The RUC also compared the survey code to CPT code 31276 *Nasal/sinus endoscopy, surgical, with frontal sinus exploration, including removal of tissue from frontal sinus, when performed* (work RVU= 6.75, intra-service time of 45 minutes, total time of 98 minutes) and noted that the reference code involves more time and is appropriately valued higher. In addition, the RUC compared the survey to CPT code 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* (work RVU= 4.46, intra-service time of 30 minutes, total time of 73 minutes) and noted that although both services involve identical intra-service time, the survey code is clinically a much more intense service to perform, placing these services in the proper rank order. **The RUC recommends a work RVU of 5.50 for CPT code 33017.**

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

The RUC reviewed the survey results from 41 interventional cardiologists and agreed on the following physician time components: 40 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 13 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 20 minutes of immediate post-service time. The specialty noted and the RUC agreed that unlike the other services in this family, general anesthesia is always used for this patient population. The specialty noted and the RUC agreed that, since there is less space for the fluid to accumulate in a small child, the target-zone is smaller for the needle, and therefore the procedure is more intense. Also, the patient is typically more complex relative to the typical patient for the other services in this new code family. The specialty noted that the pre-service evaluation time for this service is much longer because the physician is discussing the procedure with the parent of the patient which typically take longer than discussing the procedure with an adult patient, which is the typical patient for the other services in this family.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the survey 25th percentile work RVU of 5.00 undervalues the work of the service and the median work RVU of 7.00 overvalues the work required to perform the service. To determine an appropriate work RVU, the RUC compared the survey code to CPT code 31603 *Tracheostomy, emergency procedure; transtracheal* (work RVU= 6.00, intra-service time of 30 minutes, total time of 105 minutes) and noted that both services have identical intra-service time, involve a very similar amount of total time and an identical amount of physician work. Therefore, the RUC recommends a direct work RVU crosswalk from code 31603 to 33018. The RUC noted that this direct work RVU crosswalk would place this pediatric/congenital pericardial drainage in appropriate rank order with the other codes in the family, pericardiocentesis code 33X00 and adult pericardial drainage code 3XX01. The RUC compared the survey code to CPT code 45390 *Colonoscopy, flexible; with endoscopic mucosal resection* (work RVU= 6.04, intra-service time of 45 minutes, total time of 83 minutes) and noted that although the reference code involves more intra-service time, the survey code involves more total time and is more intense and complex to perform justifying the similar work value. In addition, the RUC compared the survey to CPT code 37191 *Insertion of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmap, and imaging guidance (ultrasound and fluoroscopy), when performed* (work RVU= 4.46, intra-service time of 30 minutes, total time of 73 minutes) and noted that although both services involve identical intra-service time, the survey code is clinically a much more intense service to perform, placing these services in the proper rank order. . **The RUC recommends a work RVU of 6.00 for CPT code 33018.**

33019 Pericardial drainage with insertion of indwelling catheter, percutaneous, including CT guidance

The RUC reviewed the survey results from 50 radiologists and interventional radiologists and agreed on the following physician time components: 30 minutes of pre-service evaluation, 5 minutes of pre-service positioning, 6 minutes of pre-service scrub/dress/wait, 28 minutes of intra-service time and 15 minutes of immediate post-service time. The additional positioning time for this code relative to the others in the code family was due to the need to place the patient and their apparatus in the CT machine. This procedure is performed very uncommonly and only performed on patients where there is no viable approach for ultrasound due to existing scars or some other type of impediment.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the 25th percentile work RVU of 5.00. To justify a work RVU of 5.00, the RUC compared the survey code to CPT code 45385 *Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique* (work RVU= 4.57, intra-service time of 30 minutes, total time of 68 minutes) and noted that

although both services have similar intra-service time, the survey code involves more intense work including more complex, acutely ill patients as well as higher total time which supports a higher valuation. The RUC also compared the survey code to CPT code 31276 *Nasal/sinus endoscopy, surgical, with frontal sinus exploration, including removal of tissue from frontal sinus, when performed* (work RVU= 6.75, intra-service time of 45 minutes, total time of 98 minutes) and noted that the reference code involves more time and is appropriately valued higher. In addition, the RUC compared the survey code to CPT code 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* (work RVU= 4.46, intra-service time of 30 minutes, total time of 73 minutes) and noted that although both services involve similar intra-service time, the survey code is clinically a much more intense service to perform, placing these services in the proper rank order. **The RUC recommends a work RVU of 5.00 for CPT code 33019.**

Practice Expense

The RUC recommends for this family of facility-only services to have no direct practice inputs as all services are only provided in the facility setting.

Iliac Branched Endograft Placement (Tab 5)

Curtis Anderson, MD (SIR); Matthew Sideman, MD (SVS)

For *CPT 2018*, the CPT Editorial Panel created a family of 20 new and revised codes that redefined coding for endovascular repair of the aorta and iliac arteries. A large part of this proposal involved bundling of services commonly performed together including catheter placement and radiologic supervision and interpretation. One part of this involved revising a Category III CPT code for the repair of an iliac artery aneurysm with an experimental iliac branched endograft (IBE) device. A separate Category III code for the supervision and interpretation was deleted as this service was bundled into the base code. Although there was one FDA-approved device available on the US market in January 2017 when the original endovascular repair (EVR) presentation was made to the CPT Editorial Panel, there was insufficient literature to support conversion of the Category III code to a Category I CPT code at that time.

Over the ensuing two years, the new endovascular repair codes have been adopted and the RUC recommendations have been confirmed by CMS. The iliac branched endograft technology has become more mainstream and the literature requirement for conversion to a CPT Category I code has been met. Two new Category I CPT codes were created to capture the work of iliac artery endovascular repair with an iliac branched endograft. Code 34717 is a ZZZ add-on code designed to be reported in conjunction with the standard endovascular repair codes for repair of an iliac artery at the same session as repair of an aortic aneurysm. Code 34718 is a 090-day global code that describes all the physician work to repair an iliac artery with an iliac branched endograft, either after previous placement of an endograft in the aorta more proximally or for the isolated repair of an iliac aneurysm.

34717 Endovascular repair of iliac artery at the time of aorto-iliac artery endograft placement by deployment of an iliac branched endograft including pre-procedure sizing and device selection, all ipsilateral selective iliac artery catheterization(s), all associated radiological supervision and interpretation, and all endograft extension(s) proximally to the aortic bifurcation and distally in the internal iliac, external iliac, and common femoral artery(ies), and treatment zone angioplasty/stenting, when performed, for rupture or other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, arteriovenous malformation, penetrating ulcer, traumatic disruption), unilateral (List separately in addition to code for primary procedure)

The RUC reviewed the survey results from 67 vascular surgeons and interventional radiologists and agreed on the following physician time components: 25 minutes of pre-service evaluation (all of which is

for endograft planning time) and 90 minutes of intra-service time. The RUC noted that although this add-on service would be performed at the same time as an endovascular repair of an aortic pathology which also includes endovascular pre-service planning, the additional work necessary to plan for the iliac branched device repair requires additional time in order to review the aneurysm anatomy on CT angiogram, confirm the suitability of the anatomy for endovascular repair, make a large number of aortic diameter and center-line length measurements, review available endograft sizes and develop an operative plan that will successfully treat the pathology. The pre-service endograft planning is provided after evaluation in the office, but more than 24 hours prior to the procedure. The specialty society modified the survey instrument to add an additional question to capture time spent planning for endovascular repair. The specialties noted that this is consistent with the code descriptors which include the phrase "including pre-procedure sizing and device selection." This is also consistent with how the RUC and CMS valued the endovascular repair family of services for CY 2018.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the work involved in performing this service at the 25th percentile work RVU of 9.00. To justify a work RVU of 9.00, the RUC compared the survey code to CPT code 22858 *Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophylectomy for nerve root or spinal cord decompression and microdissection); second level, cervical (List separately in addition to code for primary procedure)* (work RVU= 8.40, intra-service time of 75 minutes) and noted that the survey code involves more time and physician work to complete, justifying a higher work value. The RUC also compared the survey code to CPT code 35306 *Thromboendarterectomy, including patch graft, if performed; each additional tibial or peroneal artery (List separately in addition to code for primary procedure)* (work RVU= 9.25, intra-service and total time of 90 minutes) and noted that both services have identical intra-service time and should be valued similarly. The specialty noted that if this code was not created, when endovascular repair of the iliac artery was performed at the same time of aorto-iliac endograft placement, then the multiple procedure reduction would reduce the value by half, or 12.00 RVUs which is more RVUs than the value recommended for this add-on code. **The RUC recommends a work RVU of 9.00 for CPT code 34717.**

34718 Endovascular repair of iliac artery, not associated with placement of an aorto-iliac artery endograft at the same session, by deployment of an iliac branched endograft, including pre-procedure sizing and device selection, all ipsilateral selective iliac artery catheterization(s), all associated radiological supervision and interpretation, and all endograft extension(s) proximally to the aortic bifurcation and distally in the internal iliac, external iliac, and common femoral artery(ies), and treatment zone angioplasty/stenting, when performed, for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, arteriovenous malformation, penetrating ulcer), unilateral

The RUC reviewed the survey results from 68 vascular surgeons and interventional radiologists and agreed on the following physician time components: 110 minutes of pre-service evaluation time (60 minutes of the pre-service evaluation time is for endograft planning time), 20 minutes for pre-service positioning time, 20 minutes for pre-service scrub/dress/wait, 120 minutes for intra-service time, 35 minutes for immediate post-time, 1 99233 visit, 1 99232 visit, 1 99238 discharge visit, 1 99213 office visit and 1 99212 office visit. The RUC noted that the additional pre-service work necessary to plan for the iliac branched device repair requires a substantial amount of planning time to review the aneurysm anatomy on CT angiogram, confirm the suitability of the anatomy for endovascular repair, make a large number of aortic diameter and center-line length measurements, review available endograft sizes and develop an operative plan that will successfully treat the pathology at hand. The endograft planning portion of pre-service evaluation time is provided after evaluation in the office, but more than 24 hours prior to the procedure. Therefore, prior to conducting their surveys, the multispecialty panel received approval to add an additional question to the RUC survey to capture time spent planning for EVAR. The specialties noted that this is consistent with the code descriptors which include the phrase "including pre-

procedure sizing and device selection." This is also consistent with how the RUC and CMS valued the EVAR family of services for CY 2018.

The RUC agreed with the specialties that pre-service package 4 was appropriate for EVR procedures with adjustment to the times for addition of endovascular repair planning time. The specialties noted and the RUC agreed that the recommended pre-service times appropriately captured the additional work the day before and the day of the procedure to ensure that all necessary supplies are available for the operation, to ensure that the radiologic equipment is operational and prepared for the procedure, and to re-review the extensive anatomic imaging prior to performing the procedure. An additional 17 minutes of positioning time has been added to account for positioning the imaging equipment and operating room equipment to minimize conflicts between equipment and patient during surgery, appropriately positioning the patient with arms tucked as indicated, and confirming that all EKG leads and IV, Foley and arterial catheter lines are clear from the areas to be imaged during the procedure.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the work involved in performing this service, at the 25th percentile work RVU of 24.00. To justify a work RVU of 24.00, the RUC compared the survey code to top key reference code 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)* (work RVU=23.71, intra-service time of 120 minutes and total time of 482 minutes) and noted that both services have identical intra-service time, involve similar pre-service and post-service time and the same number and level of post-operative visits. The specialty noted and the RUC agreed that the key reference code involves utilizing straight tubes, whereas the survey code involves bifurcated branches, which makes 34718 more complex and intense to perform. Of the survey respondents that selected CPT code 34701 as their reference code, 90% indicated that the survey code is more intense and complex to perform. **The RUC recommends a work RVU of 24.00 for CPT code 34718.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society as they are consistent with standard inputs for 90 day global services.

Exploration of Artery (Tab 6)

Matthew Sideman, MD (SVS)

CPT code 35701 was identified with 35761 in January 2018 by the Relativity Assessment Workgroup's negative IWP/UT screen. At the January 2018 RUC meeting, the RUC reviewed CPT code 35761 *Exploration (not followed by surgical repair), with or without lysis of artery; other vessels* and recommended referral to CPT. The RUC recommended referring CPT code 35761 and the family of codes (35701, 35721, 35741) to the CPT Editorial Panel to revise the "with or without lysis" language and to condense the code set, where applicable, due to low frequency. The appropriate global period for exploration (not followed by surgical repair) was also considered after the CPT review. In September 2018, CPT revised one code, added two codes, and deleted three codes to report major artery exploration procedures and to condense the code set due to low frequency.

Miscoding of 35701

The CPT Editorial Panel revised code 35701, as the service was frequently misreported. The RUC understands that the 69% of claims representing services performed by otolaryngology represent

miscoding as otolaryngologists do not perform this service as currently described. A new “do not report” parenthetical was added to this service to prohibit the reporting of it with several major surgical skin flap procedures to prevent the miscoding. The RUC believes that the misreporting of CPT code 35701 was likely in addition to CPT codes (i.e., 15756-15758) and not in lieu of the correct CPT code. Therefore, the remediation of this misreporting in concert with the recommended work values should result in an overall work savings for the exploration of artery family of services.

35701 Exploration of artery not followed by surgical repair; neck (eg, carotid, subclavian)

The RUC reviewed the survey results from 52 vascular surgeons and agreed on the following physician time components: 40 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 60 minutes of intra-service time, 30 minutes of immediate post-service time, one 99231 post-operative hospital visit, one 99238 discharge visit and one 99212 post-operative office visit.

The RUC reviewed the survey 25th percentile work RVU of 11.82 and agreed that this value overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC compared the survey code to CPT code 33271 *Insertion of subcutaneous implantable defibrillator electrode* (work RVU= 7.50, intra-service time of 60 minutes and total time of 202 minutes) and noted that both services involve identical intra-service time, similar total time and an identical overall amount of physician work. Therefore, the RUC recommends a direct work RVU crosswalk from code 33271 to code 35701. The RUC also compared the survey code to MPC code 21556 *Excision, tumor, soft tissue of neck or anterior thorax, subfascial (eg, intramuscular); less than 5 cm* (work RVU= 7.66, intra-service time of 60 minutes, total time of 234 minutes) and noted that both services involve identical intra-service time, similar total time and should be valued similarly. **The RUC recommends a work RVU of 7.50 for CPT code 35701.**

35702 Exploration of artery not followed by surgical repair; upper extremity (eg, axillary, brachial, radial, ulnar)

The RUC reviewed the survey results from 52 vascular surgeons and agreed on the following physician time components: 40 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 50 minutes of intra-service time, 30 minutes of immediate post-service time, one 99231 post-operative hospital visit, one 99238 discharge visit and one 99212 post-operative office visit.

The RUC reviewed the survey 25th percentile work RVU of 11.00 and agreed that this value overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC compared the survey code to CPT code 58565 *Hysteroscopy, surgical; with bilateral fallopian tube cannulation to induce occlusion by placement of permanent implants* (work RVU= 7.12, intra-service time of 50 minutes and total time of 191 minutes) and noted that both services involve identical intra-service time, similar total time and an identical overall amount of physician work. Therefore, the RUC recommends a direct work RVU crosswalk from code 58565 to 35702. The RUC also compared the survey code to MPC code 26113 *Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); 1.5 cm or greater* (work RVU= 7.13, intra-service time of 58 minutes, total time of 214) and noted that although the reference code involves somewhat more intra-service time, the survey code involves more total time and both services involve a similar overall amount of physician work. **The RUC recommends a work RVU of 7.12 for CPT code 35702.**

35703 Exploration of artery not followed by surgical repair; lower extremity (eg, common femoral, deep femoral, superficial femoral, popliteal, tibial, peroneal)

The RUC reviewed the survey results from 52 vascular surgeons and agreed on the following physician time components: 40 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 15 minutes

of pre-service scrub/dress/wait, 60 minutes of intra-service time, 30 minutes of immediate post-service time, one 99231 post-operative hospital visit, one 99238 discharge visit and one 99212 post-operative office visit. Survey codes 35701 and 35703 involve the same pre-service, intra-service, immediate post-service times and the same post-operative care. They also involve the same amount of physician work; the RUC recommends for both services to be valued identically.

The RUC reviewed the survey 25th percentile work RVU of 12.00 and agreed that this value overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC compared the survey code to CPT code 33271 *Insertion of subcutaneous implantable defibrillator electrode* (work RVU= 7.50, intra-service time of 60 minutes and total time of 202 minutes) and noted that both services involve identical intra-service time, similar total time and an identical overall amount of physician work. Therefore, the RUC recommends a direct work RVU crosswalk from code 33271 to 35703. The RUC also compared the survey code to MPC code 21556 *Excision, tumor, soft tissue of neck or anterior thorax, subfascial (eg, intramuscular); less than 5 cm* (work RVU= 7.66, intra-service time of 60 minutes, total time of 234 minutes) and noted that both services involve identical intra-service time, similar total time and should be valued similarly. **The RUC recommends a work RVU of 7.50 for CPT code 35703.**

Practice Expense

The PE Subcommittee revised the pre-service clinical staff time to the standard of 20 minutes for emergent procedures. **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.

Orchiopexy (Tab 7)

Thomas Turk, MD (AUA); Jonathan Rubenstein, MD (AUA); Kyle Richards (AUA); Jonathan Kiechle, MD (AUA); Richard Weiss, MD (AUA)

In September 2018, the CPT Editorial Panel revised existing code 54640 to describe an additional approach for orchiopexy (scrotal) and to clearly indicate that hernia repair is separately reportable.

54640 Orchiopexy, inguinal or scrotal approach

The RUC reviewed the survey results from 96 urological and pediatric surgeons and recommends the following physician time components: 30 minutes of pre-service evaluation time, 5 minutes of pre-service positioning time, 10 minutes of pre-service scrub/dress/wait, 60 minutes of intra-service time, and 15 minutes of immediate post-service time, a half day discharge management (99238), and one 99213 office visit. The RUC agreed that this is a difficult procedure due to the infant's anatomy and that two minutes of additional positioning time is appropriate for positioning the infant in a supine frog legged position with stabilizing support for performing the procedure and to account for anesthesia lines and equipment. The RUC thoroughly reviewed the recommended work and agreed that the current work RVU of 7.73, which is below the survey 25th percentile, accounts for the physician work involved for this service.

The RUC determined the previous number of visits was flawed based the way the visits were incorrectly recorded from separate surveys by urologists and pediatric surgeons in 1993. When reviewing previous data, the specialty indicated that the dominant specialty had performed two 99212 visits, but that data did not carry over into the RUC database when it was first created. The specialties further indicated that the current survey data indicating one 99213 is approximately equal to two 99212 visits. The RUC accepted this information and agreed that the work for the survey code has not changed since the last time it was surveyed by pediatric urologists and that the recommended work RVU for the survey code appropriately

accounts for the amount of physician work that is involved, warranting a recommended work RVU of 7.73 for the survey code.

To justify a work RVU of 7.73, the RUC compared the surveyed code to CPT code 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* (work RVU= 7.80, pre-service time of 51 minutes, intra-service time of 60 minutes, and post-service time of 20 minutes) and noted that the survey code contains identical intra-service time and similar total time. The RUC also compared the survey code to CPT code 57295 *Revision (including removal) of prosthetic vaginal graft; vaginal approach* (work RVU= 7.82, pre-service time of 45 minutes, intra-service time of 60 minutes, and post-service time of 20 minutes) and noted that the survey code contains identical pre-service and intra-service time as well as similar post-service time, further justifying the recommended and current work RVU for the survey code. **The RUC recommends a work RVU of 7.73 for CPT code 54640.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society.

Radiofrequency Neurotomy Sacroiliac Joint (Tab 8)

Richard Rosenquist, MD (APSA); Gregory Polston, MD (AAPM); Vikram Patel, MD (ASIPP); Kano Mayer, MD (NASS); Marc Leib, MD (ASA); Wesley Isbazebo, MD (SIS); Scott Horn, MD (SIS); Matthew Grierson, MD (AAPMR); Demean Freas, MD (NANS); Eduardo Fraifeld, MD (AAPM); Neal Cohen, MD (ASA)

Facilitation Committee #1

In September 2018, the CPT Editorial Panel created two new codes to describe injection and radiofrequency ablation of the sacroiliac joint with image guidance for somatic nerve procedures.

64451 Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)

The RUC reviewed the survey results from 72 physicians and agreed on the following physician time components: 23 minutes of pre-service time, 15 minutes of intra-service time, and 7 minutes of immediate post-service time. This service is performed under fluoroscopic guidance, the dorsal ramus nerve is targeted at the junction of the sacral ala and superior articular process. The nerves are targeted at the posterior lateral foramen and under imaging guidance, the target areas are approached by introducing a spinal needle to each of the appropriate fluoroscopic landmarks. After negative aspiration, local anesthetic is deposited at each of the sites. The RUC thoroughly reviewed the recommended work involved in this service and agreed that the survey 25th percentile of 1.52 correctly estimates the amount of physician work involved.

To justify a work RVU of 1.52, the RUC compared the survey code to the top key reference service 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* (work RVU= 1.52 and intra-service time of 15 minutes) and noted that both codes have identical intra-service time and should be valued identically. The RUC noted that although the survey code has less pre- and post- service time, survey respondents rated the survey code identical to somewhat more intense than the top key reference service, warranting the same work RVU of 1.52. Additionally, the RUC compared the surveyed code to CPT code 43197 *Esophagoscopy, flexible, transnasal; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)* (work RVU= 1.52 and intra-service time of 15 minutes), and noted that the survey code has identical pre-service and intra-service time and nearly identical post-service time and should be valued identically. **The RUC recommends a work RVU of 1.52 for CPT code 64451.**

64625 Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)

The RUC reviewed the survey results from 73 physicians and agreed on the following physician time components: 19 minutes of pre-service time, 30 minutes of intra-service time, and 7 minutes of immediate post-service time. This service is performed under fluoroscopic guidance, the dorsal ramus nerve is targeted at the junction of the sacral ala and superior articular process. The nerves are targeted at multiple points along the posterior lateral foramen and the skin around the planned entry point is injected with local anesthetic. Following the local anesthetic infiltration and under imaging guidance, a radiofrequency cannula is guided to the appropriate fluoroscopic landmark. Sensory stimulation is performed and after further anesthetic is injected, radiofrequency ablation is performed at 60 degrees for 150 seconds.

The RUC thoroughly reviewed the recommended work involved in this service and agreed that a direct work RVU crosswalk to code 67105 *Repair of retinal detachment, including drainage of subretinal fluid when performed; photocoagulation* (work RVU= 3.39, pre-service time of 11 minutes, intra-service time of 30 minutes, post-service time of 10 minutes) correctly estimates the amount of physician work involved. For additional support, the RUC also referenced CPT code 67227 *Destruction of extensive or progressive retinopathy (eg, diabetic retinopathy), cryotherapy, diathermy* (work RVU= 3.50, pre-service time of 11 minutes, intra-service time of 30 minutes, and post-service time of 10 minutes) and noted that the survey and reference code requires similar physician work to perform and should be valued similarly. **The RUC recommends a work RVU of 3.39 for CPT code 64625.**

Refer to CPT

The RUC refers codes 64451 and 64625 to the CPT Editorial Panel to clarify that these services should not be reported with electrical stimulation codes. The RUC recommends the CPT Editorial Panel editorially add codes 95873 and 95874 to the parenthetical following codes 64451 and 64625. The parenthetical following codes 64451 and 64625 should state the following:

(Do not report 64451 in conjunction with 64493, 64494, 64495, 77002, 77003, 77012, 95873, 95874)

(Do not report 64625 in conjunction with 64635, 77002, 77003, 77012, 95873, 95874)

Practice Expense

The Practice Expense (PE) Subcommittee made modifications, including correcting the clinical activity minutes for CA018, assist physician or other qualified healthcare professional--directly related to physician work time (100%) to match the intra-service time from the physician work survey, as well as to the medical supplies (SD269, SD011). PE Subcommittee members questioned including both equipment items: mobile c-ARM room (EL018) at a purchase price of \$151,200 and fluoroscopy table (EF024) at a purchase price of \$227,650 to perform one service with fluoroscopy. The PE Subcommittee agreed that the C-arm does not include a table, so maintained the room, mobile c-ARM (EL018), removed the table, fluoroscopy (EF024) and added in the table, power (EF031) as a proxy for fluoroscopy table until invoices can be obtained to reprice the fluoroscopy table, which PE Subcommittee members agreed should have a purchase price between \$10,000 and \$15,000. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

New Technology/New Services

The RUC recommends that CPT codes 64451 and 64625 be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

Lumbar Puncture (Tab 9)

Daniel Wessell, MD, PhD (ACR); Kurt Schoppe, MD (ACR); Gregory Nicola, MD (ASNR); Alexander Mason, MD (AANS); Jordan Celeste, MD (ACEP)

In October 2017, these services were identified as being performed by a different specialty than the specialty that originally surveyed this service. In January 2018, the RUC recommended that these services be referred to CPT to bundle image guidance. At the September 2018 CPT Editorial Panel meeting, the Panel created two new codes to bundle diagnostic and therapeutic lumbar puncture with fluoroscopic or CT image guidance and revised the existing diagnostic and therapeutic lumbar puncture codes so they would only be reported without fluoroscopic or CT guidance.

Compelling Evidence

The specialty societies indicated and the RUC agreed that there is compelling evidence that the physician work has changed for code 62270 based on a different performing specialty from the survey. When code 62270 was last surveyed in 2005, the primary specialty conducting that survey was pediatrics, with a letter of support from diagnostic radiology. Diagnostic radiology was at the time and continues to be the top performing specialty for code 62270. However, with CPT's creation of codes including imaging guidance, it is anticipated that emergency medicine will now be the dominant provider of code 62270. In 2005, code 62270 was reviewed as potentially misvalued and increased 21% from 1.13 to 1.37, and family code 62272 was not reviewed. This resulted in a rank order anomaly where code 62272 is now valued less than code 62270. The RUC agreed that there is compelling evidence for code 62270 because a different specialty will perform this service compared from when the service was last surveyed and rank order anomaly in the family of codes.

Therapy and Diagnosis

In a diagnostic lumbar puncture, approximately 8-10 cc of cerebral spinal fluid (CSF) is withdrawn from the thecal sac for diagnostic purposes. In a diagnostic lumbar puncture, the CSF is needed for a range of diagnostic purposes such as to assess for causes of infection or inflammation or to assess whether the patient has leptomeningeal spread of tumor. The patient population for a therapeutic lumbar puncture is different. The typical patient is a female patient with pseudotumor cerebri. Many of these patients can have visual symptoms because of the increased intracranial pressure compromising the optic nerves. Emergent decompression with drainage of CSF is required to preserve vision. When removing this larger volume of CSF, typically >20 cc of fluid, patients are often symptomatic. The physician will often need to make decisions about if it is safe to continue the removal of CSF. In addition, multiple needle manipulations will occur when the CSF stops flowing. The needle will have to be advanced or rotated while ensuring the needle is in the correct positioning. Often the patient's positioning will have to be adjusted to ensure the flow of CSF. During these adjustments, patients will often have symptoms such as radicular pain or paresthesia that physicians monitor and use to make decisions about whether positioning of needle is correct or when the procedure should end.

As such, the complexity of therapeutic lumbar tap is increased over a diagnostic tap for the following reasons: 1) There is increased time involved in draining more fluid over a diagnostic tap. 2) Additional physical effort is required in the additional patient position and needle manipulations. 3) Mental effort and judgement is also increased because of the additional patient positioning and manipulation and also deciding if it is safe to continue to remove additional CSF. 4) Finally, there is additional psychological stress because of the increased risk of complications due to the larger amount of CSF removed and the increased possibility of patient pain.

62270 Spinal puncture, lumbar, diagnostic

The RUC reviewed the survey results from 77 physicians and recommends the following physician time components: 12 minutes of pre-service time, 15 minutes of intra-service time, and 5 minutes of post-

service time. The RUC noted that the survey 25th percentile work RVU of 2.10 and the survey median work RVU of 2.52 overestimated the work required to perform this service. Therefore, the specialty society recommended and the RUC agreed that CPT code 62270 should be crosswalked to MPC code 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* (work RVU= 1.44, pre-service time of 7 minutes, intra-service time of 17 minutes, and post-service time of 5 minutes). These services require the same physician work and similar intra-service time. The RUC agreed that although the current times of CPT code 62270 have changed, the overall intensity and complexity has increased due to expected change in dominant specialty to emergency medicine. The RUC agreed that the recommended work RVU of 1.44 for the surveyed code maintains relativity within the lumbar puncture family. **The RUC recommends a work RVU of 1.44 for CPT code 62270.**

62328 Spinal puncture, lumbar, diagnostic; with fluoroscopic or CT guidance

The RUC reviewed the survey results from 101 physicians and recommends the following physician time components: 23 minutes of pre-service time, 18 minutes of intra-service time, and 5 minutes of post-service time for code 62328. The RUC determined that the survey 25th percentile work RVU of 1.95 appropriately accounts for the work required to perform this service.

The RUC compared the survey code to the second key reference code 64483 *Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level* (work RVU= 1.90, pre-service time of 24 minutes, intra-service time of 15 minutes, and post-service time of 10 minutes), noting that CPT code 62328 requires slightly more intra-service time because it requires more time to drain the CSF compared to an injection. Additionally, based on the survey respondents, CPT code 62328 requires identical to somewhat more overall intensity and complexity than code 64483, justifying the slightly higher work RVU of 0.05. For additional support, the RUC compared the survey code to CPT code 49084 *Peritoneal lavage, including imaging guidance, when performed* (work RVU= 2.00 and intra-service time of 20 minutes) and noted that these services require similar physician work and time to perform. The RUC noted that the survey code is appropriately bracketed by codes 64483 and 49084 in terms of intra-service time and work RVUs. The RUC also agreed that the recommended work RVU of 1.95 places this service in the proper rank order with CPT code 62270, which does not include guidance, and in relation to the therapeutic spinal puncture codes. **The RUC recommends a work RVU of 1.95 for CPT code 62328.**

62272 Spinal puncture, therapeutic, for drainage of cerebrospinal fluid (by needle or catheter);

The RUC reviewed the survey results from 31 physicians and recommends the following physician time components: 22 minutes of pre-service time, 15 minutes of intra-service time, and 15 minutes of immediate post-service time for CPT code 62272. The RUC determined the survey 25th percentile work RVU of 1.80 correctly accounts for the physician work involved in this service.

To justify a work RVU of 1.80, the RUC compared the survey code to the second key reference code 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* (RVU= 1.82 and intra-service time of 15 minutes) and noted that both services require the same intra-service time and similar amount of physician work. The RUC agreed that the survey code is adequately valued at 1.80 considering that the survey respondents indicated that the survey code is somewhat more intense and complex than code 64490. Additionally, the RUC reviewed code 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)* (work RVU=1.80 and intra-service time of 15 minutes) and noted that the survey code and the comparator code have identical intra-service times. The RUC agreed that the recommended work RVU of 1.80 for the surveyed code maintains

relativity within the lumbar puncture family. **The RUC recommends a work RVU of 1.80 for CPT code 62272.**

62329 Spinal puncture, therapeutic, for drainage of cerebrospinal fluid (by needle or catheter); with fluoroscopic or CT guidance

The RUC reviewed the survey results from 131 physicians and recommends the following physician time components: 23 minutes of pre-service time, 20 minutes of intra-service time, and 10 minutes of immediate post-service time for CPT code 62329. The RUC determined the survey median work RVU of 2.25 appropriately accounts for the work required to perform this service.

To justify a work RVU of 2.25, the RUC compared the survey code to CPT code 32555 *Thoracentesis, needle or catheter, aspiration of the pleural space; with imaging guidance* (work RVU= 2.27 and intra-service time of 20 minutes) and noted that these services require the same intra-service time and similar physician work. For support, the RUC referenced similar service 43216 *Esophagoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps* (work RVU= 2.30 and intra-service time of 22 minutes) and noted that these services require similar physician work and time to perform. The RUC also agreed that the recommended work RVU of 2.25 places this service in the proper rank order with CPT code 62272, which does not include guidance, and in relation to the diagnostic spinal puncture codes. **The RUC recommends a work RVU of 2.25 for CPT code 62329.**

Practice Expense

The Practice Expense (PE) Subcommittee removed the pre-service clinical staff time in the facility setting because the service is a 000-day global code. The Subcommittee decreased clinical staff time in the non-facility setting for code 62270 to eliminate overlap with Evaluation and Management (E/M) services, and made minor corrections to the equipment time. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

New Technology/New Services

The RUC recommends that CPT codes 62328 and 62329 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.

Genicular Injection and RFA (Tab 10)

Richard Rosenquist, MD (ASA); Gregory Polston, MD (AAPM); Vikram Patel, MD (ASIPP); Marc Leib, MD (ASA); Wesley Ibazebo, MD (SIS); Scott Horn, DO (SIS); Matthew Grierson, MD (AAPMR); Eduardo Fraifeld, MD (AAPM); Neal Cohen, MD (ASA)

In May 2018, the CPT Editorial Panel approved the addition of two codes to report injection of anesthetic and destruction of genicular nerves by neurolytic agent. In October 2018, the RUC thoroughly discussed the issues surrounding the survey of this family of services. The RUC supported the specialty societies' request for CPT codes 64454, 64640, and 64624 to be resurveyed and presented at the January 2019 RUC meeting based on their concern that many survey respondents appeared to be confused about the number of nerve branch injections involved with these three codes. The RUC recommended resurveying these services for January 2019.

Compelling Evidence

The specialty societies presented compelling evidence for this family of codes based on a change in physician work due to changes in technique and change in patient population. CPT codes 64450 and 64640 both describe a single injection/ablation. In contrast, CPT code 64454 involves blocks for three different nerve branches (superomedial, inferomedial, and superolateral genicular nerve branches) at three locations (adjacent to the periosteum on the medial aspect of the tibia, and at both the medial and lateral aspects of the femur) in order to achieve analgesia for the respective knee. CPT code 64624 involves

ablation for three different nerve branches (superomedial, inferomedial, and superolateral genicular nerve branches) at three locations (adjacent to the periosteum on the medial aspect of the tibia, and at both the medial and lateral aspects of the femur) in order to achieve analgesia for the respective knee. The two new codes include imaging guidance. Imaging, which is typical and necessary to perform these genicular nerve branch procedures, is bundled into codes 64454 and 64624.

Regarding the change in patient population, when CPT code 64640 was surveyed in 2011, the typical patient had a history of neuritis of the medial calcaneal nerve. The current top diagnosis codes for code 64640 are not related to the calcaneal nerve but to other inflammatory spondylopathies; mononeuropathies of lower limb; other joint disorders; spondylosis; and other unspecified dorsopathies. The change in patient population is a result of coding changes between the 2011 and 2019 surveys where the typical podiatric patient is now reported with a different code. The RUC concluded that the change in the typical patient now made the typical service described by code 64640 more intense and complex. Currently, clinicians are reporting services described by code 64624 with code 64640. Therefore, the typical patient has changed for code 64640. The RUC approved compelling evidence for the family based on change in patient population and a change in technique.

64454 Injection(s), anesthetic agent(s) and/or steroid; genicular nerve branches including imaging guidance, when performed

The RUC reviewed the survey results from 69 physicians and determined that the survey 25th percentile work RVU of 1.52 accurately reflects the physician work necessary for this service for pain management of chronic knee osteoarthritis. The RUC recommends 17 minutes pre-service evaluation time, 1 minute pre-service positioning time, 5 minutes pre-service scrub/dress/wait time, 18 minutes intra-service time and 10 minutes immediate post-service time.

The RUC compared CPT code 64454 to the top key reference code 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* (work RVU = 1.52 and 15 minutes intra-service time) and noted the solid comparison with same amount of physician work and similar intra-service times. Over 3/4 of survey respondents indicated that the surveyed code was identical in overall intensity/complexity to the key reference code. For additional support, the RUC referenced CPT code 43197 *Esophagoscopy, flexible, transnasal; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)* (work RVU = 1.52 and 15 minutes intra-service time) and noted similarly that this code has the same amount of physician work and nearly identical intra-service time. Further, the RUC compared the survey code to another injection code 62284 *Injection procedure for myelography and/or computed tomography, lumbar* (work RVU= 1.54 and 15 minutes intra-service time) and noted that this code involves similar physician work and intra-service time.

The RUC concluded that CPT code 64454 should be valued at the 25th percentile work RVU of 1.52 as supported by the survey and top key reference service and which is also consistent with the recommendation for the sacroiliac joint. **The RUC recommends a work RVU of 1.52 for CPT code 64454.**

64640 Destruction by neurolytic agent; other peripheral nerve or branch

The RUC reviewed the survey results from 60 physicians and determined that the survey 25th percentile work RVU of 1.98 accurately reflects the physician work necessary for this service which now involves a more complex patient. The RUC questioned the intra-service time which increased from 5 minutes to 20 minutes, and ultimately supported the survey results. It noted that since both the October 2018 and the January 2019 survey resulted in a median intra-service time of 20 minutes, this increase in time was appropriate and reflected the change in the intensity and complexity of the typical patient from the 2011 RUC survey to the current 2019 RUC survey. Furthermore, the increase in intra-service time supports an

increase in work RVU. The RUC recommends 13 minutes pre-service evaluation time, 1 minute pre-service positioning time, 5 minutes pre-service scrub/dress/wait time, 20 minutes intra-service time and 9 minutes immediate post-service time, and 1-99212 office visit. While the survey data resulted in 1-99213 office visit, the RUC agreed that a 99212 was more appropriate and better reflected current practice.

The RUC compared CPT code 64640 to the top key reference code 64633 *Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint* (work RVU = 3.84 and 30 minutes intra-service time) and noted that it was appropriate for the reference code to be valued higher than the surveyed code because code 64633 includes imaging guidance while code 64640 does not. Survey respondents indicated that the survey code was either the same or of greater intensity than the reference code. The RUC also compared the survey code to the second key reference service code 64632 (*Destruction by neurolytic agent; plantar common digital nerve*) (work RVU = 1.23 and 5 minutes intra-service time) and noted that the survey code should be valued higher than code 64632 given the differences in intra-service times. CPT code 64632 has an intra time of 5 minutes versus 20 minutes for the survey code. The typical patient for code 64632 is a patient receiving an injection in the sole of their foot while the typical patient for code 64640 is a patient with severe pain involving the left chest wall. Survey respondents indicated that the survey code was either the same or of greater intensity than the reference code.

For additional support, the RUC referenced CPT code 17272 *Destruction, malignant lesion (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettment), scalp, neck, hands, feet, genitalia; lesion diameter 1.1 to 2.0 cm* (work RVU = 1.82 and 22 minutes intra-service time) and CPT code 12031 *Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities (excluding hands and feet); 2.5 cm or less* (work RVU = 2.00 and 20 minutes intra-service time) and agreed that these codes appropriately bracket the survey code. The RUC concluded that CPT code 64640 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 1.98 for CPT code 64640.**

64624 Destruction by neurolytic agent genicular nerve branches including imaging guidance, when performed

The RUC reviewed the survey results from 69 physicians and recommends a work RVU of 2.62 which is supported by a direct work RVU crosswalk to MPC code 11642 *Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 1.1 to 2.0 cm* (work RVU = 2.62, 25 minutes intra-service time and 68 minutes total time) and falls slightly above the survey 25th percentile. CPT code 64624 describes the destruction of three different nerve branches at three locations in order to *provide* analgesia for the respective knee. The crosswalked code describes excision of a malignant lesion. The physician work involved in the survey code is slightly more intense in that the destruction of three different nerve branches, if performed incorrectly would have the potential to produce irreversible tissue damage to other motor or sensory nerves in the vicinity of the knee. The RUC determined that the crosswalk is reasonable and appropriate in terms of times, intensity and physician work.

The RUC recommends 17 minutes pre-service evaluation time, 1 minute pre-service positioning time, 5 minutes pre-service scrub/dress/wait time, 25 minutes intra-service time and 10 minutes immediate post-service time, and 1-99212 office visit. The intra-service time of 25 minutes represents an increase of 5 minutes or 25 percent from the October 2018 survey. The RUC concluded that there was better understanding by survey respondents that the code described multiple injections in the more recent survey versus the October 2018 survey. While both the crosswalk code and the survey data had a 1-99213 office visit, the RUC agreed that a 99212 was more appropriate and better reflected current practice.

To further support a work RVU of 2.62, the RUC referenced CPT code 10061 *Incision and drainage of abscess (eg, carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or*

paronychia); *complicated or multiple* (work RVU = 2.45, 25 minutes intra-service time) and noted that the intra-service times are identical but the reference code has a lower intensity than both the crosswalk and survey code, and the survey code is therefore appropriately valued higher than the reference code. The RUC agrees with the direct crosswalk recommendation of 2.62 work RVUs and believes that it appropriately ranks this procedure within the family. **The RUC recommends a work RVU of 2.62 for CPT code 64624.**

Practice Expense

The Practice Expense Subcommittee accepted compelling evidence and made substantial changes to the equipment and the equipment minutes, corrected intra-service times, added minutes to code 64450 for CA006, and made changes to supplies. PE Subcommittee members questioned including both equipment items: mobile c-ARM room (EL018) at a purchase price of \$151,200 and fluoroscopy table (EF024) at a purchase price of \$227,650 to perform one service with fluoroscopy. The PE Subcommittee agreed that the C-arm does not include a table, so maintained the room, mobile c-ARM (EL018), removed the table, fluoroscopy (EF024) and added in the table, power (EF031) as a proxy for fluoroscopy table until invoices can be obtained to reprice the fluoroscopy table, which PE Subcommittee members agreed should have a purchase price between \$10,000 and \$15,000. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Affirmation of RUC Recommendations

The RUC affirmed the recent RUC recommendation for CPT code *64450 Injection, anesthetic agent; other peripheral nerve or branch* (work RVU= 0.75, 7 minutes pre-service evaluation time, 1 minute pre-service positioning time, 1 minute pre-service scrub/dress/wait time, 5 minutes intra-service time and 5 minutes immediate post-service time). The relativity within the family remains correct. **The RUC affirms the work RVU of 0.75 for CPT code 64450.**

New Technology

The RUC recommends that this family of codes be placed on the New Technology/New Services list and be re-reviewed by the RUC in three years in order to verify utilization assumptions.

Cyclophotocoagulation (Tab 11)

David Vollman, MD (AAO); Parag Parekh, MD (ASCRScat); John McAllister, MD (AAO); David Glasser, MD (AAO)

In October 2017, CPT codes 66711 and 66984 were identified as codes reported together 75% of the time or more. The RUC reviewed action plans to determine whether a code bundle solution should be developed for these services. In January 2018, the RUC recommended to refer to CPT to bundle 66711 with 66984 for CPT 2020. In May 2018, the CPT Editorial Panel revised three codes and created two new codes to differentiate cataract procedures performed with and without endoscopic cyclophotocoagulation.

66711 Ciliary body destruction; cyclophotocoagulation, endoscopic, without concomitant removal of crystalline lens

The RUC reviewed the survey results from 40 ophthalmologists and determined to crosswalk the work RVU of 6.36 from key reference service code 67210 *Destruction of localized lesion of retina (eg, macular edema, tumors), 1 or more sessions; photocoagulation* (work RVU = 6.36 and 15 minutes intra-service time) to CPT code 66711. The RUC conducted a thorough search of all other potential crosswalk codes and ran into a lack of potential crosswalk codes due to the lack of similarly intense major surgical procedures with a comparable amount of skin-to-skin time, OR time and amount of post-operative care. The RUC noted that the survey intra-service time decreased 10 minutes from the current time and that the only appropriate crosswalk for this intense intraocular service is CPT code 67210. The survey respondents indicated that 66711 is more intense and complex to perform than 67210 on all measures

examined (mental effort/judgment, technical skill/physical effort and psychological stress). Additionally, both services use laser ablation of tissue, making it the most clinically relatable service for comparison.

The RUC recommends 25 minutes pre-service evaluation, 3 minutes pre-service positioning, 6 minutes pre-service scrub/dress/wait pre-service time, 20 minutes intra-service time, 10 minutes immediate post-time, half a discharge day management (99238), four 99213 office visits and one 99212 office visit. The first post-operative visit is a 99212 visit on the first day after surgery in which the physician performs an exam on an un-dilated eye, checking visual acuity, intraocular pressure, incision integrity, and level of inflammation. The remaining four post-operative visits are 99213 visits approximately 1 week, 2 weeks, 1 month and 6-8 weeks postoperatively, in which the physician performs an exam on a dilated eye, checking visual acuity, intraocular pressure, incision integrity, corneal clarity, level of inflammation, and detailed examination of the central retina for cystoid macular edema. These exams must be performed on a dilated eye, as specified by practice guidelines, to check for macular edema and ensure that retinal detachment has not occurred. **The RUC recommends a work RVU of 6.36 for CPT code 66711.**

Complex Cataract Removal

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

The RUC reviewed the survey results from 92 ophthalmologists and determined to crosswalk the work RVU of 10.25 from CPT code 67110 *Repair of retinal detachment; by injection of air or other gas (eg, pneumatic retinopexy)* (work RVU = 10.25 and 30 minutes intra-service time) to CPT code 66982. The RUC noted that the survey top key reference codes 67036 *Vitrectomy, mechanical, pars plana approach;* (work RVU = 12.13, IWPUT = 0.1075) and 65850 *Trabeculectomy ab externo* (work RVU = 11.39, IWPUT = 0.1109) have a much lower physician work intensity than the surveyed code and therefore it would be appropriate for the survey code to have a higher intra-service work per unit of time (IWPUT). The intensity of cataract surgery has not changed and the magnitude estimation in the survey data supports that the intensity of this service is high. All the intra-service time for cataract surgery is spent with both the physicians' hands inside the eye and both feet managing ultrasound and microscope foot pedals, where a slight misstep can lead to serious complications such as endophthalmitis or retinal detachment with permanent loss of vision, which contributes to the intensity of the procedure. The RUC conducted a thorough search of all other potential crosswalk codes and ran into a lack of potential crosswalk codes due to the lack of similarly intense major surgical procedures with a comparable amount of skin-to-skin time, OR time and amount of post-operative care. The RUC noted that the only appropriate crosswalk for this intense service is 67110. CPT code 66982 has less total time than 67110, but that is due to the difference in post-operative visits required for these services. Both CPT codes 66982 and 67110 require the same intra-service time of 30 minutes and CPT code 66982 is appropriately more intense than CPT code 67110. CPT code 67110 involves an injection of air into the vitreous to tamponade the retinal detachment and there is relatively less intraocular manipulation. Whereas, the intra-service work for 66982 includes work all performed inside the eye.

The RUC recommends 25 minutes evaluation, 3 minutes positioning, 7 minutes scrub/dress/wait pre-service time, 30 minutes intra-service time, 6 minutes immediate post-time, half a discharge day management (99238), three 99213 office visits and one 99212 office visit. The first post-operative visit is a 99212 visit on the first day after surgery in which the physician performs an exam on an un-dilated eye, checking visual acuity, intraocular pressure, incision integrity, and level of inflammation. The remaining three post-operative visits are 99213 visits approximately 1 week, 2-4 weeks, and 6-8 weeks

postoperatively, in which the physician performs an exam on a dilated eye, checking visual acuity, intraocular pressure, incision integrity, corneal clarity, level of inflammation, and detailed examination of the central retina for cystoid macular edema and peripheral retina for tears or detachments. These exams must be performed on a dilated eye, as specified by practice guidelines, to ensure that retinal detachment has not occurred. **The RUC recommends a work RVU of 10.25 for CPT code 66982.**

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

The RUC reviewed the survey results from 31 ophthalmologists and determined a work RVU of 13.15 appropriately accounts for the work required to perform this service. The RUC conducted a thorough search of all other potential crosswalk codes and noted a lack of potential crosswalk codes due to the complete lack of similarly intense major surgical procedures with a comparable amount of skin-to-skin time, OR time and amount of post-operative care. There are no available crosswalks to the physician work, time and intensity of this service. Therefore, the RUC used an increment approach by adding the RUC recommended difference of the standard cataract removal with endoscopic cyclophotocoagulation (CPT code 66988 RUC recommended work RVU = 10.25) compared to the standard cataract removal without endoscopic cyclophotocoagulation (CPT code 66984, RUC recommended work RVU = 7.35), which results in 2.90 ($10.25 - 7.35 = 2.90$). Therefore, adding the work of the endoscopic cyclophotocoagulation (2.90) to the RUC recommendation for CPT code 66982 complex cataract removal without endoscopic cyclophotocoagulation (RUC recommended work RVU = 10.25), ($10.25 + 2.90 = 13.15$) results in 13.15 work RVUs.

The RUC noted that the survey top key reference codes 66179 *Aqueous shunt to extraocular equatorial plate reservoir, external approach; without graft* (work RVU = 14.00, 55 minutes intra-service time and IWP/UT = 0.1156) and 65285 *Repair of laceration; cornea and/or sclera, perforating, with reposition or resection of uveal tissue* (work RVU = 15.36, 90 minutes intra-service time and IWP/UT = 0.0743) have a much higher intra-service time and lower IWP/UT than what would be appropriate for the much more intense surveyed code. The intensity of cataract surgery has not changed and the magnitude estimation in the survey data supports that the intensity of this service is high. All the intra-service time for cataract surgery is spent with both the physicians' hands inside the eye and both feet managing ultrasound and microscope foot pedals, where a slight misstep can lead to serious complications such as endophthalmitis or retinal detachment with permanent loss of vision, which contributes to the intensity of the procedure.

The RUC recommends 30 minutes pre-service evaluation, 3 minutes pre-service positioning, 10 minutes pre-service scrub/dress/wait time, 36 minutes intra-service time, 10 minutes immediate post-time, half a discharge day management (99238), five 99213 office visits and one 99212 office visit. The first post-operative visit is a 99212 visit on the first day after surgery in which the physician performs an exam on an un-dilated eye, checking visual acuity, intraocular pressure, incision integrity, and level of inflammation. The remaining five post-operative visits are 99213 visits approximately 1, 2, 3-4, 6-8, and 10-12 weeks postoperatively, in which the physician performs an exam on a dilated eye, to check visual acuity, intraocular pressure, incision integrity, corneal clarity, level of inflammation, and detailed examination of the central retina for cystoid macular edema and peripheral retina for tears or detachments. These exams must be performed on a dilated eye, as specified by practice guidelines, to check for macular edema and ensure that retinal detachment has not occurred. **The RUC recommends a work RVU of 13.15 for CPT code 66987.**

Cataract Removal

66983 Intracapsular cataract extraction with insertion of intraocular lens prosthesis (1 stage procedure)

This service is performed less than 150 times in the Medicare population and the specialty society, with the RUC's approval, did not attempt to survey this service. Based on the Medicare Provider Utilization and Payment Data: Physician and Other Supplier PUF CY2016 file, only one ophthalmologist reported this service more than 10 times. **The RUC recommends that this service be contractor priced.**

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

The RUC reviewed the survey results from 93 ophthalmologists and determined a work RVU of 7.35 appropriately accounts for the work required to perform this service. The RUC used an incremental approach by taking the value of similar service 67210 *Destruction of localized lesion of retina (eg, macular edema, tumors), 1 or more sessions; photocoagulation* (work RVU = 6.36 and 15 minutes intra-service time, IWPUT = 0.1991) and added the intensity for 5 additional intra-service minutes associated with 66984 (20 minutes intra-service time). (5 minutes x 0.1991 intensity of CPT code 67210 = 0.99, 6.36 + 0.99 = 7.35). The RUC conducted a thorough search of all other potential crosswalk codes and ran into a lack of potential crosswalk codes due to the complete lack of similarly intense major surgical procedures with a comparable amount of skin-to-skin time, OR time and amount of post-operative care. The RUC noted there are no distinct crosswalks to support the intensity of this service and the only appropriate code to reference with similar intensity is 67210. A minority of those surveyed, chose CPT code 67210 as a top key reference service and ranked the intensity and complexity of 66984 as somewhat more to much more than 67210. The specialty societies indicated that as an intraocular procedure, 66984 is much more intense and complex than 67210, which is an extraocular laser procedure with a contact lens placed on the eye.

The RUC noted that the survey top key reference codes 65850 *Trabeculectomy ab externo* (work RVU = 11.39, IWPUT = 0.1109) and 66184 *Revision of aqueous shunt to extraocular equatorial plate reservoir; without graft* (work RVU = 9.58, IWPUT = 0.0485) have a much lower IWPUT than what would be appropriate for the much more intense surveyed code. The intensity of cataract surgery has not changed and the magnitude estimation in the survey data supports that the intensity of this service is high. All the intra-service time for cataract surgery is spent with both the physicians' hands inside the eye and both feet managing ultrasound and microscope foot pedals, where a slight misstep can lead to serious complications such as endophthalmitis or retinal detachment with permanent loss of vision, which contribute to the intensity of the procedure.

The RUC recommends 13 minutes pre-service evaluation, 1 minutes pre-service positioning, 6 minutes pre-service scrub/dress/wait time, 20 minutes intra-service time, 5 minutes immediate post-service time, half a discharge day management (99238), two 99213 office visits and one 99212 office visit. The first post-operative visit is a 99212 visit on the first day after surgery in which the physician performs an exam on an un-dilated eye, checking visual acuity, intraocular pressure, incision integrity, and level of inflammation. The remaining two post-operative visits are 99213 visits approximately one week and one month postoperatively to check visual acuity, intraocular pressure, incision integrity, corneal clarity, level of inflammation, and detailed examination of the central retina for cystoid macular edema and peripheral retina for tears or detachments. These exams must be performed on a dilated eye as specified by practice guidelines, to check for macular edema and ensure that retinal detachment has not occurred. **The RUC recommends a work RVU of 7.35 for CPT code 66984.**

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

The RUC reviewed the survey results from 31 ophthalmologists and determined to crosswalk the work RVU of 10.25 from CPT code 67110 *Repair of retinal detachment; by injection of air or other gas (eg, pneumatic retinopexy)* (work RVU = 10.25 and 30 minutes intra-service time) to this service. The RUC noted that the survey top key reference codes 66179 *Aqueous shunt to extraocular equatorial plate reservoir, external approach; without graft* (work RVU = 14.00, 55 minutes intra-service time and IWPUT = 0.1156) and 65285 *Repair of laceration; cornea and/or sclera, perforating, with reposition or resection of uveal tissue* (work RVU = 15.36, 90 minutes intra-service time and IWPUT = 0.0743) have much higher intra-service time and lower IWPUT than what would be appropriate for the much more intense surveyed code. The intensity of cataract surgery has not changed and the magnitude estimation in the survey data supports that the intensity of this service is high. All the intra-service time for cataract surgery is spent with both the physicians' hands inside the eye and both feet managing ultrasound and microscope foot pedals, where a slight misstep can lead to serious complications such as endophthalmitis or retinal detachment with permanent loss of vision, which contributes to the intensity of the procedure. The RUC conducted a thorough search of all other potential crosswalk codes and ran into a lack of potential crosswalk codes due to the lack of similarly intense major surgical procedures with a comparable amount of skin-to-skin time, OR time and amount of post-operative care. The RUC noted the only appropriate crosswalk for this intense service is 67110. CPT code 66988 has similar total time and the same intra-service time of 30 minutes. CPT code 66988 is appropriately more intense than CPT code 67110. CPT code 67110 involves an injection of air into the vitreous to tamponade the retinal detachment and there is relatively less intraocular manipulation. Whereas, the intra-service work for 66988 includes work all performed inside the eye.

The RUC recommends 25 minutes pre-service evaluation, 3 minutes pre-service positioning, 10 minutes pre-service scrub/dress/wait time, 30 minutes intra-service time, 7 minutes immediate post-time, half a discharge day management (99238), four 99213 office visits and one 99212 office visit. The first post-operative visit is a 99212 visit on the first day after surgery in which the physician performs an exam on an undilated eye, checking visual acuity, intraocular pressure, incision integrity, and level of inflammation. The remaining four post-operative visits are 99213 visits approximately 1, 2, 4, and 6-8 weeks postoperatively, in which the physician performs an exam on a dilated eye, to check visual acuity, intraocular pressure, incision integrity, corneal clarity, level of inflammation, and detailed examination of the central retina for cystoid macular edema and peripheral retina for tears or detachments. These exams must be performed on a dilated eye, as specified by practice guidelines, to check for macular edema and ensure that retinal detachment has not occurred. **The RUC recommends a work RVU of 10.25 for CPT code 66988.**

Flag

The value for CPT codes 66984 and 66987 were established using a building block methodology, the RUC notes that they should be flagged as **“Do not use to validate for physician work.”**

Practice Expense

The RUC recommends the standard 090-day global period direct practice expense inputs as submitted by the specialty society.

Work Neutrality

The RUC's recommendation for this code will result in an overall work savings that should be redistributed back to the Medicare conversion factor.

Upper Gastrointestinal Tract Imaging (Tab 12)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT codes 74240 and 74246 were initially identified as part of this screen. In January 2018, the RUC referred these services to the CPT Editorial Panel to condense this family of services and combine fluoroscopy. In May 2018, the CPT Editorial Panel approved revision of nine codes, addition of two codes and deletion of five codes to conform to other families of radiologic examinations. The existing codes omitted key information regarding study types and provided inconsistent guidance on whether certain components are included in each code. The revisions will address these limitations and reflect the work inherent in each examination. The specialty society surveyed the lower GI codes (CPT codes 74250, 74251, 74270, 74280) for the October 2018 RUC meeting and requested to delay survey of the upper GI codes in this family (CPT codes 74210, 74220, 74XX0, 74230, 74240, 74246, and 74248) until January 2019.

Compelling Evidence

The specialty society presented compelling evidence based on flawed methodology in the previous valuation. The two codes identified by the screen, CPT codes 74240 and 74246, are both CMS/Other sourced. Therefore, how the times and values were established is unknown or flawed. The RUC accepted compelling evidence for these two codes based on flawed methodology.

Post-service Time

The RUC discussed the immediate post-service time for the family and noted that there were differences in the recommended post-service times while the description of post-service work is the same for all the codes. The specialty explained that, unlike the radiology codes that have a post-time of 1 minute, this family is more appropriately considered to be *procedural fluoroscopy codes using X-rays*. As such, they are not comparable for post-times to common X-ray codes or to other imaging codes, such as CT and MR, because they have their own unique procedural aspects. The additional work in the post-time period involves more and different images than a common X-ray, it includes multiple fluoroscopic images and review of a lengthier report that discusses a procedure rather than an imaging result. Recognizing the fluoroscopic image burden, the RUC determined that with the affirmation of CPT codes 74210 and 74230, with post-service times of 2 and 3 minutes respectively, there should be 3 minutes of post-service time for all other codes in the family.

74220 Radiologic examination, esophagus, including scout chest radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study

The RUC reviewed the survey results from 72 radiologists and determined that the survey 25th percentile work RVU of 0.60 accurately reflects the physician work necessary for this service and falls below the existing value. This code was recently valued in April 2017 but has been split into two codes (CPT codes 74221 and 74220) and thus was resurveyed. The RUC recommends 3 minutes pre-service time, 10 minutes intra-service time, and 3 minutes immediate post-service time.

The RUC compared CPT code 74220 to the top key reference code 74150 *Computed tomography, abdomen; without contrast material* (work RVU = 1.19 and 12 minutes intra-service time) and noted that the survey code has two minutes less intra-service time and half the intensity as the reference code. The esophagus study is a more focused examination evaluating a specific problem or possible etiologies in one organ system, while the CT abdomen without contrast includes a larger number of anatomic structures and a wider range of pathologic conditions, supported by the higher intensity and greater amount of physician work. The RUC also compared the survey code to the second key reference code 74160 *Computed tomography, abdomen; with contrast material(s)* (work RVU = 1.27 and 15 minutes

intra-service time) and noted likewise, that the survey code is appropriately valued lower than the reference code, which has 5 minutes more intra-service time and higher intensity.

The RUC compared the survey code to MPC code 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 noted that the survey code has identical intra-service and total time as the comparison code. However, the survey code is slightly more intense and complex, relating for example, to the need for patient repositioning and other maneuvers throughout the examination, accounting for the slightly higher intensity and work RVU. The RUC also compared the survey code to MPC code 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient, ...* (work RVU = 0.76 and 10 minutes intra-service time) and noted that the survey code has identical intra-service time as the comparison code, but two less minutes of pre-service time, as well as periods of less intense work, supporting the slightly lower work RVU.

The RUC concluded that CPT code 74220 should be valued at the 25th percentile work RVU as supported by the survey. Further, the recommendation maintains relativity within the upper and lower gastrointestinal tract X-ray family and greater RBRVS. **The RUC recommends a work RVU of 0.60 for CPT code 74220.**

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

The RUC reviewed the survey results from 72 radiologists and determined that the survey 25th percentile work RVU of 0.70 accurately reflects the physician work necessary for this service. The RUC noted that double-contrast studies take longer to perform than the single-contrast codes in the family and require more physician work. The RUC recommends 3 minutes pre-service time, 12 minutes intra-service time, and 3 minutes immediate post-service time.

The RUC compared the survey code to the top key reference code 74160 *Computed tomography, abdomen; with contrast material(s)* (work RVU = 1.27 and 15 minutes intra-service time) and noted that the survey code is appropriately valued lower than the reference code which has 3 minutes more intra-service time and higher intensity. The esophagus study is a more focused examination evaluating a specific problem or possible etiologies in one organ system, while the CT abdomen with contrast includes a larger number of anatomic structures and a wider range of pathologic conditions, supported by the higher value.

For additional support, the RUC compared the survey code to MPC code 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient, ...* (work RVU = 0.76 and 10 minutes intra-service time) and noted that the survey code has greater intra-service time but overall less intense work when compared to the low-complexity E/M encounter, therefore the recommended work RVU is slightly lower than the comparison code. The RUC concluded that CPT code 74221 should be valued at the 25th percentile work RVU as supported by the survey. Further, the recommendation maintains relativity within the upper and lower gastrointestinal tract X-ray family and greater RBRVS. **The RUC recommends a work RVU of 0.70 for CPT code 74221.**

74240 Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study

The RUC reviewed the survey results from 72 radiologists and determined that the survey 25th percentile work RVU of 0.80 accurately reflects the physician work necessary for this service. The RUC recommends 4 minutes pre-service time, 12 minutes intra-service time, and 3 minutes immediate post-service time.

The RUC compared the survey code to MPC code 76700 *Ultrasound, abdominal, real time with image documentation; complete* (work RVU = 0.81, 11 minutes intra-service time) and noted that these services require similar physician time, and intensity to perform and thus should be valued similarly. For additional support, the RUC compared the survey code to CPT code 76641 *Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; complete* (work RVU = 0.73, 12 minutes intra-service time, 22 minutes total time), which has identical intra-service time. The survey code is more intense and complex to perform and is appropriately valued higher. The RUC also compared the survey code to CPT code 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* (work RVU = 0.85, 12 minutes intra-service time, 28 minutes total time), which has identical intra-service time. The survey code is appropriately valued lower given the greater total time of the comparison code.

The RUC concluded that CPT code 74240 should be valued at the 25th percentile work RVU as supported by the survey. Further, the recommendation maintains relativity within the upper and lower gastrointestinal tract X-ray family and greater RBRVS. **The RUC recommends a work RVU of 0.80 for CPT code 74240.**

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

The RUC reviewed the survey results from 72 radiologists and determined that the survey 25th percentile work RVU of 0.90 accurately reflects the physician work necessary for this service. The RUC noted that the double-contrast study takes longer to perform than the single-contrast codes in the family. The RUC recommends 4 minutes pre-service time, 15 minutes intra-service time, and 3 minutes immediate post-service time.

The RUC compared CPT code 74246 to the top key reference code 74160 *Computed tomography, abdomen; with contrast material(s)* (work RVU = 1.27, 15 minutes intra-service time, 23 minutes total time) and noted that the two examinations have identical intra-service time and nearly identical total time. However, the reference code has higher intensity, accounting for the higher work RVU. The upper GI study is a more focused examination evaluating a specific problem or possible etiologies in one organ system while the CT abdomen with contrast includes a larger number of anatomic structures and a wider range of pathologic conditions, supported by the higher intensity.

For additional support, the RUC compared the survey code to MPC code 92012 *Ophthalmological services: medical examination and evaluation, with initiation or continuation of diagnostic and treatment program; intermediate, established patient* (work RVU = 0.92, 15 minutes intra-service time) and noted that these services require the same intra-service time and similar intensity and complexity to perform and thus should be valued similarly. The RUC concluded that CPT code 74246 should be valued at the 25th percentile work RVU as supported by the survey. Further, the recommendation maintains relativity within the upper and lower gastrointestinal tract X-ray family and greater RBRVS. **The RUC recommends a work RVU of 0.90 for CPT code 74246.**

74248 Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; with small intestine follow-through study, including multiple serial images (List separately in addition to code for primary procedure)

The RUC reviewed the survey results from 72 radiologists and determined that the survey 25th percentile work RVU of 0.70 accurately reflects the physician work necessary for this service. The RUC recommends 12 minutes of intra-service time and total time for this new add-on code. The intra-service

time also represents the survey 25th percentile. It is below the survey median time of 20 minutes because this service was previously reported as part of CPT codes 74245 or 74249, both of which are being deleted, and that were CMS/Other codes with a total of 18 minutes of physician work. The new add-on code will have a similar intra-service time as the base services with which it is being performed, codes 74240 or 74246, which have survey median intra-service times of 12 minutes and 15 minutes, respectively.

The RUC compared CPT code 74248 to the top key reference code 76810 *Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, after first trimester (> or = 14 weeks 0 days), transabdominal approach; each additional gestation (List separately in addition to code for primary procedure)* (work RVU = 0.98, 20 minutes intra-service time) and noted that the survey code requires 8 minutes less intra-service time, accounting for the lower work RVU. However, code 74248 requires imaging of an entirely different region of anatomic structures than the base codes, requiring patient repositioning and additional maneuvers, accounting for the slightly higher IWP/UT than the reference code.

For additional support, the RUC compared CPT code 74248 to MPC code 64484 *Injection(s), anesthetic agent 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)* (work RVU = 1.00, 10 minutes intra-service time) and noted that the survey code requires 2 more minutes of intra-service time than the comparison code, and is appropriately valued lower since it is a less intense non-invasive procedure. The RUC concluded that CPT code 74248 should be valued at the 25th percentile work RVU as supported by the survey. Further, the recommendation maintains relativity within the upper and lower gastrointestinal tract X-ray family and greater RBRVS. **The RUC recommends a work RVU of 0.70 for CPT code 74248.**

CPT Referral

The RUC determined that CPT code 74248 should be referred to the CPT Editorial Panel to correct the add-on code descriptor to clearly delineate the small bowel follow-through as a procedure reported in addition to the preceding upper GI code. Some RUC members expressed concern that there may be confusion in reporting this code that might be mistaken as inclusive of the preceding upper GI code. **The RUC recommends CPT code 74248 be referred to the CPT Editorial Panel for editorial revision.**

Practice Expense

The Practice Expense Subcommittee reviewed and made slight changes in the clinical staff time in one of the codes, 74230, which carried through and created a minor change in the equipment minutes. In response to an inquiry from CMS, the specialty society clarified that speech pathologists use CPT codes 92610 and 92611 to bill for non-fluoroscopic and fluoroscopic evaluations. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Affirmation of RUC Recommendations

The RUC affirmed the recent RUC recommendations for CPT code 74210 (work RVU= 0.59, 3 minutes pre-service time, 10 minutes intra-service time and 2 minutes immediate post-service time) and CPT code 74230 (work RVU= 0.53, 2 minutes pre-service time, 10 minutes intra-service time and 3 minutes immediate post-service time). The relativity within the family remains correct.

Myocardial PET (Tab 13)

John McAllister, MD (AAO); David Glasser, MD (AAO); Richard Wright, MD (ACC); David Wessell, MD (ACR); Thad Waites, MD (ACC); William Van Decker, MD (SNMMI); Ed Tuohy, MD (ACC); Kurt Schoppe, MD; (ACR); Gary L. Dillehay, MD (SNMMI); Scott C. Bartley, MD (ACNM)

In January 2017, CPT code 78492 was identified via the High Volume Growth screen with total Medicare utilization over 10,000 which increased by at least 100% from 2009 through 2014. The RUC recommended referring this code to the CPT Editorial Panel to undergo substantive descriptor changes to reflect newer technology aspects such as wall motion, ejection fraction, flow reserve, and technology updates for hardware and software. In May 2018 the CPT Editorial Panel approved deletion of a Category III code, addition of six Category I codes, and revision of three codes to separately identify component services included for myocardial imaging using positron emission tomography.

In October 2018, the RUC pre-facilitated this tab and thoroughly discussed the issues surrounding the survey of this family of services. The RUC recognized significant problems, such as these services are essentially incremental studies, of myocardial PET metabolic, myocardial PET perfusion, with or without CT studies. However, the surveyed work RVUs were non-consistent increments and the physician time increments were only 0, 2, 3 or 5 minutes different. Noting that if these were stand-alone services, the differences would most likely be larger, like 5 or 10 minutes. Likewise, the difference of work was also not consistent. The RUC explored various alternative accepted methodologies and nothing produced an appropriate valuation of these services. The RUC also noted there are limited crosswalk codes to develop work RVUs for these services. Due to the survey outcome and concern with relativity among this family of services, the RUC recommended resurveying these services for January 2019. The specialty societies indicated they would request via the Research Subcommittee to resurvey using a custom survey tool where the work RVU and physician time question would be on the same page of the survey in a tabular format — the custom survey would include additional explanatory language.

In January 2019, the specialty societies presented new survey data and recommendations that demonstrated the appropriate rank order for this family of services.

Compelling Evidence

The specialty societies indicated and the RUC agreed that there is compelling evidence that the physician work has changed for these services due to a change in technology. Myocardial PET imaging has evolved in the past two decades. There have been changes in instrumentation, computer processing, and software since the mid 1990's that allow extraction of greater clinically valuable information on metabolic, perfusion and function. Of note, when these legacy PET services were originally developed, the technology to perform wall motion or ejection fraction for myocardial PET perfusion did not exist, these new services now include this work. These changes have enhanced the acquisition, processing, quality control, and interpretation while also adding new variables for analysis and review by the physician or qualified healthcare professional.

PET Metabolic – Single Study

78459 Myocardial imaging, positron emission tomography (PET), metabolic evaluation study (including ventricular wall motion(s), and/or ejection fraction(s), when performed) single study;

The RUC reviewed the survey results from 63 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 1.61 appropriately accounts for the work required to perform CPT code 78459. The RUC recommends 10 minutes pre-service time, 15 minutes intra-service time and 8 minutes immediate post-service time. This is a PET scan instead of examining at blood flow, as with the perfusion PET, it examines metabolism using a tracer, such as glucose. The RUC agreed that

CPT code 78459 requires slightly more physician work than code 78491 *Myocardial imaging PET perfusion, single study* (RUC recommended work RVU = 1.56) because the metabolic codes examine glucose uptake by the myocardium. The heart is a peculiar organ, as its primary energy source is fatty acid, not glucose like the brain and skeletal muscle. Therefore, the physician needs certain metabolic conditions to be met at the time of the tracer injection for glucose levels and patients must adhere to a specific diet prior to the injections. The metabolic scans are more interactive to insure a quality uptake scan occurs. The RUC compared the surveyed code to the key reference services 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 and total time of 40 minutes) and 78811 *Positron emission tomography (PET) imaging; limited area (eg, chest, head/neck)* (work RVU = 1.54 and total time of 40 minutes) and noted that CPT code 78459 requires less total time but is more intense and complex to perform. Thus, appropriately valued similarly to the reference services. For additional support, the RUC also compared the surveyed code to MPC code 74176 *Computed tomography, abdomen and pelvis; without contrast material* (work RVU = 1.74 and total time of 32 minutes). **The RUC recommends a work RVU of 1.61 for CPT code 78459.**

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

The RUC reviewed the survey results from 66 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 1.76 appropriately accounts for the work required to perform CPT code 78429. The RUC recommends 10 minutes pre-service time, 18 minutes intra-service time and 10 minutes immediate post-service time. The RUC confirmed that CPT code 78429, which includes CT, appropriately requires 3 more minutes intra-service time and 2 more minutes immediate post-service time than the myocardial PET without CT (78459). Likewise, the recommended work RVU for the *with and without CT* demonstrates the appropriate relativity. The RUC compared the surveyed code to the second key reference service 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* (work RVU = 1.75 and total time of 40 minutes) noting that both services require similar physician work, time and intensity to perform and thus should be valued similarly. For additional support, the RUC also compared the surveyed code to similar service 70552 *Magnetic resonance (eg, proton) imaging, brain (including brain stem); with contrast material(s)* (work RVU = 1.78 and total time of 32 minutes). **The RUC recommends a work RVU of 1.76 for CPT code 78429.**

PET Perfusion – Single Study

78491 Myocardial imaging, positron emission tomography, perfusion study (including ventricular wall motion(s), and/or ejection fractions(s), when performed); single study, at rest or stress (exercise or pharmacologic)

The RUC reviewed the survey results from 64 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 1.56 appropriately accounts for the work required to perform CPT code 78491. The RUC recommends 8 minutes pre-service time, 15 minutes intra-service time and 7 minutes immediate post-service time. The RUC compared the surveyed code to the key reference services 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 and total time of 40 minutes) and 78811 Positron emission tomography (PET) imaging; limited area (eg, chest, head/neck) (work RVU = 1.54 and total time of 40 minutes) and noted that CPT code 78491 requires less total time but is more intense and complex to perform. CPT code 78491 is slightly more intense than the key reference codes because it involves PET isotopes, whereas CPT code 78452 does not and is performed on complex patients that are high risk with multiple previous stents and CABGs. Thus, appropriately valued similarly to the reference services and maintains the relativity among these services. For additional support, the RUC also compared the surveyed code to MPC code 74176 Computed tomography, abdomen and pelvis; without contrast material (work RVU = 1.74 and total time of 32 minutes). **The RUC recommends a work RVU of 1.56 for CPT code 78491.***

78430 Myocardial imaging, positron emission tomography, perfusion study (including ventricular wall motion(s), and/or ejection fractions(s), when performed); single study, at rest or stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan

The RUC reviewed the survey results from 61 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 1.67 appropriately accounts for the work required to perform CPT code 78430. The RUC recommends 8 minutes pre-service time, 17 minutes intra-service time and 7 minutes immediate post-service time. The RUC confirmed that CPT code 78430, which includes concurrent CT, appropriately requires 2 more minutes intra-service time than the myocardial PET perfusion single study without CT (78491). Likewise, the recommended work RVU for the *with and without CT* demonstrates the appropriate relativity. The RUC compared the surveyed code to the key reference services 78814 *Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)* (work RVU = 2.20 and total time of 60 minutes) and noted that the survey code requires less physician time. The RUC also compared the service to second key reference code 78072 *Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT), and concurrently acquired computed tomography (CT) for anatomical localization* (work RVU = 1.60 and total time of 30 minutes) and noted that CPT code 78430 is slightly more intense and complex to perform. CPT code 78430 requires less physician time and work than top key reference service 78814 and slightly more physician time and work than the second key reference service 78072. Thus, appropriately valued compared to the reference services. For additional support, the RUC also compared the surveyed code to similar code 53855 *Insertion of a temporary prostatic urethral stent, including urethral measurement* (work RVU = 1.64 and total time of 32 minutes). **The RUC recommends a work RVU of 1.67 for CPT code 78430.**

PET Perfusion – Multiple Studies

78492 Myocardial imaging, positron emission tomography, perfusion study (including ventricular wall motion(s), and/or ejection fractions(s), when performed); multiple studies at rest and stress (exercise or pharmacologic)

The RUC reviewed the survey results from 71 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 1.80 appropriately accounts for the work required to perform CPT code 78492. CPT code 78492 is a myocardial PET perfusion study comparing perfusion immediately following exercise and at rest. The RUC recommends 8 minutes pre-service time, 20 minutes intra-service time and 10 minutes immediate post-service time. The RUC compared the surveyed code to the key reference services 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 and total time of 40 minutes) and 78812 *Positron emission tomography (PET) imaging; skull base to mid-thigh* (work RVU = 1.93 and total time of 50 minutes) and noted that CPT code 78492 requires less total physician time but is

slightly more intense and complex to perform, thus, appropriately valued compared to the reference services. For additional support, the RUC also compared the surveyed code to MPC code 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* (work RVU = 1.75 and total time of 40 minutes) and similar service code 70552 *Magnetic resonance (eg, proton) imaging, brain (including brain stem); with contrast material(s)* (work RVU = 1.78 and total time of 32 minutes). **The RUC recommends a work RVU of 1.80 for CPT code 78492.**

78431 Myocardial imaging, positron emission tomography, perfusion study (including ventricular wall motion(s), and/or ejection fractions(s), when performed); multiple studies at rest and stress (exercise or pharmacologic), with concurrently acquired computed tomography transmission scan

The RUC reviewed the survey results from 64 cardiologists and nuclear medicine physicians and determined that it is appropriate to crosswalk CPT code 78431 to the work RVU of CPT code 64617 *Chemodenervation of muscle(s); larynx, unilateral, percutaneous (eg, for spasmodic dysphonia), includes guidance by needle electromyography, when performed* (work RVU = 1.90 and 15 minutes pre-service evaluation pre-time, 1 minute pre-service positioning pre-time, 15 minutes intra-service time and 5 minutes immediate post-service time). The RUC determined the survey 25th percentile work RVU of 2.00 was slightly high for the addition of concurrent CT in comparison with CPT code 78492 PET, perfusion, multiple studies without CT. The RUC determined a work RVU of 1.90 and 8 minutes pre-service time, 21 minutes intra-service time and 10 minutes immediate post-service time appropriately accounts for the work and time required to perform code 78431. Therefore, the crosswalk maintains the rank order and relativity among this family of services.

The RUC compared the surveyed code to the key reference services 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)* (work RVU = 2.40 and total time of 50 minutes) and 78814 *Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)* (work RVU = 2.20 and total time of 60 minutes) and noted that CPT code 78431 requires less total physician work and time to perform. Thus, appropriately valued compared to the reference services. For additional support, the RUC referenced similar service 56821 *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 and total time of 37 minutes). **The RUC recommends a work RVU of 1.90 for CPT code 78431.**

PET Perfusion Single Study + Metabolic Study

78432 Myocardial imaging, positron emission tomography, combined perfusion with metabolic evaluation study (including ventricular wall motion(s), and/or ejection fraction(s), when performed), dual radiotracer (eg, myocardial viability);

The RUC reviewed the survey results from 59 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 2.07 appropriately accounts for the work required to perform CPT code 78432. The RUC recommends 10 minutes pre-service time, 22 minutes intra-service time and 10 minutes immediate post-service time. CPT code 78432 includes the myocardial PET perfusion and metabolic studies. This service is intense and is performed on complicated patients, with injection fractions less than 30% and multi-vessel coronary disease, where the physician is trying to decide if there is enough tissue that is worth re-vascularizing. The physician tries to match the perfusion

flow to the metabolism to look for areas of mismatch where there is decreased flow but retained increased metabolism.

The RUC compared the surveyed code to the key reference services 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)* (work RVU = 2.40 and total time of 50 minutes) and 78815 *Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh* (work RVU = 2.44 and total time of 65 minutes) and noted that CPT code 78432 requires less total physician time and work but is slightly more intense and complex to perform, thus, appropriately valued lower compared to the reference services. For additional support, the RUC also compared the surveyed code to similar service CPT code 56821 *Colposcopy of the vulva; with biopsy(s)* (work RVU = 12.05 and total time of 45 minutes). **The RUC recommends a work RVU of 2.07 for CPT code 78432.**

78433 Myocardial imaging, positron emission tomography, 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

The RUC reviewed the survey results from 61 cardiologists and nuclear medicine physicians and determined to crosswalk CPT code 78433 to CPT code 71552 *Magnetic resonance (eg, proton) imaging, chest (eg, for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s), followed by contrast material(s) and further sequences* (work RVU = 2.26 and 7.5 minutes evaluation pre-time, 24 minutes intra-service time and 10 minutes immediate post-service time). The RUC determined the survey 25th percentile work RVU of 2.30 was slightly high for the addition of CT in comparison with CPT code 78432 PET perfusion single study + metabolic study, without concurrent CT. The RUC determined a work RVU of 2.26 and 10 minutes pre-service time, 24 minutes intra-service time and 10 minutes immediate post-service time appropriately accounts for the work and time required to perform code 78433. Therefore, the crosswalk maintains the rank order and relativity among this family of services.

The RUC compared the surveyed code to the key reference services 75561 *Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences;* (work RVU = 2.60 and total time of 65 minutes) and 78815 *Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh* (work RVU = 2.44 and total time of 65 minutes) and noted that CPT code 78433 requires less total physician work and time to perform. Thus, appropriately valued compared to the reference services. **The RUC recommends a work RVU of 2.26 for CPT code 78433.**

Add-on

78434 Absolute quantitation of myocardial blood flow (AQMBF), positron emission tomography, rest and pharmacologic stress (List separately in addition to code for primary procedure)

The RUC reviewed the survey results from 51 cardiologists and nuclear medicine physicians and determined that the survey 25th percentile work RVU of 0.63 appropriately accounts for the work required to perform CPT code 78434. The RUC recommends 11 minutes of intra-service time. This service involves a complex integration of clinical information — it is a dynamic flow study performed real-time with an electrocardiogram. The physician must assess the flow data and ensure the quality is good enough to interpret and report since it will make major clinical differences. There are a variety of regions of interest to review and a variety of curves to match for differences between rest and stress and the

physician must attempt to adjudicate those values in three different vascular beds. This is not simply the reporting of a number nor physician validation of a computer-generated number.

The RUC compared the surveyed code to the key reference services 78496 *Cardiac blood pool imaging, gated equilibrium, single study, at rest, with right ventricular ejection fraction by first pass technique* (List separately in addition to code for primary procedure) (work RVU = 0.50 and intra-service/total time of 19 minutes) and 93567 *Injection procedure during cardiac catheterization including imaging supervision, interpretation, and report; for supra-avalvular aortography* (List separately in addition to code for primary procedure) (work RVU = 0.97 and intra-service/total time of 15 minutes) and noted that CPT code 78434 requires similar physician work and time to perform. Thus, appropriately bracketed by the reference services. The RUC noted that the survey 25th percentile work RVU of 0.63 falls appropriately in the broader range relative to many other services. For additional support, the RUC referenced MPC codes 51797 *Voiding pressure studies, intra-abdominal (ie, rectal, gastric, intraperitoneal)* (List separately in addition to code for primary procedure) (work RVU = 0.80 and total time of 15 minutes) and 96411 *Chemotherapy administration; intravenous, push technique, each additional substance/drug* (List separately in addition to code for primary procedure) (work RVU = 0.20 and total time of 7 minutes). **The RUC recommends a work RVU of 0.63 for CPT code 78434.**

Practice Expense

The Practice Expense Subcommittee accepted the compelling evidence as explained, based on a change in technology. The PE Subcommittee corrected the equipment minutes associated with the standard formula for highly technical equipment. The PE Subcommittee reviewed the software packages submitted and ensured only the software used per individual CPT code, per patient, per day, was included in the direct practice expense inputs. The Subcommittee discussed how the radioisotopes were transported to the lab and determined that the lead-lined transport is part of the indirect practice expense and removed the equipment item, *safe storage, lead-lined* (ER058). Lastly, the PE Subcommittee reduced the clinical staff time for 78432 and 78433 since the patient comes back a second time. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

New Technology

The RUC recommends that these services be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

SPECT-CT Procedures (Tab 14)

Daniel Wessell, MD, PhD (ACR); William Van Decker, MD (SNMMI); Kurt Schoppe, MD (ACR); Gary L. Dillehay, MD (SNMMI); Scott C. Bartley, MD (ACNM)

Facilitation Committee #3

At the September 2018 CPT Editorial Panel meeting, the Panel revised 5 codes, created 4 new codes and deleted nine codes to better differentiate between planar radiopharmaceutical localization procedures and SPECT, SPECT-CT and multiple area or multiple day radiopharmaceutical localization/distribution procedures. The code change applicants noted and the Panel agreed that the resources involved in performing these services on different organ systems and body areas were similar enough where a generic family of codes be created, modeled after the current tumor and radiopharmaceutical distribution codes.

Compelling Evidence

The RUC reviewed the specialty's presented argument for compelling evidence. Similar to PET-CT, there have been changes in SPECT and SPECT-CT instrumentation, computer processing, and software since the early 2010's that allow extraction of greater clinically valuable information regarding tumor, infection, inflammation, and distribution of a variety of radiotracers. These changes have enhanced the acquisition, processing, quality control, and interpretation while also adding new variables for acquisition

protocols, analysis and a shift in the typical patients. The RUC accepted compelling evidence based on a change in technique/change in technology.

78800 Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s), (includes vascular flow and blood pool imaging when performed); planar limited single area (eg, head, neck, chest pelvis), single day of imaging

The RUC reviewed the survey results from 77 physicians and agreed on the following physician time components: 7 minutes of pre-service, 10 minutes of intra-service time and 10 minutes of immediate post-service time. CPT code 78800 involves imaging one body area with planar technology and is the least intense imaging study to perform in this family of services.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the survey 25th percentile work RVU of 0.70. To justify a work RVU of 0.70, the RUC compared the survey code to CPT code 94617 *Exercise test for bronchospasm, including pre- and post-spirometry, electrocardiographic recording(s), and pulse oximetry* (work RVU= 0.70, intra-service time of 10 minutes, total time of 26 minutes) and noted that both services have identical intra-service time and very similar total time and involve a similar amount of physician work. The RUC also compared the survey code to the 2nd key reference code 78305 *Bone and/or joint imaging; multiple areas* (work RVU= 0.83, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services have identical intra-service time, but the reference code is more intense and complex to perform justifying the higher work value. The RUC also compared the survey code to CPT code 93289 *Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional...* (work RVU= 0.75, intra-service time of 10 minutes, total time of 24 minutes) and noted that both services involve identical intra-service time and should be valued similarly. **The RUC recommends a work RVU of 0.70 for CPT code 78800.**

78801 Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s), (includes vascular flow and blood pool imaging when performed); planar, 2 or more areas (eg, abdomen and pelvis, head and chest), 1 or more days of imaging or single area imaging over 2 or more days

The RUC reviewed the survey results from 77 physicians and agreed on the following physician time components: 10 minutes of pre-service, 10 minutes of intra-service time and 10 minutes of immediate post-service time. This service involves either imaging of two or more body areas using planar technology, or performing two days of imaging of the same area and comparing the studies from each day.

The RUC reviewed the survey respondents' estimated physician work values and agreed that maintaining the current work RVU of 0.79 is appropriate and is supported by the survey 25th percentile work RVU of 0.86. To justify a work RVU of 0.79, the RUC compared the survey code to top key reference code 78305 *Bone and/or joint imaging; multiple areas* (work RVU= 0.83, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services have identical intra-service time and a comparable amount of physician work. The RUC also compared the survey code to CPT code 78070 *Parathyroid planar imaging (including subtraction, when performed);* (work RVU= 0.80, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services have identical intra-service time and involve a similar amount of physician work. **The RUC recommends a work RVU of 0.79 for CPT code 78801.**

78802 Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s), (includes vascular flow and blood pool imaging when performed); planar, whole body, single day of imaging

The RUC reviewed the survey results from 80 physicians and agreed on the following physician time components: 10 minutes of pre-service, 10 minutes of intra-service time and 10 minutes of immediate post-service time. The RUC noted that survey code 78802 is a more intense service to perform relative to code 78801 as the whole-body code involves reviewing more anatomy and somewhat more complex decision-making in the same amount of time. In addition to the whole body imaging, this service also includes any spot or localized planar imaging as needed.

The RUC reviewed the survey respondents' estimated physician work values and agreed that maintaining the current work RVU of 0.86 would be appropriate and is supported by the survey 25th percentile work RVU of 0.89. To justify a work RVU of 0.86, the RUC compared the survey code to top key reference code 78306 *Bone and/or joint imaging; whole body* (work RVU= 0.86, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services have identical intra-service time and involve an identical amount of physician work. Ninety-two percent of the survey respondents who selected the top key reference service 78306 said that the intensity and complexity between both services is identical. The RUC also compared the survey code to CPT code 78598 *Quantitative differential pulmonary perfusion and ventilation (eg, aerosol or gas), including imaging when performed* (work RVU= 0.85, intra-service time of 10 minutes, total time of 24 minutes) and noted that both services have identical intra-service time and involve a similar amount of physician work. **The RUC recommends a work RVU of 0.86 for CPT code 78802.**

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), single day of imaging

The RUC reviewed the survey results from 76 physicians and agreed on the following physician time components: 10 minutes of pre-service, 22 minutes of intra-service time and 10 minutes of immediate post-service time. This survey code describes SPECT imaging and also includes any planar imaging that is performed on the same day of service. The specialty noted and the RUC agreed the SPECT and SPECT-CT services, which involves three-dimensional imaging, are relatively more intense services to perform than planar imaging codes 78800-78803 which do not involve three-dimensional imaging, and therefore would be expected to have a higher IWPUs.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the 25th percentile work RVU of 1.20. To justify a work RVU of 1.20, the RUC compared the survey code to top key reference code 78071 *Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT)* (work RVU= 1.20, intra-service time of 15 minutes, total time of 25 minutes) and noted that although the survey code involves somewhat more time, both services involve a very similar amount of physician work. The RUC also compared the survey code to CPT code 95908 *Nerve conduction studies; 3-4 studies* (work RVU= 1.25, intra-service time of 22 minutes, total time of 42 minutes) and noted that both services have identical times and should be valued similarly. **The RUC recommends a work RVU of 1.20 for CPT code 78803.**

78804 Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s), (includes vascular flow and blood pool imaging when performed); planar, whole body, requiring 2 or more days of imaging

The RUC reviewed the survey results from 79 physicians and agreed on the following physician time components: 10 minutes of pre-service, 15 minutes of intra-service time and 15 minutes of immediate post-service time. This service includes all of the work described by code 78804, but then also conducting

at least one additional whole body study on a separate day and then comparing the two or more studies performed on separate days. Additional spot planar imaging is also performed with this service, as needed.

The RUC reviewed the survey respondents' estimated physician work values and agreed that maintaining the current work RVU of 1.07 would be appropriate and is supported by the survey 25th percentile work RVU of 1.10. To justify a work RVU of 1.07, the RUC compared the survey code to 2nd key reference code 78582 *Pulmonary ventilation (eg, aerosol or gas) and perfusion imaging* (work RVU= 1.07, intra-service time of 12 minutes, total time of 27 minutes) and noted that although the survey code involves somewhat more intra-service and total time, both services involve a similar amount of physician work. The RUC also compared the survey code to MPC code 70460 *Computed tomography, head or brain; with contrast material(s)* (work RVU= 1.13, intra-service time of 12 minutes, total time of 22 minutes) and noted that the valuation of the survey code is supported when compared to the time and values of the MPC code as both services involve a comparable amount of physician work. **The RUC recommends a work RVU of 1.07 for CPT code 78804.**

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 or pelvis), single day of imaging

The RUC reviewed the survey results from 78 physicians and agreed on the following physician time components: 10 minutes of pre-service, 25 minutes of intra-service time and 10 minutes of immediate post-service time. This survey code describes SPECT imaging with concurrently acquired CT imaging for combined fusion review and also includes any planar imaging that is performed on the same day of service. The specialty noted and the RUC agreed the SPECT and SPECT-CT services, which involves three-dimensional imaging, are relatively more intense services to perform than planar imaging codes 78800-78803 which do not involve three-dimensional imaging, and therefore would be expected to have a higher IWPUs.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the survey 25th percentile work RVU of 1.60. To justify a work RVU of 1.60, the RUC compared the survey code to top key reference and MPC code 78072 *Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT), and concurrently acquired computed tomography (CT) for anatomical localization* (work RVU= 1.60, intra-service time of 20 minutes, total time of 30 minutes) and noted that although the survey code typically involves somewhat more physician time, both services involve a very similar amount of physician work. The RUC also compared the survey code to MPC code 99304 *Initial nursing facility care, per day, for the evaluation and management of a patient, which requires these 3 key components...* (work RVU= 1.64, intra-service time of 23 minutes, total time of 43 minutes) and noted that the survey code involves two more minutes of intra-service and total time and both services should have similar values. **The RUC recommends a work RVU of 1.60 for CPT code 78830.**

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, abdomen and pelvis), single day of imaging, or single area of imaging over 2 or more days

The RUC reviewed the survey results from 73 physicians and agreed on the following physician time components: 10 minutes of pre-service, 30 minutes of intra-service time and 15 minutes of immediate post-service time. This service involves either imaging of two or more body areas using SPECT

technology, or performing two days of imaging of the same area and comparing the studies from each day. The specialty noted and the RUC agreed the SPECT and SPECT-CT services, which involves three-dimensional imaging, are relatively more intense services to perform than planar imaging codes 78800-78803 which do not involve three-dimensional imaging, and therefore would be expected to have a higher IWPUTs in general.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the survey median work RVU of 1.93. To justify a work RVU of 1.93, the RUC compared the survey code to top key reference code 78812 *Positron emission tomography (PET) imaging; skull base to mid-thigh* (work RVU= 1.93, intra-service time of 30 minutes, total time of 50 minutes) and noted that both services have identical intra-service time and the same amount of physician work. The RUC also compared the survey code to CPT code 95957 *Digital analysis of electroencephalogram (EEG) (eg, for epileptic spike analysis)* (work RVU= 1.98, intra-service time of 50 minutes, total time of 55 minutes) and noted that both services involve identical intra-service and total time and a comparable amount of physician work. **The RUC recommends a work RVU of 1.93 for CPT code 78831.**

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, abdomen and pelvis), single day of imaging, or single area of imaging over 2 or more days imaging

The RUC reviewed the survey results from 72 physicians and agreed on the following physician time components: 10 minutes of pre-service, 35 minutes of intra-service time and 15 minutes of immediate post-service time, either performed on two or more body regions or multiple days. The specialty noted and the RUC agreed that the SPECT and SPECT-CT services, which involve three-dimensional imaging, are relatively more intense services to perform than the planar imaging codes 78800-78803 which do not involve three-dimensional imaging, and therefore would be expected to have higher IWPUTs in general.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the survey median work RVU of 2.23. To justify a work RVU of 2.23, the RUC compared the survey code to CPT code 95939 *Central motor evoked potential study (transcranial motor stimulation); in upper and lower limbs* (work RVU= 2.25, intra-service time of 30 minutes, total time of 60 minutes) and noted that the survey code involves somewhat more intra-service time and both codes involve the same total time and a similar amount of physician work. The RUC also compared the survey code to MPC Code 99310 *Subsequent nursing facility care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components...* (work RVU= 2.35, intra-service time of 35 minutes, total time of 70 minutes) and noted that both services have identical intra-service times, whereas the reference code involves somewhat more total time, supporting a somewhat lower value for the survey code. **The RUC recommends a work RVU of 2.23 for CPT code 78832.**

78835 Radiopharmaceutical quantification measurement(s) single area

The RUC reviewed the survey results from 39 physicians and agreed on the following physician time components: 17 minutes of intra-service time.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the survey 25th percentile work RVU of 0.51. To justify a work RVU of 0.51, the RUC compared the survey code to CPT

code 77002 *Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device) (List separately in addition to code for primary procedure)* (work RVU= 0.54, intra-service time of 15 minutes, total time of 17 minutes) and noted that both services have the same amount of total time and involve a similar amount of physician work. The RUC also compared the survey code to top key reference code 78496 *Cardiac blood pool imaging, gated equilibrium, single study, at rest, with right ventricular ejection fraction by first pass technique (List separately in addition to code for primary procedure)* (work RVU= 0.50, intra-service time of 19 minutes) and noted that both services involve a similar amount of physician work. **The RUC recommends a work RVU of 0.51 for CPT code 78835.**

Practice Expense

The PE Subcommittee corrected the equipment times based on the formulas as provided by CMS. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

New Technology/New Services

The RUC recommends that CPT codes 78830-78835 be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

Biofeedback Training (Tab 15)

Thomas Turk, MD (AUA); Mitch Schuster, MD (ACOG); Jonathan Rubenstein, MD (AUA); Kyle Richards, MD (AUA); Jonathan Kiechle, MD (AUA); Jon Hathaway, MD (ACOG)

The RUC identified services with a negative IWPOT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. CPT code 90911 was identified by this screen for review. At the April 2018 meeting, the specialty societies requested for the RUC to support their decision to refer this service to the CPT Editorial Panel for revision. The specialty societies noted that CPT code 90911 was initially created in 1993 for fecal incontinence. Since then, biofeedback for pelvic floor weakness has evolved and patients require disparate amounts of time for each session. Initial sessions may indeed take longer, however follow-up sessions are typically shorter. The specialty societies explained to the RUC their plan to submit a CPT code change application to delete code 90911 and create two time-based codes using 15-minute increments. The specialties also indicated they would recommend that a maximum of 4 units be billed on the same day with clear documentation of the time in the medical record. The RUC recommended CPT code 90911 be referred to CPT. In September 2018, CPT replaced one code with two new codes to describe biofeedback training initial 15 minutes of one-on-one patient contact and each additional 15 minutes of biofeedback training (one-on-one patient contact).

Compelling Evidence

The specialty societies indicated that there is compelling evidence that the physician work for this service has changed. Deleted CPT code 90911 *Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry* was created and surveyed by colorectal surgeons for fecal incontinence biofeedback training, however colorectal surgeons now represent less than 2% of the 2017 Medicare utilization and are no longer the dominant provider of this service. Additionally, in 1997, CMS significantly reduced the work RVU from 2.15 to 0.89, but maintained the colorectal surgery survey time resulting in a negative IWPOT. For these reasons, the RUC determined there is compelling evidence that the physician work described in these codes has changed.

90912 *Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry when performed; initial 15 minutes of one-on-one patient contact*

The RUC reviewed the survey results from 36 gynecologists and urologists and determined that the survey 25th percentile work RVU of 0.90 appropriately accounts for the work required to perform this

service. The RUC recommends 7 minutes pre-service evaluation, 5 minutes pre-service positioning and 3 minutes pre-service scrub/dress/wait pre-service time, 15 minutes intra-service time and 5 minutes immediate post-service time. The specialty societies specified that the scrub, dress and wait time includes the physician donning gloves, shaving and cleaning the patient with soap and water and applying alcohol to clean oils from the skin and any residual soap before applying the electrodes so they adhere to the patient.

The specialty societies noted that for a new patient the typical length of the first visit is 60 minutes total. For subsequent visits, the typical length of the session is 30 minutes total, which was confirmed by the survey respondents. The specialty societies also confirmed that if there are multiple sessions, the risks/benefits will be reiterated at the beginning of the session to remind the patient of the risks and discuss ongoing management of their expectations.

The RUC questioned if this service includes only direct physician time. The specialty societies confirmed that the physician is required to perform the service the entire 15 minutes, stimulating the correct pelvic floor muscles. The RUC recommends an editorial revision that specifies “15 minutes of one-on-one physician or qualified health care professional contact with the patient” so reporting of this service is clear. CPT will review this language at the February 2019 CPT meeting.

The RUC compared the surveyed code to the top two key reference services, CPT code 99213 *Office or other outpatient visit for the evaluation and management of an established patient*, (work RVU = 0.97, 15 minutes intra-service time and 23 minutes total time) and 57160 *Fitting and insertion of pessary or other intravaginal support device* (work RVU = 0.89, 15 minutes intra-service time and 40 minutes total time) and noted that the survey respondents indicated that the surveyed code requires identical to somewhat more intensity and complexity overall, which supports the recommendation. The RUC determined that these key reference services required similar physician work and time and established the appropriate relativity for CPT code 90912. For additional support the RUC referenced 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, 15 minutes intra-service time and 31 minutes total time). **The RUC recommends a work RVU of 0.90 for CPT code 90912.**

90913 *Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry when performed; each additional 15 minutes of one-on-one patient contact (List separately in addition to code for primary procedure)*

The RUC reviewed the survey results from 36 gynecologists and urologists and determined that the survey 25th percentile work RVU of 0.50 appropriately accounts for the work required to perform this service. The RUC recommends 15 minutes intra-service/total time. The specialty societies noted for a new patient, the typical length of the first visit is 60 minutes total. For subsequent visits, the typical length of the session is 30 minutes total, which was confirmed by the survey respondents.

The RUC questioned if this service includes only direct physician time. The specialty societies confirmed that the physician is required to perform the service the entire 15 minutes, stimulating the correct pelvic floor muscles. The RUC recommends an editorial revision that specifies “15 minutes of one-on-one physician or qualified health care professional contact with the patient” so reporting of this service is clear. CPT will review this language at the February 2019 CPT meeting.

The RUC compared the surveyed code to the top two key reference services, CPT codes 51797 *Voiding pressure studies, intra-abdominal (ie, rectal, gastric, intraperitoneal) (List separately in addition to code for primary procedure)* (work RVU = 0.80, 15 minutes intra-service/total time) and

76802 *Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; each additional gestation (List separately in addition to code for (work RVU = 0.83, 10 minutes intra-service/total time). The RUC determined that these key reference services require more physician work and are more intense and complex to perform, justifying the higher work values. For additional support the RUC referenced similar service, CPT code 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) (work RVU = 0.50, 15 minutes intra-service/total time), which requires the same physician work and time as 90913 and should be valued identically. **The RUC recommends a work RVU of 0.50 for CPT code 90913.****

Practice Expense

The PE Subcommittee made a minor modification, reducing the razor (SK068) from 1 to 0.2, to parallel with the 0.2 stimulation sensor (SD113) because these supplies are kept for the same patient for the initial and subsequent visits. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Refer to CPT

The RUC recommends referral to the CPT Editorial Panel that CPT codes 90912 and 90913 be revised to clarify that the physician is performing the service the entire time. The RUC recommends an editorial revision that specifies “15 minutes of one-on-one physician or qualified health care professional contact with the patient” so reporting of this service is clear and represents what was surveyed and valued at the RUC.

Computerized Dynamic Posturography (Tab 16)

Jay Shah, MD (AAO-HNS); Paul Pessis, AuD (AAA); Mary Newman, MD (ACP); Lance Manning, MD (AAO-HNS); R. Peter Manes, MD (AAO-HNS); Kevin A. Kerber, MD (AAN); Tanvir Hussain, MD (ACP); Leisha Eiten, AuD (ASHA)

In October 2017, the RUC identified CPT code 92548 was via the negative IWPUT screen. The specialties indicated that CPT code 92548 has not been reviewed since 1997. The code descriptor for this code is vague and current utilization may not be reflective of intended use. Practice expense includes specialized computerized equipment and audiologists are included in clinical work. Neurology and audiology agree that the code descriptor and practice expense must be updated. The specialties also believe that utilization may vary for this code with providers performing this service in different ways using different (or no) equipment. Neurology and audiology reviewed current utilization among their respective provider groups to better inform the code revision/development process. The RUC referred code 92548 to the CPT Editorial Panel for revision. The RUC notes that this service was also identified via the different performing specialty from original survey in 2017. In September 2018, CPT revised one code and added another code to more accurately describe the current clinical work and equipment necessary to provide this service.

Compelling Evidence

The RUC reviewed the compelling evidence that the work has changed for CPT code 92548. First, the specialty performing the procedure has changed. In April 1996, the code was surveyed only by otolaryngology. Since then, a plurality of other specialties now perform this service more often than otolaryngology, with internal medicine being the most common specialty. Second, the current valuation results in a negative IWPUT, signifying that the relationship between the work RVU and time is not

appropriate. Additionally, audiology time is currently captured as clinical labor in practice expense. However, audiologists have been able to report Medicare independently since 2008, thus audiology time should not be captured under practice expense. Rather, a portion of audiology time should be accounted for in professional work. The RUC accepted compelling evidence based on incorrect assumptions in prior valuation resulting in a negative IWPUT and a change in the performing specialty.

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;*

The RUC reviewed the survey results from 70 physicians and other qualified healthcare professionals and recommends the following provider time components: pre-service time of 5 minutes, intra-service time of 20 minutes and post-service time of 10 minutes. Computerized dynamic posturography tests a patient's balance control and produces quantitative data on the degree of the patient's imbalance. The sensory organization test, which is what is described by this CPT code, involves testing a patient's level of imbalance under 6 conditions (ie, eyes open, eyes closed, visual sway, platform sway, eyes closed platform sway, platform and visual sway). This service includes performing the sensory organization test, interpretation and report.

The RUC determined that the survey 25th percentile work RVU of 0.76 appropriately accounts for work involved in performing this service. To justify a work RVU of 0.76, the RUC compared the survey code to the 2nd key reference code 95992 *Canalith repositioning procedure(s) (eg, Epley maneuver, Semont maneuver), per day* (work RVU= 0.75, intra-service time of 20 minutes, total time of 30 minutes) and noted that both services have identical intra-service time, whereas the survey code involves somewhat more total time. The RUC also compared the survey code to MPC code 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, intra-service time of 20 minutes, total time of 26 minutes) and noted that both services involve identical intra-service time and both services involve a comparable amount of physician work. The difference in total time is made up by the comparison code being a somewhat more intense service to perform. **The RUC recommends a work RVU of 0.76 for CPT code 92548.**

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)*

The RUC reviewed the survey results from 54 physicians and other qualified healthcare professionals and recommends the following provider time components: pre-service time of 5 minutes, intra-service time of 27 minutes and post-service time of 10 minutes. The RUC determined that the survey 25th percentile work RVU of 0.96 appropriately values the work involved in performing this service. In addition to all of the work described by CPT code 92548, 92549 also includes the work of performing the motor control test and the adaptation test. For the motor control test, the platform is shifted horizontally rapidly for at least three different set distances, multiple times. For the adaptation test, the platform is rotated multiple times around the ankle axis. This service includes performing the sensory organization test, the motor control test, the adaptation test, interpretation and report.

The RUC inquired whether a patient would ever be brought back just to have only the two additional tests (motor control test and the adaptation test) performed and the specialties responded that would not occur. A CMS official also inquired whether it would ever be possible for both services to be reported for the same patient, and the presenters noted that would not happen. The presenters explained that is because the qualified healthcare professional would report only 92549 (CDP-SOT, -MCT, and -ADT) if it was determined that the additional two tests were needed in addition to the sensory organization test (92548). 92548 would never be reported in addition to 92549.

The RUC reviewed the survey respondents' estimated physician work values and agreed that the respondents appropriately valued the physician work involved in performing this service at the 25th percentile work RVU of 0.96. To justify a work RVU of 0.96, the RUC compared the survey code to CPT code 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* (work RVU= 0.96, intra-service time of 20 minutes, total time of 40 minutes) and noted that the survey code involves more intra-service and total time, though is a somewhat less intense service, and both services involve a comparable amount of physician or other qualified healthcare provider work. The RUC also compared the service to CPT code 99448 *Interprofessional telephone/Internet/electronic health record assessment and management service provided by a consultative physician...* (work RVU= 1.05, intra-service time of 25 minutes, total time of 35 minutes) and noted that although both services involve similar intra-service time, the comparison code is a somewhat more intense service to perform and that the survey code would have appropriate rank order with this comparison code at a value of 0.96. **The RUC recommends a work RVU of 0.96 for CPT code 92549.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society.

Duplex Scan Arterial Inflow-Venous Outflow (Tab 17)

Daniel Wessell, MD, PhD (ACR); Matthew Sideman, MD (SVS); Kurt Schoppe, MD (ACR); Lauren Golding, MD (ACR) and Chester A. Amedia, MD (RPA);

In September 2018, CPT replaced one G-code (G0365) with two new codes to describe the duplex scan of arterial inflow and venous outflow for preoperative vessel assessment prior to creation of hemodialysis access for complete bilateral and unilateral study.

Compelling Evidence

The RUC reviewed the specialty's presented argument for compelling evidence based on the following three criteria:

1. Documentation in the peer-reviewed medical literature or other reliable data that there have been changes in physician work due to one or more of the following: technique
2. Evidence that incorrect assumptions were made in the previous valuation of the service, as documented, such as: a flawed mechanism or methodology used in the previous valuation
3. An anomalous relationship between the code being valued and other codes.

1. Code G0365 was created by CMS in 2005 to analyze the relationship between venous mapping utilization and fistula formation. Accrediting bodies have since established detailed practice guidelines for this procedure redefining the technique and recommending additional study components that were not part of the original intention of this G-code. Pre-operative vascular imaging has since been shown to be exceedingly beneficial to the successful creation of a functional hemodialysis access and has been acceptable as standard of care. The emphasis has shifted from the relationship between mapping and fistula formation to a thorough evaluation of the veins and arteries of the upper extremity(ies) to find not a suitable vein but the patient's best option for success. This evolution in technique represents compelling evidence for a change in work, when G0365 was converted to Category I CPT codes 93985 and 93986.

2. Incorrect assumptions were made in the previous valuation: flawed methodology. The work RVU for G0365 was estimated by crosswalking to CPT 93990 *Duplex scan of hemodialysis access (including arterial inflow, body of access and venous outflow* (work RVU= 0.50) . This code was surveyed as part of the vascular lab family in April 2014 and increased in value from an RVU of 0.25 to 0.50; however, a corresponding increase was never applied to G0365 and it remained crosswalked to the previous value.

3. An anomalous relationship between the code being valued and other codes. Code G0365 and now 93985, include the evaluation of arteries and veins in both upper extremities. As currently valued at 0.25 RVU, it is the lowest of all the vascular lab studies, lower than other codes that describe limited or unilateral exams of only venous *or* arterial structures. These discrepancies support the need for RVU changes to correct the anomalies.

The RUC accepted compelling evidence based on a change in technique, incorrect assumptions were made in the previous valuation and rank order anomaly between G0365 and other vascular lab studies.

93985 Duplex scan of arterial inflow and venous outflow for preoperative vessel assessment prior to creation of hemodialysis access; complete bilateral study

The RUC reviewed the survey results from 69 vascular surgeons, nephrologists and radiologists and recommend the following physician time components: 5 minutes of pre-service, 17 minutes of intra-service time and 5 minutes of immediate post-service time.

The RUC determined the survey 25th percentile work RVU of 0.80 appropriately accounts for the physician work involved in performing this service. To justify a work RVU of 0.80, the RUC compared the survey code to top key reference code 93930 *Duplex scan of upper extremity arteries or arterial bypass grafts; complete bilateral study* (work RVU= 0.80, intra-service time of 15 minutes, total time of 25 minutes) and noted that the survey code involves slightly more intra-service and total time and a comparable amount of physician work. Also, both services are bilateral vascular lab studies of the upper extremities with analogous physician work. The RUC also compared the survey code to CPT code 93925 *Duplex scan of lower extremity arteries or arterial bypass grafts; complete bilateral study* (work RVU= 0.80, intra-service time of 15 minutes, total time of 25 minutes) and noted that the survey code involves slightly more intra-service and total time and a comparable amount of physician work. **The RUC recommends a work RVU of 0.80 for CPT code 93985.**

93986 Duplex scan of arterial inflow and venous outflow for preoperative vessel assessment prior to creation of hemodialysis access; complete unilateral study

The RUC reviewed the survey results from 69 vascular surgeons, nephrologists and radiologists and recommends the following physician time components: 5 minutes of pre-service, 10 minutes of intra-service time and 5 minutes of immediate post-service time. The RUC determined the survey 25th percentile work RVU of 0.50 appropriately accounts for the physician work involved in performing this service. To justify a work RVU of 0.50, the RUC compared the survey code to top key reference code 93990 *Duplex scan of hemodialysis access (including arterial inflow, body of access and venous outflow)* (work RVU= 0.50, intra-service 11 minutes, total time of 21 minutes) and noted that both services involve similar intra-service time and total time and a comparable amount of physician work. The work between these two services are somewhat different but comparable; unlike 93990 which includes imaging only of arteries and veins in the already functioning dialysis circuit, pre-operative code 93986 includes all of the arteries and veins in the arm. The RUC also compared the survey code to 2nd key reference code 93931 *Duplex scan of upper extremity arteries or arterial bypass grafts; unilateral or limited study* (work RVU= 0.50, intra-service time of 10 minutes, total time of 20 minutes) and noted that both service have identical times and involve a similar amount of physician work. It was noted that the reference code involves only evaluating arteries in a unilateral upper extremity, whereas the survey code involves evaluating all of the arteries and veins, confirming that the value of the survey code should be at least as high as this reference code. **The RUC recommends a work RVU of 0.50 for CPT code 93986.**

Practice Expense

The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Myocardial Strain Imaging (Tab 18)

Richard Wright, MD (ACC); Thad Waites, MD (ACC); Ed Tuohy, MD (ACC); Geoffrey Rose, MD (ASE); Michael Main, MD (ASE)

At the September 2018 CPT Editorial Panel meeting, the Panel deleted one Category III code and created one new Category I add-on code 93356 to describe the work of myocardial strain imaging performed in supplement to transthoracic echocardiography services 93303, 93304, 93306, 93307, 93308, 93350, and 93351.

93356 Myocardial strain imaging using speckle-tracking derived assessment of myocardial mechanics (List separately in addition to codes for echocardiography imaging)

The RUC reviewed the survey results from 84 physicians and agreed on the following provider time components: 9 minutes of intra-service time.

The RUC reviewed the survey 25th percentile work RVU of 0.24 and agreed that this value appropriately accounts for the physician work involved. To justify a work RVU of 0.24, the RUC compared the survey code to top key reference code 93320 *Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (List separately in addition to codes for echocardiographic imaging); complete* (work RVU= 0.38, intra-service time of 15 minutes) and noted that the survey code involves less time, though has a similar intensity of physician work, supporting the somewhat lower valuation. The RUC also compared the survey code to CPT code 75565 *Cardiac magnetic resonance imaging for velocity flow mapping (List separately in addition to code for primary procedure)* (work RVU= 0.25, intra-service time of 10 minutes) and noted that both services involve a similar amount of time and a similar amount of physician work. Both codes comprise a similar type of physician work as both describe velocity flow mapping in addition to a separate cardiac imaging study. **The RUC recommends a work RVU of 0.24 for CPT code 93356.**

Practice Expense

The PE Subcommittee removed the stretcher (EF018). **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Self-Measured Blood Pressure Monitoring (Tab 19)

Richard Wright, MD (ACC); Thad Waites, MD (ACC); Ed Tuohy, MD (ACC); Mary Newman, MD (ACP); Tanvir Hussain, MD (ACP); Audrey Chun, MD (AGS)

In September 2018, the CPT Editorial Panel created two new codes and revised four codes to describe self-measured blood pressure monitoring and differentiate from ambulatory blood pressure monitoring.

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

The RUC reviewed the survey results from 33 physicians and determined that the survey 25th percentile work RVU of 0.18 appropriately accounts for the work required to perform this service. The RUC recommends 3 minutes evaluation pre-service time, 5 minutes intra-service time and 2 minutes immediate post-service time. The RUC noted that CPT code 99474 is a self-actuated monitor in which the patient

reports typically two readings each day over a 30-day period that is forwarded to the physician for clinical decision making. CPT code 99474 is typically for a patient with known or expected hypertension in order to adjust hypertension medicine as necessary. The RUC noted that this service should not be reported separately with an Evaluation and Management (E/M service on the same day by the same provider. The RUC recommends referral to the CPT Editorial Panel to add introductory language to clarify.

The RUC compared the surveyed code to the top key reference code 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* (work RVU = 0.18 and 9 minutes total time) and determined that these services require the same physician work and almost the exact physician time to perform. The survey respondents indicated that this service requires identical to somewhat more technical skill, physical effort and psychological stress to perform than code 93793. For additional support, the RUC referenced MPC codes 99211 *Office or other outpatient visit for the evaluation and management of an established patient*, (work RVU = 0.18 and 7 minutes total time) and 93042 *Rhythm ECG, 1-3 leads; interpretation and report only* (work RVU = 0.15 and 7 minutes total time), which bracket the surveyed code and establish the proper relativity among other similar services. **The RUC recommends a work RVU of 0.18 for CPT code 99474.**

93790 Ambulatory blood pressure monitoring, utilizing report-generating software, automated, worn continuously for 24 hours or longer; review with interpretation and report

The RUC reviewed the survey results from 31 physicians and determined that the current work RVU of 0.38 appropriately accounts for the work required to perform this service. The RUC recommends 3 minutes evaluation pre-service time, 7 minutes intra-service time and 7 minutes immediate post-service time. The RUC noted that CPT code 93790 is an auto-activated monitor provided by the physician's office. Many are ordered not by the provider of this service, but by the primary care physician, nephrologist or endocrinologist. CPT code 93784 is the professional only code for ambulatory blood pressure monitoring that is not actuated by the patient. The patient wears the monitor, which records blood pressure every 15-20 minutes throughout the 24-hour reporting period and those 60-80 readings are reviewed by the physician and the physician provides an interpretation and report.

The RUC compared the surveyed code to the top key reference code 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* (work RVU = 0.18 and 9 minutes total time) and 92213 *Office or other outpatient visit for the evaluation and management of an established patient*, (work RVU = 0.97 and 23 minutes total time) and noted that these services largely bracket the physician work, time and intensity of the surveyed service. The RUC compared the surveyed code to similar services 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* (work RVU = 0.37, 7 minutes intra-service time and 17 minutes total time) and 96446 *Chemotherapy administration into the peritoneal cavity via indwelling port or catheter* (work RVU = 0.37, 7 minutes intra-service time and 17 minutes total time), noting that these services require similar physician work and time and maintain the appropriate relativity across the Medicare Physician Payment Schedule.

For additional support, the RUC referenced MPC code 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) (work RVU = 0.40 and 11 minutes total time). **The RUC recommends a work RVU of 0.38 for CPT code 93790.**

93784 Ambulatory blood pressure monitoring, utilizing report-generating software, automated, worn continuously for 24 hours or longer; including recording, scanning analysis, interpretation and report CPT code 93784 is a comprehensive code that is the sum of CPT codes 93786, 93788, and 93790. The specialty societies surveyed CPT code 93790 to develop a work recommendation that could be crosswalked to CPT code 93784. CPT code 93784 is ambulatory blood pressure monitoring that is not actuated by the patient. The patient wears the monitor, which records blood pressure every 15-20 minutes throughout the 24-hour reporting period and those 60-80 readings are analyzed by the physician. The specialty societies recommend a work RVU of 0.38 for CPT code 93784, based on the survey of CPT code 93790. The specialty societies indicated and the RUC agreed that these two services should have identical work RVUs. **The RUC recommends a work RVU of 0.38 for CPT code 93784.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society.

New Technology/New Services

The RUC recommends that CPT code 99474 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 Referral

The RUC recommends referral to the CPT Editorial Panel to add language that CPT code 99474 should not be reported separately with an Evaluation and Management (E/M) service on the same day by the same provider.

Chronic Care Remote Physiologic Monitoring (Tab 20)

Richard Wright, MD (ACC); Thad Waites, MD (ACC); Ed Tuohy, MD (ACC); Mary Newman, MD (ACP); Tanvir Hussain, MD (ACP); Audrey Chun, MD (AGS)

In September 2018, the CPT Editorial Panel revised CPT code 99457 and created a new code to describe remote physiologic monitoring treatment management services to differentiate between the first 20 minutes of management time from each additional 20 minutes.

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

CPT code 99457 was reviewed in January 2018 and the work RVU of 0.61 was recently finalized for the CY 2019. The RUC noted that the code was editorially revised to state “first 20 minutes” instead of “20 minutes or more”. CMS approved the RUC recommended time of 20 minutes for CPT code 99457 for CY 2019. **The RUC affirmed the work RVU of 0.61 for CPT code 99457.**

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)

The RUC reviewed the survey results from 31 physicians and recommends a work RVU of 0.61, a crosswalk to base code 99457. The RUC noted that the recommended work RVU falls in between the survey 25th percentile (0.50) and median (0.70). The RUC recommends 20 minutes of intra-service time. The RUC questioned why the physician work is the same for the first 20 minutes and each additional 20 minutes. The specialty societies indicated that if the patient requires more than the first 20

minutes of remote physiological monitoring treatment management, then this patient is part of a subgroup of patients that need more care and extra attention. These patients have fluctuating physiologic parameters. For example, if patients with pressure monitors data are completely consistent, then less physician work is required, but if there are great fluctuations as in code 99458, the physician will need to provide more work analyzing and addressing these differences with medication modifications or other adjustments.

The RUC compared CPT code 99458 to the top key reference service 99490 *Chronic care management services, at least 20 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month...* (work RVU = 0.61 and 23 minutes total time) and noted that these services required the same physician work and similar time to perform, and are appropriately valued the same. The typical patient receiving 99458 has a chronic disease, specifically, heart failure and has a chronic heart failure management device at home to prevent hospitalization. Thus, CPT code 99458 is similar to the chronic care management code 99490. Additionally, both CPT codes 99490 and 99458 include physician time and clinical staff time. For additional support, the RUC referenced 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 and 20 minutes total time), which requires similar work and the same total time.

CMS questioned if the RUC was aware of any other add-on codes with the same value as the base code. The RUC notes that the comparison of base codes to add-on codes in this manner is not straightforward because typically a base code will include pre- and post-service time and the add-on codes typically include only intra-service time. The base code accounts for more minutes than the add-on service, therefore, the work RVUs are not expected to be the same. Whereas, with codes 99457 and 99458, the intra-service time and total times are the same for both the base code and add-on code. However, there are multiple codes in the Medicare Physician Payment Schedule where this occurs. One example where the services are the same are 99487 *Complex chronic care management services...; 60 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month* (work RVU = 1.00 and 26 minutes intra-service/total time) and add-on code 99489 *Complex chronic care management services...; 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)* (work RVU = 0.50 and 13 minutes intra-service/total time). If you multiply the work RVU of code 99489 ($0.50 \times 2 = 1.00$) to account for double the intra-service time (26 and 13 minutes respectively), the work RVUs are the same at 1.00.

Another example is CPT codes 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* (work RVU = 1.50, 5 minutes pre-service time, 30 minutes intra-service time and 10 minutes post-service time) and 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)* (work RUV = 1.40 and 30 minutes intra-service time). The physician work is essentially the same, 1.50 and 1.40 comparatively, once you account for the differences in pre- and post-service time.

Since CPT codes 99457 and 99458 require the same physician time, the RUC concluded that it is appropriate that both are valued the same at 0.61 work RVUs. **The RUC recommends a work RVU of 0.61 for CPT code 99458.**

Practice Expense

The PE Subcommittee noted that when CPT code 99457 was reviewed last year, the societies conducted a clinical staff survey that yielded 30 minutes of independent clinical staff time under clinical activity CA037 for the base code that specifies 20 minutes minimum. The PE Subcommittee determined that the appropriate total conglomerate clinical staff time between the base and add on code is 40 minutes for CPT code 99458. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

New Technology/New Services

The RUC noted that CPT code 99457 was new for 2019 and placed on the new technology list and was scheduled for review in 2022. The RUC recommends that 99457 be pushed back a year to be reviewed with 99458 in 2023. Otherwise, these two services would have been re-examined in different cycles. The RUC recommends that CPT codes 99457 and 99458 be placed on the new technology list and be re-reviewed by the RUC in three years (2023) to ensure correct valuation and utilization assumptions.

Online Digital Evaluation Service (Tab 21)

Mary Newman, MD (ACP); Steven Krug, MD (AAP); David Kanter, MD (AAP); Tanvir Hussain, MD (ACP); Audrey Chun, MD (AGS); Megan Adamson, MD (AAFP)

In September 2018, the CPT Editorial Panel deleted two codes and replaced them with six new non-face-to-face codes to describe patient-initiated digital communications that require a clinical decision that otherwise typically would have been provided in the office. Three codes describe the physician e-visit (99421, 99422 and 99423) and three codes describe the qualified nonphysician health care professional e-visit (98970, 98971 and 98972).

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

The RUC reviewed the survey results from 92 physicians and determined that the survey 25th percentile work RVU of 0.25 appropriately accounts for the work required to perform this service. The RUC recommends 8 minutes intra-service time. The RUC noted that this service includes only intra-service time as this service starts with the physician opening up the electronic communication, which differs from the top key reference code 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* (work RVU = 0.25 and 8 minutes intra-service time, 13 minutes total time), where the physician may get a voicemail and may have an opportunity to review the medical record before engaging in the call. The e-visit is the documentation of the visit itself, the e-mail response. The RUC compared the surveyed code to the top key reference code 99441 and noted that these services require the same physician work and intra-service time to perform. However, 99421 is more intense than 99441 because the physician response is documented in writing. There is a higher risk and challenge within the written response, as the physician or patient may misinterpret something within the communication. Whereas, with a telephone call, any misinterpretations would be clarified with immediate feedback. Additionally, 99421 is more intense because the physician may review multiple images, some of which may be hard to decipher and the physician will need to engage in multiple communications over seven days that adds to the complexity of this service.

For additional support, the RUC referenced MPC codes 99406 *Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes* (work RVU = 0.24 and 7 minutes intra-service/total time) and 92568 *Acoustic reflex testing, threshold* (work RVU = 0.29 and 8 minutes

intra-service time), which demonstrates the appropriate relativity among similar services. **The RUC recommends a work RVU of 0.25 for CPT code 99421.**

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

The RUC reviewed the survey results from 96 physicians and determined that the survey 25th percentile work RVU of 0.50 appropriately accounts for the work required to perform this service. The RUC recommends 15 minutes intra-service time. The RUC compared the surveyed code to the top key reference code 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* (work RVU = 0.50 and 15 minutes intra-service time, 21 minutes total time) and noted that these services require the same physician work and intra-service time to perform. However, 99422 is more intense than 99442 because the physician response is documented in writing with higher risk and challenges with multiple communications, not a verbal response with immediate clarifications as detailed in the rationale for CPT code 99421.

For additional support, the RUC referenced MPC code 99212 *Office or other outpatient visit for the evaluation and management of an established patient*, (work RVU = 0.48 and 10 minutes intra-service, 16 minutes total time), which demonstrates the appropriate relativity among similar services. **The RUC recommends a work RVU of 0.50 for CPT code 99422.**

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

The RUC reviewed the survey results from 95 physicians and determined that the survey 25th percentile work RVU of 0.80 appropriately accounts for the work required to perform this service. The RUC recommends 25 minutes intra-service time. The RUC compared the surveyed code to the second top key reference code 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* (work RVU = 0.75 and 20 minutes intra-service time, 31 minutes total time) and noted that code 99423 requires slightly more physician work to perform because it describes 21 minutes or more, emphasis on more because the service will likely require more than 21 minutes, potentially much more. Whereas, CPT code 99443 is up to 30 minutes. Additionally, the typical patient receiving 99423 has problems and concerns greater than the average patient. The RUC agreed that 99423 is more intense than 99443 because the physician response is documented in writing with higher risk and challenges with multiple communications, not a verbal response with immediate clarifications as detailed in the rationale for CPT code 99421.

For additional support, the RUC referenced MPC codes 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient...* (work RVU = 0.76 and 10 minutes intra-service, 20 minutes total time) and 99213 *Office or other outpatient visit for the evaluation and management of an established patient...* (work RVU = 0.97 and 15 minutes intra-service, 23 minutes total time), which demonstrates the appropriate relativity among similar services. **The RUC recommends a work RVU of 0.80 for CPT code 99423.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society.

New Technology/New Services

The RUC recommends that CPT codes 99421, 99422 and 99423 be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

IX. CMS Request/Relativity Assessment Identified Codes

Bone Biopsy Trocar/Needle (Tab 22)

Daniel Wessell, MD, PhD (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR); Curtis Anderson, MD (SIR)

In October 2017, CPT code 20225 was identified as being performed by a different specialty than who originally surveyed this service. In January 2018 the specialty society recommended and the RUC agreed that this service be surveyed for the 2020 CPT cycle. Image guidance (ultrasound, fluoroscopy, CT) and localization may be reported separately for this family of services.

Compelling Evidence

The RUC reviewed the argument for compelling evidence. For both services, the specialty performing the procedure has changed. Previously for code 20220, the code was surveyed only by General Surgery during the Harvard Review process. For code 20225, the code was surveyed by Orthopedic Surgery during the RUC review performed in August 1995. Since that time, Radiology has become the dominant provider for both services and was not a participant in the prior review. The RUC accepted compelling evidence based on a change in the specialty performing the procedure and the current dominant specialty not having been involved in the prior review process.

20220 Biopsy, bone, trocar, or needle; superficial (eg, ilium, sternum, spinous process, ribs)

The RUC reviewed the survey results from 50 radiologists and agreed on the following physician time components: 7 minutes of pre-service evaluation, 6 minutes of pre-service positioning, 5 minutes of pre-service scrub/dress/wait, 20 minutes of intra-service time and 12 minutes of immediate post-service time. The RUC determined that the survey 25th percentile work RVU of 1.93 appropriately accounts for the physician work involved in performing this service. The RUC noted that the current times for this service are over 25 years old from the Harvard study and not valid for comparison. The IWPUT for the current times is similar to scrub/dress/wait IWPUT, which strongly implies the current times are highly inflated relative to the current work RVU and not valid for comparison to the new times. In addition, the RUC noted that this service is typically performed with image guidance. The RUC accounted for this typical overlap in both their pre-service evaluation time and 25th percentile work value recommendation.

To justify a work RVU of 1.93, the RUC compared the survey code to CPT code 30905 *Control nasal hemorrhage, posterior, with posterior nasal packs and/or cautery, any method; initial* (work RVU= 1.97, intra-service time of 20 minutes, total time of 44 minutes) and noted that the survey code involves identical intra-service time and somewhat more total time and a similar amount of physician work, justifying a similar valuation. The RUC also compared the survey code to CPT code 45334 *Sigmoidoscopy, flexible; with control of bleeding, any method* (work RVU= 2.00, intra-service time of 20 minutes, total time of 53 minutes) and noted that both services involve identical intra-service time and the reference code involves 3 more minutes of total time. **The RUC recommends a work RVU of 1.93 for CPT code 20220.**

20225 Biopsy, bone, trocar, or needle; deep (eg, vertebral body, femur)

The RUC reviewed the survey results from 50 radiologists and agreed on the following physician time components: 7 minutes of pre-service evaluation, 6 minutes of pre-service positioning, 6 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 15 minutes of immediate post-service time. The RUC determined the survey 25th percentile work RVU of 3.00 appropriately accounts for the work

involved to perform this service. The IWPUT for the current times is similar to scrub/dress/wait IWPUT, which strongly implies the current times are highly inflated relative to the current work RVU and not valid for comparison to the new times. In addition, the RUC noted that this service is typically performed with image guidance. The RUC accounted for this typical overlap in both their pre-service evaluation time and 25th percentile work value recommendation.

To justify a work RVU of 3.00, the RUC compared the survey code to CPT Code 43247 *Esophagogastroduodenoscopy, flexible, transoral; with removal of foreign body(s)* (work RVU= 3.11, intra-service time of 30 minutes, total time of 58 minutes) and noted that the survey code involves identical intra-service time and somewhat more total time and a similar amount of physician work, justifying a similar valuation. The RUC also compared the survey code to CPT code 44389 *Colonoscopy through stoma; with biopsy, single or multiple* (work RVU= 3.02, intra-service time of 30 minutes, total time of 65 minutes) and noted that both services involve identical intra-service time, similar total times and a similar amount of physician work. **The RUC recommends a work RVU of 3.00 for CPT code 20225.**

Practice Expense

The PE Subcommittee removed the supply item SF040 the vicryl suture and replaced it with a nylon suture for CPT code 20220. The PE Subcommittee added the supply item SB033 mask, surgical for both codes. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Cystourethroscopy Insertion Transprostatic Implant (Tab 23)

Thomas Turk, MD (AUA); Jonathan Rubenstein, MD (AUA); Kyle Richards, MD (AUA); Jonathan Kiechle, MD (AUA)

In 2005, the AMA RUC began the process of flagging services that represent new technology or new services as they were presented to the Committee. This service was flagged for CPT 2015 and reviewed at the October 2018 Relativity Assessment Workgroup meeting. The Workgroup indicated that the utilization is increasing and questioned the time required to perform these services. The RUC recommended that these services be resurveyed for physician work and practice expense for January 2019.

52441 Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant

The RUC reviewed the survey results from 36 urologists and determined the current work RVU of 4.50, which is below the survey 25th percentile work RVU of 4.62, appropriately accounts for the work required to perform this service. The RUC recommends 26 minutes pre-service evaluation, 5 minutes pre-service positioning and 10 minutes scrub/dress/wait pre-service time, 25 minutes intra-service time and 15 minutes post-service time. The RUC noted that the intra-service time has decreased by 5 minutes. However, the specialty society validated that the physician work is now more intense, which is supported by the FDA approval to perform this service on the median lobe of the prostate. In 2015, the implants could only be applied to the lateral lobes of the prostate, and it was contra-indicated to treat the median lobe. Implanting an anchor in the median lobe is more intense because there is a higher risk of injury to surrounding structures such as the rectum and ureteral orifices. Since this procedure may now be performed on the median lobe this allows patients with larger prostates to receive this service. Operating on larger prostates/larger median lobes requires the physician to work on a prostate that is protruding into the bladder which may be blocking the urine flow. Therefore, it is more intense to perform than previously. In addition, it was initially thought this procedure would be typically performed in an office setting under local anesthesia, however, with more experience and with the addition of a new indication, it was determined that the typical patients would require MAC anesthesia, a prostate block, and local anesthesia. This further supports a more intense procedure than previously determined.

The RUC compared the surveyed code to the top key reference service 52234 *Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; SMALL bladder tumor(s) (0.5 up to 2.0 cm)* (work RVU = 4.62 and 30 minutes intra-service time) and determined based on the survey respondents that CPT code 52441 is more intense and complex on all measures examined. The RUC agreed that code 52241 is more intense than code 52234, as the implants must be precise to prevent complications. For additional support, the RUC referenced MPC codes 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* (work RVU = 4.46, 30 minutes intra-service time and 73 minutes total time) and 52352 *Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or manipulation of calculus (ureteral catheterization is included)* (work RVU = 6.75, 45 minutes intra-service time and 118 minutes total time), which validate relativity among other well-known services in the Medicare Physician Payment Schedule. **The RUC recommends a work RVU of 4.50 for CPT code 52441.**

52442 *Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; each additional permanent adjustable transprostatic implant (List separately in addition to code for primary procedure)*

The RUC reviewed the survey results from 36 urologists and determined that the current work RVU of 1.20, which is below the survey 25th percentile work RVU of 1.50, appropriately accounts for the work required to perform this service. The RUC recommends 15 minutes intra-service time. The RUC noted that the intra-service time has decreased. However, the specialty society validated that the physician work is now more intense, which is supported by the FDA approval to perform this service on the median lobe of the prostate. In 2015, the implants could only be inserted in the lateral lobes of the prostate, and it was contra-indicated to treat the median lobe. Implanting an anchor in the median lobe is more intense because there is a higher risk of injury to surrounding structures such as the rectum and ureteral orifices. Since this procedure may now be performed on the median lobe this allows patients with larger prostates to receive this service. Operating on larger prostates/larger median lobes requires the physician to work on a prostate that is protruding into the bladder which may be blocking the urine flow. Therefore, it is more intense to perform than previously. In addition, it was initially thought this procedure would be typically performed in an office setting under local anesthesia, however, with more experience and with the addition of a new indication, it was determined that the typical patients would require MAC anesthesia, a prostate block, and local anesthesia. This further supports a more intense procedure than previously determined.

The RUC compared the surveyed code to the top key reference service 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)* (work RVU = 1.50 and 20 minutes intra-service time) and determined based on the survey respondents that CPT code 52442 is somewhat more intense and complex on all measures examined. The RUC agreed that code 52242 is more intense than code 49412, as the additional implants must be precise to prevent complications. For additional support the RUC referenced MPC code 64480 *Injection(s), anesthetic agent 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)* (work RVU = 1.20 and 15 minutes intra-service time) and noted that this reference code requires the same physician work and time to perform, thus validating the relativity of these services. **The RUC recommends a work RVU of 1.20 for CPT code 52442.**

Practice Expense

The PE Subcommittee discussed compelling evidence because the supply costs increased and recognized that the required lidocaine jelly was inadvertently left out previously. The PE Subcommittee also discussed the delineation of all the components of the different trays, eliminated any overlap in supplies,

corrected the clinical staff time and equipment for the appropriate monitoring post-procedure of 5 minutes 1-1 with the patient and 10 minutes 1-4 with the patient, to allow for multi-tasking. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

X-Ray Exam - Sinuses (Tab 24)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Gregory Nicola, MD (ASNR); Lauren Golding, MD (ACR); Melissa Chen, MD (ASNR); Megan Adamson, MD (AAFP)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018. The RUC used a similar cross-walking methodology as it did for CY 2019 codes that were rejected in the NRPM for 2019, for 7 X-ray codes that were reviewed at the April 2018 meeting for CY 2020. (CPT codes 70210, 70220, 70250, 70260, 70360, 72170 and 72190). The RUC requested that the specialties survey these seven services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

Compelling Evidence

The specialty societies presented compelling evidence based on flawed methodology for CPT code 70210. Both codes in this family are CMS/Other sourced, as identified by the screen, therefore how the times and values were established is unknown. Codes with the CMS/Other designation were never surveyed by the RUC or any other stakeholder; their physician time and work were assigned by CMS in rulemaking over 20 years ago using an unknown method. Thus, the RUC accepted compelling evidence based on flawed methodology.

70210 Radiologic examination, sinuses, paranasal, less than 3 views The RUC reviewed the survey results from 41 radiologists and family physicians and determined that the survey 25th percentile work RVU of 0.20 accurately reflects the physician work necessary for this service. The sinus exams include axial views that contain overlapping structures (head, neck, spine) which are more difficult images to interpret and have historically been considered more complex. The RUC recommends 1 minute pre-service time, 3 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 70210 to the top key reference code 71046 *Radiologic examination, chest; 2 views* (work RVU = 0.22, 4 minutes intra-service time) and noted that the two axial examinations require similar amounts of physician work to perform but the reference code has one minute more of intra-service time justifying the slightly higher value. For additional support, the RUC compared CPT code 70210 to MPC code 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU = 0.20, 5 minutes intra-service time) and noted that the intra-service time is two minutes higher for the comparison code but there is no pre-service time and the work is less intense. The comparison code is a single view orthopantomogram which is less intense work compared to the survey code which is typically two views of the paranasal sinuses. The RUC also compared CPT code 70210 to MPC code 96402 *Chemotherapy administration, subcutaneous or intramuscular; hormonal anti-neoplastic* (work RVU = 0.19, 3 minutes intra-service time) and noted that the intra-service times are identical and the amount of physician work is similar although the survey code has less total time and is more intense to perform than the comparison code and therefore should be appropriately valued higher.

The RUC concluded that CPT code 70210 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.20 for CPT code 70210.**

70220 Radiologic examination, sinuses, paranasal, complete, minimum of 3 views

The RUC reviewed the survey results from 41 radiologists and family physicians and determined that the survey 25th percentile work RVU of 0.22 accurately reflects the physician work necessary for this service and falls below the existing value. The RUC recommends 1 minute pre-service time, 4 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 70220 to the top key reference code 71046 *Radiologic examination, chest; 2 views* (work RVU = 0.22, 4 minutes intra-service time) and noted that these services are well-matched, requiring identical physician work, times, and intensity to perform and thus should be valued similarly. For additional support, the RUC compared CPT code 70210 to MPC code 92567 *Tympanometry (impedance testing)* (work RVU = 0.20, 4 minutes intra-service time) and noted that both services have identical intra-service time, whereas the survey code is a more intense service to perform and should be appropriately valued higher than the comparison code.

To further justify the recommendation, the RUC noted that there are multiple other CPT codes for X-ray exams with work RVU = 0.22, 4 minutes intra-service time, 6 minutes total time: 71100, 72072, 72074, 72080, 73502, 73521. The RUC concluded that CPT code 70220 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.22 for CPT code 70220.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in April 2018. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Exam – Skull (Tab 25)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Gregory Nicola, MD (ACR); Lauren Golding, MD (ACR); Melissa Chen, MD (ASNR)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT code 70250 was identified by this screen and CPT code 70260 was added as part of the family. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018. The RUC used a similar cross-walking methodology as it did for CY 2019 codes that were rejected in the NRPM for 2019, for seven X-ray codes that were reviewed at the April 2018 meeting for CY 2020. (CPT codes 70210, 70220, 70250, 70260, 70360, 72170 and 72190). The RUC requested that the specialties survey these seven services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

70250 Radiologic examination, skull; less than 4 views

The RUC reviewed the survey results from 43 radiologists and determined that the survey 25th percentile work RVU of 0.20 accurately reflects the physician work necessary for this service and falls below the existing value. The RUC recommends 1 minute pre-service time, 3 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 70250 to both the top key reference service 71046 *Radiologic examination, chest; 2 views* (work RVU = 0.22, 4 minutes intra-service time) and the second highest key reference service 73562 *Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time) and agreed that these codes appropriately bracket the survey code. The RUC noted that the intra-service time for the survey code is one minute less with a slightly lower RVU and thus is appropriately valued relative to the chest X-ray reference code. In comparison to code 73562, the survey code has one minute less intra-service time and the physician work is more intense due to the complexity of the anatomy being studied. The survey code involves an axial structure, as opposed to the knee, with many overlapping

structures in the skull and skull base, thus the complexity and technical skill is slightly higher than for the knee. The survey code is appropriately valued higher than the second KRS and other X-ray codes valued at 0.18 due to the greater complexity reflected clinically in the work required for the study of the skull. For additional support, the RUC compared CPT code 70250 to MPC code 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU = 0.20, 5 minutes intra-service time), which is also the third-highest chosen key reference service, and noted that the codes have similar total time and identical amount of physician work.

The RUC concluded that CPT code 70250 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.20 for CPT code 70250.**

70260 Radiologic examination, skull; complete, minimum of 4 views

The RUC reviewed the survey results from 43 radiologists and determined that the survey 25th percentile work RVU of 0.29 accurately reflects the physician work necessary for this service and is lower than the current value. The RUC recommends 1 minute pre-service time, 4 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 70260 to the second highest key reference code 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time) and noted that the intra-service time for the survey code is one minute less and the physician work is more intense due to the complexity of the anatomy being studied. The RUC also compared CPT code 70260 to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time) and noted similarly that the intra-service time for the survey code is one minute less and the physician work is more intense due to the complexity of the anatomy being studied and the greater number of views, therefore the survey code is appropriately valued higher than the comparison code.

To further justify a work RVU of 0.29, the RUC compared the survey code to CPT code 71047 *Radiologic examination, chest; 3 views* (work RVU = 0.27, 4 minutes intra-service time) and CPT code 74021 *Radiologic examination, abdomen; 3 or more views* (work RVU = 0.27, 4 minutes intra-service time) and noted that although these services have identical service times, the survey code involves a slightly greater intensity of physician work, due to the greater number of views and greater complexity of the skull study, supporting a higher valuation.

The RUC concluded that CPT code 70260 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.29 for CPT code 70260.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in April 2018. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

Work Neutrality

The RUC's recommendation for this code will result in an overall work savings that should be redistributed back to the Medicare conversion factor.

X-Ray Exam – Neck (Tab 26)

Daniel Wessell, MD, PhD (ACR); Kurt Schoppe, MD (ACR); Gregory Nicola, MD (ASNR); Lauren Golding, MD (ACR); Melissa Chen, MD (ASNR); Megan Adamson, MD (AAFP)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018. The RUC used a similar cross-walking methodology as it did for CY 2019 codes that were rejected in the NRPM for 2019, for seven X-ray codes that were reviewed at the April 2018 meeting for CY 2020. (CPT codes 70210, 70220, 70250, 70260, 70360, 72170 and 72190). The RUC requested that the specialties survey these seven services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

Compelling Evidence

The specialty societies presented compelling evidence based on flawed methodology. CPT code 70360 is CMS/Other sourced as identified by the screen. Therefore, how the times and values were established is unknown or flawed. The RUC accepted compelling evidence for this code based on flawed methodology.

70360 Radiologic examination; neck, soft tissue

The RUC reviewed the survey results from 64 radiologists and family physicians and determined that the survey 25th percentile work RVU of 0.20 accurately reflects the physician work necessary for this service. CPT code 70360 is an X-ray procedure used to assess the airway and soft tissues of the neck, with potential evaluation of foreign bodies. A 2-view exam is typical. The RUC recommends 1 minute pre-service time, 3 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 70360 to the top key reference service 71046 *Radiologic examination, chest; 2 views* (work RVU = 0.22, 4 minutes intra-service time) and noted that the intra-service time for the survey code is one minute less and the complexity in evaluating structures of the neck (esophagus, trachea, cervical skeleton, epiglottis, sinuses, cervical spine, etc.) on two views is comparable to the evaluation of the thoracic structures (heart, lung, mediastinum, pleura, thoracic spine, etc.) on two views (PA and lateral) if not slightly more intense, justifying the slightly higher value for the survey code. The RUC also compared CPT code 70360 to CPT code 73562 *Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time) and noted that the anatomic region of the knee is less complex than the neck, where subtle soft tissue findings may be a clue to underlying pathology such as airway compromise, therefore the survey code involves a slightly greater intensity of physician work, supporting a higher valuation.

For additional support, the RUC compared CPT code 70360 to CPT code 74018 *Radiologic examination, abdomen; 1 view* (work RVU = 0.18, 3 minutes intra-service time, 5 minutes total time) and noted that both studies have identical intra-service and total times, while the survey code has more views and is more intense. The RUC concluded that CPT code 70360 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.20 for CPT code 70360.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in October 2018. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Exam – Spine (Tab 27)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Gregory Nicola, MD (ASNR); Andrew Moriarity, MD (ACR); Hussein Elkousy, MD (AAOS); William Creevy, MD (AAOS); Melissa Chen, MD (ASNR)

In October 2016, the Relativity Assessment Workgroup expanded the CMS/Other Source codes screen, lowering the Medicare utilization threshold from 250,000 to 100,000 based on 2015 Medicare utilization data. Two X-ray codes of the spine (72020 and 72070) were identified by this screen and the family was expanded to include ten additional X-ray codes of the spine (72040, 72050, 72052, 72072, 72074, 72080, 72100, 72110, 72114, and 72120). The Workgroup recommended that the specialty societies survey these services for April 2017, with a strong recommendation that the Research Subcommittee consider the specialty societies request to allow direct crosswalks to similar services for physician work and time. In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommends in lieu of conducting a RUC survey. In the NPRM for 2019, CMS disagreed with the RUC recommended work RVUs for 20 CPT codes included in the X-Ray Spine, X-Ray Sacrum, X-Ray Elbow-Forearm, X-Ray Heel and X-Ray Toe code families. CMS proposed the same work RVU of 0.23 for all 20 services based on a utilization-weighted average. The RUC recommended for CMS to maintain the CY 2018 work RVU for all 20 services on an interim basis and requested that the specialties survey all 20 services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

Compelling Evidence

The specialty societies presented compelling evidence based on flawed methodology. CPT codes 72020, 72072, 72074, and 72080 are CMS/Other sourced.. Therefore, how the times and values were established is unknown or flawed. The RUC accepted compelling evidence based on flawed methodology.

Complexity

The RUC recognizes the need to maintain relativity within families across the X-ray modality. The spine family in particular raises questions about relativity and complexity. The RUC noted that the complexity argument appears to be based not only on the number of views or the complexity of the body area but a *combination* of anatomic site (e.g., cervical, thoracic or lumbar), views and total time. The RUC discussed appendicular and axial structures and agreed that axial X-rays are more complex. Axial X-rays are typically more complex studies than appendicular X-rays due to the increased number of overlapping soft tissue and bony structures and the increasing severity of pathology which can involve the spinal canal and spinal cord, resulting in increased mental effort and judgement, as well as psychological stress. The synthesis of the information in multiple views are needed to be able to recognize anatomic variants, congenital abnormalities and, most importantly, pathology. This is also the reason that the single view X-ray codes in the axial skeleton tend to have a lower complexity, relative to their multiple view counterparts, because the information required and the clinical indications for these exams are extremely specific. For example, a single view of a spine level is most typically used to assess positioning of hardware in the spine after surgery. This is contrasted with a cervical spine, 2-3 view radiograph. The 3 views are vital in order to adequately assess the relationships of the articulations including the facet joints, the disc spaces, the alignment of the vertebral bodies, spinous processes, and the craniocervical junction.

The complexity of X-rays also varies with the clinical indications and typical patient population. An example of this would be the cervical and lumbar spine radiographs. Although the cervical spine may be a more complex anatomic site than the lumbar spine, the typical clinical scenarios these are ordered for contribute to complexity for both of these exams. The cervical spine may be typically ordered in an outpatient setting to assess for osteoarthritis or other arthritic changes. There is a large number of abnormalities found on these X-rays in this patient population. Often, multiple levels within the spinal canal are compromised, as well as multiple facet joints. In addition, patients with rheumatoid arthritis

often have atlantoaxial instability, with subluxation of the cervical spine that can lead to neurologic compromise. The sheer number of levels which may be involved in the cervical spine along with complexity of pathology increase the technical skill and judgement. On the other hand, the typical patient population evaluated with a lumbar spine radiograph is trauma in which there is concern for fracture. It is critical for the physician to find the fracture in the acute setting to direct appropriate treatment and workup which results in increased psychological stress. As expected, services provided in an ER tend to be more stressful and have more potential negative consequences for inaccurate or delayed diagnoses than outpatient X-ray services. However, if a complex disease process is the typical indication for a particular X-ray code, then it is also logical that the required technical skill and intensity of providing that service is higher than for another X-ray code with similar total time or total views performed in a different setting.

72020 Radiologic examination, spine, single view, specify level

The RUC reviewed the survey results from 79 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.16 accurately reflects the physician work necessary for this service. CPT code 72020 is an X-ray procedure most often used to check for vertebral alignment or for pre- and post-surgical assessment of the cervical spine. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72020 to the top key reference service 73120 *Radiologic examination, hand; 2 views* (work RVU = 0.16, 4 minutes intra-service time, 6 minutes total time) and noted that the physician work is valued the same despite the differences in number of views and intra-service time. The spine is a more complex anatomic structure than the hand, accounting for the slightly higher intensity. To further justify the recommendation, the RUC noted that there are multiple other CPT codes for X-ray exams with work RVU = 0.16, 3 minutes intra-service time, 5 minutes total time: 73060, 73100, 73551, 73560, 73565, 73590, 73600, and 73620. The RUC concluded that CPT code 72020 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation for the base code in the series maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.16 for CPT code 72020.**

72040 Radiologic examination, spine, cervical; 2 or 3 views

The RUC reviewed the survey results from 79 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.22 accurately accounts for the physician work to perform this service and reflects the current value. CPT code 72040 is used to evaluate for injury, assess for degenerative changes and causes of neck pain, check alignment after reduction, or may be used for surgical planning. Three views are typical for this exam, which would include an anteroposterior, lateral and open mouth odontoid view to assess the craniocervical articulations. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72040 to the top key reference service 73562 *Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time, 6 minutes total time) and noted that the anatomic area of the reference service is less complex, which accounts for the differences in intensity and physician work. The appendicular X-rays are typically less complex than the axial X-rays, which include the chest, abdomen and spine regions. The axial X-rays are more complex because of the increased overlapping soft tissue and bony structures which need to be assessed. For additional support, the RUC compared the survey code to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time) and noted that the comparison code is a one-view exam primarily used to assess spinal curvature and vertebral alignment in outpatients with scoliosis. It has 2 minutes more intra-service time than the survey code which is appropriate for

evaluating a larger section of the spine. Dedicated evaluation of the cervical spine is slightly more complex than scoliotic evaluation of the spine which explains the higher intensity for the survey code. The RUC concluded that CPT code 72040 should be valued at the 25th percentile work RVU, which maintains the current value, as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.22 for CPT code 72040.**

72050 Radiologic examination, spine, cervical; 4 or 5 views

The RUC reviewed the survey results from 79 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.27 accurately reflects the physician work necessary for this service. CPT code 72050 is a more comprehensive radiograph to evaluate for injury or assess for degenerative changes and causes for neuropathy. Five views are typical for this code, which would include an anteroposterior, lateral, open mouth odontoid view and bilateral oblique views to assess the neural foramina. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute.

The RUC compared CPT code 72050 to the top key reference service 72083 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); 4 or 5 views* (work RVU = 0.35, 7 minutes intra-service time, 9 minutes total time) and noted the similar amount of views but higher intra-service time of the reference code due to the large anatomic region evaluated. The survey code has greater intensity due to the increased complexity and intensity of work related to the evaluation of more complex articulations in the cervical spine. For additional support, the RUC compared the survey code to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time) and noted similarly that the intensity is greater for the survey code given that the dedicated evaluation of the cervical spine is a more complex anatomic region compared to 72081. The RUC concluded that CPT code 72050 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.27 for CPT code 72050.**

72052 Radiologic examination, spine, cervical; 6 or more views

The RUC reviewed the survey results from 78 radiologists and determined that the survey 25th percentile work RVU of 0.30 accurately reflects the physician work necessary for this service. CPT code 72052 is a more comprehensive radiograph to evaluate for injury or assess for degenerative changes and causes for neuropathy. Seven views would be typical for this code, which includes AP, lateral, open mouth odontoid view, bilateral oblique views of the neural foramina, lateral flexion and extension views. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 5 minutes and post-service time of 1 minute.

The RUC compared CPT code 72052 to the second key reference service 72083 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); 4 or 5 views* (work RVU = 0.35, 7 minutes intra-service time, 9 minutes total time) and noted that the reference service has more intra-service and total time because of the larger anatomic region assessed. However, evaluation of the cervical spine is more complex than scoliotic assessment, therefore, the survey code involves more intense physician work. For additional support, the RUC compared the survey code to both MPC codes 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time) and 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU = 0.20, 5 minutes intra-service time, 6 minutes total time) and noted that the comparison codes have identical intra-service times and similar or identical total times compared to the survey code.

However, the intensity is higher for 72052 because it assesses a more complex anatomic region. The RUC concluded that CPT code 72052 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.30 for CPT code 72052.**

72070 Radiologic examination, spine; thoracic, 2 views

The RUC reviewed the survey results from 79 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.20 accurately reflects the physician work necessary for this service. CPT Code 72070 is used to evaluate for injury or assess for degenerative changes and causes for neuropathy or back pain. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72070 to the top key reference service 71046 *Radiologic examination, chest; 2 views* (work RVU = 0.22, 4 minutes intra-service time, 6 minutes total time) and noted that the reference service has slightly more intra-service time because of the larger anatomic region assessed. The spine is a more complex anatomic structure, therefore the survey code has higher intensity. For additional support, the RUC compared the survey code to both MPC codes 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU of 0.26, 5 minutes intra-service time, 7 minutes total time) and 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU of 0.20, 5 minutes intra-service time, 6 minutes total time) and noted that the comparison codes are single-view exams that have slightly higher intra-service times and total times comparable to the survey code. The complex anatomic region assessed by survey code compared to code 70355 accounts for the higher intensity and similar work valuation despite differences in time. The dedicated views of the thoracic spine is a more complex study than code 72081 which assesses scoliotic curvature on a single view, resulting in higher intensity for the survey code. The RUC concluded that CPT code 72070 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.20 for CPT code 72070.**

72072 Radiologic examination, spine; thoracic, 3 views

The RUC reviewed the survey results from 78 radiologists and determined that the survey 25th percentile work RVU of 0.23 accurately reflects the physician work necessary for this service. CPT code 72072 is used to evaluate for injury or assess for degenerative changes and causes for neuropathy or back pain. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72072 to both MPC codes 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time) and 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU = 0.20, 5 minutes intra-service time, 6 minutes total time) and agreed that these codes appropriately bracket the survey code. However, the survey code is more intense than both comparison codes because it assesses a more complex anatomic region than 70355, and it evaluates for potentially more complex pathology when compared to 72081. In addition, CPT code 72072 is typically performed in the ER and inpatient setting more frequently than 72081, and therefore, has a more complex patient population. The RUC concluded that CPT code 72072 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.23 for CPT code 72072.**

72074 Radiologic examination, spine; thoracic, minimum of 4 views

The RUC reviewed the survey results from 78 radiologists and determined that the survey 25th percentile work RVU of 0.25 accurately reflects the physician work necessary for this service. CPT code 72074 is used to evaluate for injury or assess for degenerative changes and causes for neuropathy or back pain. The typical number of views for this is 4 views; anteroposterior, lateral, flexion and extension views. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute.

The RUC compared CPT code 72074 to the second highest key reference service 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time, 7 minutes total time) and noted that the reference code has slightly more intra-service and total time. However, evaluation of the hips is less complex than evaluation of the spine because of the potential consequences of missing subtle spine injury or stenosis that may lead to spinal cord injury, thus the intensity of the survey code is slightly higher. For additional support, the RUC compared the survey code to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time) and noted that the physician work values are similar with one minute more intra-service and total time for the comparison code. However, the survey code is more complex with concern for potential injury or stenosis and is more commonly performed in the ER and inpatient, with more complex patients, and therefore, has a higher intensity than the comparison code. The RUC concluded that CPT code 72074 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.25 for CPT code 72074.**

72080 Radiologic examination, spine; thoracolumbar junction, minimum of 2 views

The RUC reviewed the survey results from 79 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.21 accurately reflects the physician work necessary for this service. CPT code 72080 is used to evaluate spinal hardware, evaluate for spine injury, assess for degenerative changes and causes for neuropathy. Two views would be typical for this exam, which would include an anteroposterior and lateral view. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72080 to the top key reference service 71046 *Radiologic examination, chest; 2 views* (work RVU = 0.22, 4 minutes intra-service time, 6 minutes total time) and noted the similar times and physician work valuation while the survey code assesses a more complex anatomic region and therefore, has a slightly higher intensity than the reference service. For further support, the RUC compared the CPT code 72080 to CPT code 71100 *Radiologic examination, ribs, unilateral; 2 views* (work RVU = 0.22, 4 minutes intra-service time, 6 minutes total time) and noted that both services are 2 views and cover the similar anatomic regions, with one focused on the thoracic region and the other the lower thoracic and upper lumbar region. The services have similar times and amount of physician work and should therefore be valued similarly. The RUC concluded that CPT code 72080 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.21 for CPT code 72080.**

72100 Radiologic examination, spine, lumbosacral; 2 or 3 views

The RUC reviewed the survey results from 80 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.22 accurately accounts for the physician work to perform this service and reflects the current value. CPT code 72100 is used to evaluate for spine injury, assess for degenerative changes and causes for neuropathy and back pain. Three views are typical for this exam,

which would include an anteroposterior, lateral and coned view of the lumbosacral junction. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72100 to the second highest key reference service 73562 *Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time, 6 minutes total time) and noted the similar intra-service and total times, that the anatomic area of the reference service is less complex, which accounts for the differences in intensity and physician work. The appendicular x-rays are typically less complex than the axial x-rays, which include the chest, abdomen and spine regions. The axial x-rays are more complex because of the increased overlapping soft tissue and bony structures which need to be assessed. For additional support, the RUC compared the survey code to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU of 0.26, 5 minutes intra-service time, 7 minutes total time) and noted that the acuity of the patient for the survey code is more complex. The comparison code has slightly more intra-service and total times, along with a higher work value, compared to the survey code. However, the work associated with 72100 is more complex and performed more frequently in the ER and inpatient setting than the comparison code, resulting in a higher intensity. The RUC concluded that CPT code 72040 should be valued at the 25th percentile work RVU, which maintains the current value, as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.22 for CPT code 72100.**

72110 Radiologic examination, spine, lumbosacral; minimum of 4 views

The RUC reviewed the survey results from 80 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.26 accurately accounts for the physician work to perform this service. CPT code 72110 is used to evaluate for spine injury, assess for degenerative changes and causes for neuropathy. Five views are typical for this exam which would include anteroposterior, lateral, coned-in view of the lumbosacral junction, and oblique views to evaluate the bilateral foramina. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute.

The RUC compared CPT code 72110 to the second highest key reference service 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time, 7 minutes total time) and noted that the reference code has slightly more intra-service and total time. However, the intensity of the survey code is slightly higher because hip assessment is less complex than the spine due to the potential consequences of missing subtle spine injury or stenosis that may lead to spinal cord injury. For additional support, the RUC compared the survey code to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU of 0.26, 5 minutes intra-service time, 7 minutes total time) and noted that the physician work values are identical with one minute less intra-service and total time for the survey code. However, the survey code is more complex and performed more frequently in the ER and inpatient setting than the comparison code, yielding a higher intensity. The RUC concluded that CPT code 72110 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.26 for CPT code 72110.**

72114 Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views

The RUC reviewed the survey results from 80 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.30 accurately accounts for the physician work to perform this service. CPT code 72114 is used to evaluate for spine injury, evaluate spine alignment and instability, assess for degenerative changes and causes for neuropathy. Seven views are typical for this exam, which

would include, anteroposterior, lateral, coned-in view of the lumbosacral junction, oblique views to assess the neural foramina, bending and extension views. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 5 minutes and post-service time of 1 minute.

The RUC compared CPT code 72114 to the both key reference services 72083 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); 4 or 5 views* (work RVU = 0.35, 7 minutes intra-service time, 9 minutes total time) and 72084 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); minimum of 6 views* (work RVU = 0.41, 8 minutes intra-service time, 10 minutes total time) and noted that the reference services have higher intra-service times because of the larger anatomic regions covered. However, the complexity of assessing dedicated views of the lumbosacral spine, represented by the survey code, is higher compared to either of the reference codes. CPT code 72114 shows more detailed views of the spinal canal, neural foramina and dynamic stability, whereas 72083 and 72084 capture a larger view to assess the alignment of the spine and potential congenital anomalies contributing to curvature of the spine.

For additional support, the RUC compared the survey code to both MPC codes 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time) and 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU of 0.20, 5 minutes intra-service time, 6 minutes total time) and noted that the comparison codes have the same intra-service time as the survey code, with similar or identical total times, but all have varying physician work valuations. MPC code 70355 covers a less complex anatomic region, which accounts for the lower amount of physician work and intensity. MPC code 72081 is a one view exam of the entire spine used to assess for scoliosis, requiring less intense work compared to the survey code, which has a minimum of 6 views. The RUC also noted an appropriate comparison between the survey code and CPT code 72082 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); 2 or 3 views* (work RVU = 0.31, 6 minutes intra-service time, 8 minutes total time) with similar intra-service and total times and physician work. Both exams are multi-view examinations of complex anatomic regions. CPT code 72082 typically involves anteroposterior and lateral views of the thoracic and lumbar spine obtained on four images. Two images are stitched together to form the anteroposterior view and the other two stitched together to form the lateral view. CPT code 72114 typically consists of anteroposterior, lateral, bilateral oblique and bending views of the lumbosacral spine. The RUC concluded that CPT code 72114 should be valued at the 25th percentile work RVU as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.30 for CPT code 72114.**

72120 Radiologic examination, spine, lumbosacral; bending views only, 2 or 3 views

The RUC reviewed the survey results from 80 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.22 accurately accounts for the physician work to perform this service and reflects the current value. CPT code 72120 is used to evaluate the dynamic spine alignment and instability. Three views are typical for this code, which includes a view in flexion, neutral and extension position. The RUC agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC compared CPT code 72120 to the second highest key reference service 74019 *Radiologic examination, abdomen; 2 views* (work RVU = 0.23, 4 minutes intra-service time, 6 minutes total time) and noted the similar times and amount of physician work, but the anatomic region of the reference code is less complex, therefore the survey code yields a higher intensity. For additional support, the RUC compared the survey code to MPC code 72081 *Radiologic examination, spine, entire thoracic and*

lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view (work RVU of 0.26, 5 minutes intra-service time, 7 minutes total time) and noted that the comparison code has a slightly higher intra-service time and amount of physician work because it covers a larger anatomic region. However, 72081 is a single view exam used to assess spine alignment, and is less complex than dedicated views assessing the stability of the lumbosacral spine, resulting in lower intensity compared to the survey code. The RUC also compared CPT code 72120 to CPT code 71100 *Radiologic examination, ribs, unilateral; 2 views* (work RVU = 0.22, 4 minutes intra-service time, 6 minutes total time) and noted that both services should be valued similarly as both services have similar intra-service and total times, while studies of the spine are typically more intense to perform. In addition, both exams have similar numbers of views and cover similar anatomic regions, with one focused on the thoracic region and the other the lower thoracic and upper lumbar region. The RUC concluded that CPT code 72120 should be valued at the 25th percentile work RVU, which maintains the current value, as supported by the survey. This recommendation maintains rank order and relativity within the X-ray spine family. **The RUC recommends a work RVU of 0.22 for CPT code 72120.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in April 2017. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Exam – Pelvis (Tab 28)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR); Hussein Elkousy, MD (AAOS); William Creevy, MD (AAOS)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT code 72190 was identified by this screen and CPT code 72170 was added as part of the family. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018. The RUC used a similar cross-walking methodology as it did for CY 2019 codes that were rejected in the NRPM for 2019, for 7 X-ray codes that were reviewed at the April 2018 meeting for CY 2020. (CPT codes 70210, 70220, 70250, 70260, 70360, 72170 and 72190). The RUC requested that the specialties survey these seven services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

Compelling Evidence

The specialty societies presented compelling evidence based on flawed methodology for CPT code 72190 only. This code is CMS/Other sourced as identified by the screen. Therefore, how the times and values were established is unknown or flawed. The RUC accepted compelling evidence for 72190 based on flawed methodology.

72170 Radiologic examination, pelvis; 1 or 2 views

The RUC reviewed the survey results from 54 radiologists and orthopaedic surgeons and determined that the current work RVU of 0.17, which falls below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. The RUC recommends 1 minute pre-service time, 4 minutes intra-service time, and 1 minute immediate post-service time.

The RUC noted that CPT code 72170 is in the family of X-ray codes used to evaluate the pelvis-only, distinct from the set of codes created for the hips in which the pelvis was bundled in and is typically performed as a one view pelvis radiograph. Thus, the survey code reflects lower intensity and less physician work when compared to both the top key reference service 73502 *Radiologic examination, hip, unilateral, with pelvis when performed; 2-3 views* (work RVU = 0.22, 4 minutes intra-service time) and the second highest key reference service 73522 *Radiologic examination, hips, bilateral, with pelvis when*

performed; 3-4 views (work RVU = 0.29, 5 minutes intra-service time). A single view is typical for the survey code and therefore the key reference services will almost always include more views.

To further justify a work RVU of 0.17, the RUC compared CPT code 72170 to CPT code 73110 *Radiologic examination, wrist; complete, minimum of 3 views* (work RVU = 0.17, 4 minutes intra-service time) and noted that the studies should be valued similarly given the identical service times and intensity of physician work despite the variance in views. Thus, the RUC agreed that the current work RVU of 0.17 for CPT code 72170 should be maintained. **The RUC recommends a work RVU of 0.17 for CPT code 72170.**

72190 Radiologic examination, pelvis; complete, minimum of 3 views

The RUC reviewed the survey results from 54 radiologists and orthopaedic surgeons and determined that the survey 25th percentile work RVU of 0.25 accurately reflects the physician work necessary for this service. CPT code 72190 is in the family of x-ray codes used to evaluate the pelvis-only. Typical number of views is a three-view exam. The RUC recommends 1 minute pre-service time, 5 minutes intra-service time, and 1 minute immediate post-service time. While questions were raised regarding the additional minute of intra-service time as compared to other X-ray codes, the RUC supports the validity of the survey data and relies upon the survey respondents to accurately account for the times involved in the service. The RUC further noted that the 0.08 RVU increment between the two codes in the family is appropriate recognizing that 3 views is typical for the survey code.

The RUC compared CPT code 72190 to both the top key reference service 73502 *Radiologic examination, hip, unilateral, with pelvis when performed; 2-3 views* (work RVU = 0.22, 4 minutes intra-service time) and the second highest key reference service 73552 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time) and agreed that these codes appropriately bracket the survey code. The survey code is also bracketed by the two MPC codes 70355 *Orthopantomogram (eg, panoramic x-ray)* (work RVU = 0.20, 5 minutes intra-service time) and 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time).

To further justify the recommendation, the RUC compared CPT code 72190 to MPC code 93922 *Limited bilateral noninvasive physiologic studies of upper or lower extremity arteries...* (work RVU = 0.25, 5 minutes intra-service time) and noted that the services have identical intra-service times and involve the same amount of physician work while the survey code has twice the intensity/complexity as the comparison code.

The RUC concluded that CPT code 72190 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.25 for CPT code 72190.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in April 2018. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Exam – Sacrum (Tab 29)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR); Timothy Laing, MD

In October 2016, the Relativity Assessment Workgroup expanded the CMS/Other Source codes screen, lowering the Medicare utilization threshold from 250,000 to 100,000 based on 2015 Medicare utilization data. CPT code 72220 was identified by this screen and the family was expanded to include sacroiliac X-ray codes 72200 and 72202. The Workgroup recommended that the specialty societies survey these services for April 2017, with a strong recommendation that the Research Subcommittee consider the

specialty societies request to allow direct crosswalks to similar services for physician work and time. In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommends in lieu of conducting a RUC survey. In the NPRM for 2019, CMS disagreed with the RUC recommended work RVUs for 20 CPT codes included in the X-Ray Spine, X-Ray Sacrum, X-Ray Elbow-Forearm, X-Ray Heel and X-Ray Toe code families. CMS proposed the same work RVU of 0.23 for all 20 services based on a utilization-weighted average. The RUC recommended for CMS to maintain the CY 2018 work RVU for all 20 services on an interim basis and requested that the specialties survey all 20 services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

Compelling Evidence

The specialty societies presented compelling evidence based on flawed methodology. This family of codes is CMS/Other sourced as identified by the screen. Therefore, how the times and values were established is unknown or flawed. The RUC accepted compelling evidence based on flawed methodology.

72200 Radiologic examination, sacroiliac joints; less than 3 views

The RUC reviewed the survey results from 67 radiologists and rheumatologists and determined that the survey 25th percentile work RVU of 0.20 accurately reflects the physician work necessary for this service. The RUC recommends 1 minute pre-service time, 4 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 72200 to the top key reference service *73522 Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time, 7 minutes total time) and noted that the survey code involves evaluation of bilateral diarthrodial joint articulations supporting the junction of the spine and pelvis and typically requires two views. Survey respondents appropriately assigned this code lesser intra-service time and intensity and a lower physician work valuation compared to the key reference service which is three or more views evaluating the bilateral hip joints. Evaluation of the bilateral sacroiliac joints and articulations are more complex compared to the second highest key reference service *73562 Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time, 6 minutes total time) which involves evaluation of only one knee, thus the survey code is appropriately valued higher.

For additional support, the RUC noted that CPT code 72200 is bracketed by two MPC codes 93042 *Rhythm ECG, 1-3 leads; interpretation and report only* (work RVU = 0.15, 3 minutes intra-service time, 7 minutes total time) and 70355 (*Orthopantomogram (eg, panoramic x-ray)*) (work RVU = 0.20, 5 minutes intra-service time, 6 minutes total time). The ECG code has one minute less of total time with an appropriately lower amount of physician work and intensity. The panoramic code is a one-view examination that evaluates both the mandible and the maxilla and is familiar to radiologists. It is primarily used to assess for mandible fractures, temporomandibular joint disease or for dental abscess. This MPC code has 1 minute more of intra-service time with identical total time and the same amount of physician work.

The RUC concluded that CPT code 72200 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.20 for CPT code 72200.**

72202 Radiologic examination, sacroiliac joints; 3 or more views

The RUC reviewed the survey results from 70 radiologists and rheumatologists and determined that the survey 25th percentile work RVU of 0.26 accurately reflects the physician work necessary for this service. The RUC recommends 1 minute pre-service time, 4 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 72202 to the top key reference service 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time, 7 minutes total time) and noted that the survey code involves evaluation of bilateral diarthrodial joint articulations supporting the junction of the spine and pelvis and typically requires three views. Survey respondents appropriately assigned this code a lesser intra-service time and lower physician work valuation compared to the key reference service which is three or more views evaluating the bilateral hip joints. Evaluation of the bilateral sacroiliac joints and articulations is more complex compared to the second highest key reference service 73562 *Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time, 6 minutes total time) which involves evaluation of only one knee. The additional view in this code compared to the survey code is appropriately reflected in the greater intensity and physician work valuation and maintains relativity in the family.

For additional support, the RUC noted that CPT code 72202 is bracketed by two MPC codes 70355 (*Orthopantomogram (eg, panoramic x-ray)*) (work RVU = 0.20, 5 minutes intra-service time, 6 minutes total time) and 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 5 minutes intra-service time, 7 minutes total time). The panoramic code is a one-view examination that evaluates both the mandible and the maxilla and is familiar to radiologists. It is primarily used to assess for mandible fractures, temporomandibular joint disease or for dental abscess. This MPC code has 1 more minute of intra-service time but identical total time. The spine code is also a one-view examination that covers a larger area although is a more focused examination compared to evaluation of the articulating SI joints in the surveyed code.

The RUC noted the similar times and values to the pelvis (CPT codes 72170 and 72190) and concluded that CPT code 72202 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.26 for CPT code 72202.**

72220 Radiologic examination, sacrum and coccyx, minimum of 2 views

The RUC reviewed the survey results from 55 radiologists and rheumatologists and determined that the survey 25th percentile work RVU of 0.20 accurately reflects the physician work necessary for this service. The RUC recommends 1 minute pre-service time, 3 minutes intra-service time, and 1 minute immediate post-service time.

The RUC compared CPT code 72220 to the top key reference service 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU = 0.29, 5 minutes intra-service time, 7 minutes total time) and noted that the survey code involves evaluation of the fused sacrum and coccyx forming the tail bone as well as the associated joint articulations and typically requires two views. Survey respondents appropriately assigned this code lesser intra-service time and intensity and a lower physician work valuation compared to the key reference service which is three or more views evaluating the bilateral hip joints. Evaluation of the sacrococcygeal structures and articulations is more complex compared to the second highest key reference service 73562 *Radiologic examination, knee; 3 views* (work RVU = 0.18, 4 minutes intra-service time, 6 minutes total time) which involves evaluation of only one knee.

For additional support, the RUC noted that CPT code 72220 is bracketed by two MPC codes 93042 *Rhythm ECG, 1-3 leads; interpretation and report only* (work RVU = 0.15, 3 minutes intra-service time, 7 minutes total time) and 70355 (*Orthopantomogram (eg, panoramic x-ray)*) (work RVU = 0.20, 5 minutes intra-service time, 6 minutes total time). The ECG code has identical intra-service time with an appropriately lower intensity due to the differences in physician work. The panoramic code is a one-view examination that evaluates both the mandible and the maxilla and is familiar to radiologists. It is primarily used to assess for mandible fractures, temporomandibular joint disease or for dental abscess. This MPC

code has 2 more minutes of intra-service time and 1 more minute of total time, but identical physician work valuation.

The RUC concluded that CPT code 72220 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 0.20 for CPT code 72220.**

Practice Expense

The Practice Expense Subcommittee made a single edit to line 52 to insert radiologic technologist. These services were reviewed and approved by the PE Subcommittee in April 2017. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Elbow/ Forearm (Tab 30)

Daniel Wessell, MD, (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR); Hussein Elkousy, MD (AAOS); William Creevy, MD (AAOS)

In October 2016, the Relativity Assessment Workgroup expanded the CMS/Other Source codes screen, lowering the Medicare utilization threshold from 250,000 to 100,000 based on 2015 Medicare utilization data. The Workgroup recommended that the specialty societies survey these services for April 2017, with a strong recommendation that the Research Subcommittee consider the specialty societies request to allow direct crosswalks to similar services for physician work and time. In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommends in lieu of conducting a RUC survey. In the NPRM for 2019, CMS disagreed with the RUC recommended work RVUs for 20 CPT codes included in the X-Ray Spine, X-Ray Sacrum, X-Ray Elbow-Forearm, X-Ray Heel and X-Ray Toe code families. CMS proposed the same work RVU of 0.23 for all 20 services based on a utilization-weighted average. The RUC recommended for CMS to maintain the CY 2018 work RVU for all 20 services on an interim basis and requested that the specialties survey all 20 services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

Compelling Evidence

The specialty societies presented compelling evidence based on flawed methodology. CPT code 73070 is CMS/Other sourced as identified by the screen. Therefore, how the times and values were established is unknown or flawed. The RUC accepted compelling evidence based on flawed methodology.

73070 Radiologic examination, elbow; 2 views

The RUC reviewed the survey results from 51 physicians and agreed on the following physician time components: 1 minute of pre-service time, 3 minutes of intra-service time, and 1 minute of immediate post-service time. The RUC thoroughly reviewed the recommended work and agreed that the survey 25th percentile work RVU of 0.16, correctly estimates the amount of physician work involved for this service. To justify a work RVU of 0.16, the RUC compared the survey code to CPT code 73060 *Radiologic examination; humerus, minimum of 2 views* (work RVU= 0.16, intra-service time of 3 minutes, total time of 5 minutes) and noted that both services have identical times and involve an identical intensity of physician work. The RUC also compared the survey code to CPT code 73100 *Radiologic examination, wrist; 2 views* (work RVU= 0.16, intra-service time of 3 minutes, total time of 5 minutes) and noted that both services have identical times and involve identical physician work intensity. This recommendation maintains rank order and relativity within the X-ray elbow/forearm family. **The RUC recommends a work RVU of 0.16 for CPT code 73070.**

73080 Radiologic examination, elbow; complete, minimum of 3 views

The RUC reviewed the survey results from 51 physicians and agreed on the following physician time components: 1 minute of pre-service time, 3 minutes of intra-service time, and 1 minute of immediate

post-service time. The RUC thoroughly reviewed the recommended work and agreed that the current work RVU of 0.17, which is also below the survey 25th percentile, correctly estimates the amount of physician work involved for this service. To justify a work RVU of 0.17, the RUC compared the survey code to CPT code 73610 *Radiologic examination, ankle; complete, minimum of 3 views* (work RVU= 0.17, intra-service time of 3 minutes, total time of 5 minutes) and 73630 *Radiologic examination, foot; complete, minimum of 3 views* (work RVU= 0.17, intra-service time of 3 minutes, total time of 5 minutes) and noted that all three services have identical times, views and intensity and should be valued the same. This recommendation maintains rank order and relativity within the X-ray elbow/forearm family. **The RUC recommends a work RVU of 0.17 for CPT code 73080.**

73090 Radiologic examination; forearm, 2 views

The RUC reviewed the survey results from 51 physicians and agreed on the following physician time components: 1 minute of pre-service time, 3 minutes of intra-service time, and 1 minute of immediate post-service time. The RUC thoroughly reviewed the recommended work and agreed that the current and survey 25th percentile work RVU of 0.16, correctly estimates the amount of physician work involved for this service. To justify a work RVU of 0.16, the RUC compared the survey code to CPT code 73060 *Radiologic examination; humerus, minimum of 2 views* (work RVU= 0.16, intra-service time of 3 minutes, total time of 5 minutes) and noted that both services have identical times and involve an identical intensity of physician work. The RUC also compared the survey code to CPT code 73100 *Radiologic examination, wrist; 2 views* (work RVU= 0.16, intra-service time of 3 minutes, total time of 5 minutes) and noted that both services have identical times and involve identical physician work intensity. The recommendation also fits well into the rank order for the family of upper extremity X-Ray codes, justifying the recommended work RVU for the survey code. **The RUC recommends a work RVU of 0.16 for CPT code 73090.**

Practice Expense

These services were reviewed by the PE Subcommittee in April 2017. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Heel (Tab 31)

**Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR)
Hussein Elkousy, MD (AAOS); William Creevy, MD (AAOS); Brooke Bisbee, DPM (APMA)**

In October 2016, the Relativity Assessment Workgroup expanded the CMS/Other Source codes screen, lowering the Medicare utilization threshold from 250,000 to 100,000 based on 2015 Medicare utilization data. The Workgroup recommended that the specialty societies survey these services for April 2017, with a strong recommendation that the Research Subcommittee consider the specialty societies request to allow direct crosswalks to similar services for physician work and time. In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommends in lieu of conducting a RUC survey. In the NPRM for 2019, CMS disagreed with the RUC recommended work RVUs for 20 CPT codes included in the X-Ray Spine, X-Ray Sacrum, X-Ray Elbow-Forearm, X-Ray Heel and X-Ray Toe code families. CMS proposed the same work RVU of 0.23 for all 20 services based on a utilization-weighted average. The RUC recommended for CMS to maintain the CY 2018 work RVU for all 20 services on an interim basis and requested that the specialties survey all 20 services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

73650 Radiologic examination; calcaneus, minimum of 2 views

The RUC reviewed the survey results from 136 physicians and agreed on the following physician time components: 1 minute of pre-service time, 5 minutes of intra-service time, and 1 minute of immediate post-service time. The RUC thoroughly reviewed the recommended work and agreed that the current

work value and the survey 25th percentile work RVU of 0.16, correctly estimates the amount of physician work involved for this service. To justify a work RVU of 0.16, the RUC compared the survey code to MPC code 93010 *Electrocardiogram, routine ECG with at least 12 leads; interpretation and report only* (work RVU= 0.17, intra-service time of 5 minutes, post-service time of 1 minute, and 6 minutes total time) and noted that the survey code involves evaluation of the calcaneus, soft tissues, and the adjacent bones with their complex articulations in two views and is most commonly performed in the setting of acute trauma. Both codes have identical intra-service time and a similar amount of physician work. The RUC also compared the survey code to MPC code 51741 *Complex uroflowmetry (eg, calibrated electronic equipment)* (work RVU= 0.17, intra-service time of 5 minutes, total time of 7 minutes) and noted that both services involve an identical amount of intra-service time and total time and a similar intensity of physician work. This recommendation maintains rank order and relativity with other X-ray codes. **The RUC recommends a work RVU of 0.16 for CPT code 73650.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in April 2017. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

X-Ray Toe (Tab 32)

Daniel Wessell, MD (ACR); Kurt Schoppe, MD (ACR); Andrew Moriarity, MD (ACR); Hussein Elkousy, MD (AAOS); William Creevy, MD (AAOS); Brooke Bisbee, DPM (APMA)

In October 2016, the Relativity Assessment Workgroup expanded the CMS/Other Source codes screen, lowering the Medicare utilization threshold from 250,000 to 100,000 based on 2015 Medicare utilization data. The Workgroup recommended that the specialty societies survey these services for April 2017, with a strong recommendation that the Research Subcommittee consider the specialty societies request to allow direct crosswalks to similar services for physician work and time. In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommends in lieu of conducting a RUC survey. In the NPRM for 2019, CMS disagreed with the RUC recommended work RVUs for 20 CPT codes included in the X-Ray Spine, X-Ray Sacrum, X-Ray Elbow-Forearm, X-Ray Heel and X-Ray Toe code families. CMS proposed the same work RVU of 0.23 for all 20 services based on a utilization-weighted average. The RUC recommended for CMS to maintain the CY 2018 work RVU for all 20 services on an interim basis and requested that the specialties survey all 20 services and review them again at the January 2019 RUC meeting (CY 2020 cycle).

73660 Radiologic examination; toe(s), minimum of 2 views

The RUC reviewed the survey results from 138 physicians and agreed on the following physician time components: 1 minute of pre-service time, 5 minutes of intra-service time, and 1 minute of immediate post-service time. The survey code involves evaluation of the bones, joints and soft tissues of a toe in two or more views. The RUC thoroughly reviewed the recommended work and agreed that the current work value and the survey 25th percentile work RVU of 0.13, correctly estimates the amount of physician work involved for this service. To justify a work RVU of 0.13, the RUC compared the survey code to MPC code 51741 *Complex uroflowmetry (eg, calibrated electronic equipment)* (work RVU= 0.17, intra-service time of 5 minutes, total time of 7 minutes) and noted that both services involve an identical amount of intra-service time and total time, whereas the survey code involves somewhat less physician work intensity. The RUC also compared the survey code to MPC code 93010 *Electrocardiogram, routine ECG with at least 12 leads; interpretation and report only* (work RVU= 0.17, intra-service time of 5 minutes, post-service time of 1 minute, and 6 minutes total time) and noted that both services involve identical intra-service time, though the reference code is a slightly more intense service to perform. The RUC also agreed that the recommended work valuation maintains relativity within the family of X-Ray foot and ankle codes. **The RUC recommends a work RVU of 0.13 for CPT code 73660.**

Practice Expense

These services were reviewed and approved by the PE Subcommittee in April 2017. **The RUC recommends the direct practice expense inputs as affirmed by the Practice Expense Subcommittee.**

Corneal Hysteresis Determination (Tab 33)

David Vollman, MD (AAO); Parag Parekh, MD (ASCRS); Charles Fitzpatrick, OD (AOA)

In 2005, the AMA RUC began the process of flagging services that represent new technology or new services as they were presented to the Committee. This service was flagged for CPT 2015 and reviewed at the October 2018 Relativity Assessment Workgroup meeting. The Workgroup indicated that the utilization is continuing to increase for these services. The RUC recommended that these services be resurveyed for physician work and practice expense for January 2019.

92145 Corneal hysteresis determination, by air impulse stimulation, unilateral or bilateral, with interpretation and report

The RUC reviewed the survey responses from 30 ophthalmologists and optometrists and determined that the survey 25th percentile work RVU of 0.10 appropriately accounts for the work required to perform this service. The RUC recommends 1 minute evaluation pre-service time, 5 minutes intra-service time and 1 minute post-service time, which accounts for a reduction in the pre- and post-service time as indicated by the survey respondents because this service is typically reported with an Evaluation and Management (E/M) service on the same day. CPT code 92145 measures corneal resiliency to absorb and dissipate energy in response to an externally applied force (air) and the information is used to predict risk of the progression of glaucoma. The physician reviews approximately 12 data elements on the intra-ocular pressure, what the change would be, quality and reliability of the test and compares this data to other data about glaucoma, such as optical coherence tomography results, the physical examination of the nerve, the visual fields and corneal thickness.

The RUC compared the surveyed code to the second key reference service 92285 *External ocular photography with interpretation and report for documentation of medical progress (eg, close-up photography, slit lamp photography, gonioscopy, stereo-photography)* (work RVU = 0.05, 5 minutes intra-service/total time) and agreed that more cognitive work is required to perform the interpretation work involved in CPT code 92145, whereas CPT code 92285, ocular photography, is primarily for documentation purposes. The RUC compared the surveyed code to similar service, CPT code 76514 *Ophthalmic ultrasound, diagnostic; corneal pachymetry, unilateral or bilateral (determination of corneal thickness)* (work RVU = 0.14 and 5 minutes total time) and determined that code 92145 is less intense and requires less physician work, thus valued appropriately at the survey 25th percentile. **The RUC recommends a work RVU of 0.10 for CPT code 92145.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society.

Work Neutrality

The RUC's recommendation for this code will result in an overall work savings that should be redistributed back to the Medicare conversion factor.

Septostomy (Tab 34)

Thad Waites, MD (ACC); Ed Tuohy, MD (ACC); Clifford J. Kavinsky, MD (SCAI); Richard Wright, MD (ACC)

Facilitation Committee #2

The Society for Cardiovascular Angiography and Interventions (SCAI) nominated two codes to CMS as potentially misvalued services. These services are typically performed on children, a non-Medicare population, and are currently contractor-priced. The RUC agreed with the specialty society and recommended to survey for January 2019.

92992 Atrial septectomy or septostomy; transvenous method, balloon (eg, Rashkind type) (includes cardiac catheterization)

The RUC determined that the survey 25th percentile work RVU of 10.00 was too low and the median work RVU of 16.00 was somewhat high for this high intensity service compared to the key reference services. The RUC noted there were not adequate crosswalks for this 000-day global within physician service times, physician work and high intensity level. The RUC identified the possibility that related imaging guidance may not be correctly bundled into the code. Therefore, the RUC recommends that CPT code 92992 be referred to CPT for revision to bundle in all forms of imaging guidance typically used during the procedure. **The RUC recommends that CPT code 92992 remain contractor priced for another cycle and will review the revised service for the 2021 Medicare Physician Payment Schedule.**

92993 Atrial septectomy or septostomy; blade method (Park septostomy) (includes cardiac catheterization)

The specialty societies indicated that CPT code 92993, atrial septostomy using the blade method, is antiquated and rarely performed. The RUC recommends that CPT code 92993 be referred to the CPT Editorial Panel for revision. **The RUC recommends that CPT code 92993 remain contractor priced for another cycle and will review the revised service for the 2021 Medicare Physician Payment Schedule.**

Refer to CPT

The RUC identified the possibility that related imaging guidance may not be correctly bundled into CPT code 92992. Therefore, the RUC recommends that CPT code 92992 be referred to the CPT Editorial Panel for revision to bundle in all forms of imaging guidance typically used during the procedure. Additionally, the specialty societies indicated that CPT code 92993 is antiquated and rarely performed. The RUC recommends that CPT code 92993 be referred to the CPT Editorial Panel for revision or possible deletion. Once these services return to the RUC for survey they should survey as a 000-day global period because these procedures do not provide definitive therapy, the patients requiring these procedures often remain critically ill after the life-saving/temporizing procedures.

Heart Rate Test (Tab 35)

Mary Newman, MD (ACP); Tanvir Hussain, MD (ACP)

In April 2018, the Relativity Assessment Workgroup identified contractor-priced Category I CPT codes that have 2017 estimated Medicare utilization over 10,000. The RUC determined that CPT code 95943 is performed by many specialties and the utilization is high enough to survey. The RUC recommended to survey this service for January 2019.

The RUC last considered this code in 2012. At that time, the American College of Physicians (ACP) and the American Academy of Family Physicians (AAFP) worked to obtain the equipment vendor's customer list to identify physicians who could accurately value this service. The ACP and AAFP also obtained

random samples of physicians among their respective specialties. The specialties collected a total sample of 750 physicians and received approval from the Research Subcommittee to conduct a survey. At that time, only three partial responses were received, with no respondents indicating familiarity with the service. Given this lack of data, the RUC recommended carrier pricing for CPT code 95943.

As indicated in the RUC database, utilization for code 95943 was 31,418 in 2017 and information from the Medicare Physician and Other Supplier Public Use File identifies 100 internal medicine physicians and 98 family medicine physicians who are reporting the code to Medicare. For this utilization the RUC requires at least thirty completed surveys. ACP launched a survey of code 95493 on November 23, 2018 to 2000 ACP members. The ACP survey closed on December 17, 2018 with only 9 completed surveys 21 short of the required completed survey number. At the January 2019 RUC meeting ACP requested to re-survey with a targeted survey for presentation at the April 2019 RUC meeting.

The RUC discussed that according to the CPT Editorial Panel, a new or revised Category I code must satisfy all the following criteria:

- All devices and drugs necessary for performance of the procedure or service have received FDA clearance or approval when such is required for performance of the procedure or service;
- The procedure or service is performed by many physicians or other qualified health care professionals across the United States;
- The procedure or service is performed with frequency consistent with the intended clinical use (i.e., a service for a common condition should have high volume, whereas a service commonly performed for a rare condition may have low volume);
- The procedure or service is consistent with current medical practice;
- The clinical efficacy of the procedure or service is documented in literature that meets the requirements set forth in the CPT code change application.

A RUC member provided background that when this Category I code was created at the CPT Editorial Panel it was created to differentiate the service from tilt table testing. The device manufacturer brought the code forward for a series of maneuvers that are different than those performed using a tilt table. The RUC member suggested that in the years since the code was created it has proven that it does not meet the criteria for a Category I code. The RUC member explained the service is not widely performed and that 100 internists performing the service is not “frequency consistent with the intended clinical use”. The code describes common measures and if the service was consistent with current medical practice the volume would be much higher. **The RUC recommends CPT code 95943 be referred to the CPT Editorial Panel for deletion.**

X. Practice Expense Subcommittee (Tab 36)

Doctor Scott Manaker, Chair, provided a summary of the report of the Practice Expense (PE) Subcommittee:

CMS Medical Supplies and Equipment Repricing Specialty Review

The PE Subcommittee reminds the specialty societies and others about the CMS repricing initiative. There were some errors and items that were overlooked by the external consultant so the PE Subcommittee encourages all specialty societies to look at the revised supplies and equipment pricing to make sure that the prices are accurate and that the equipment priced is the correct equipment for the procedure. There is an example of a stent that was repriced accurately for that stent, however it is not the correct equipment for the service. It is important to look at the equipment and supplies for your specialty and if it is not correct, get an invoice and present the information to CMS.

Fluoroscopy Rooms and Tables

During the meeting, PE Subcommittee members questioned including both equipment items: mobile c-ARM room (EL018) at a purchase price of \$151,200 and fluoroscopy table (EF024), which includes a fluoroscopy unit, at a purchase price of \$227,650 to perform one service with fluoroscopy. Although there was agreement that the C-arm does not include a table, most Subcommittee members thought that the appropriate fluoroscopy table should have a purchase price between \$10,000 and \$15,000. **The fluoroscopy table was replaced with a regular exam table for the time being and the PE Subcommittee requested that staff conduct an analysis to identify all services with both equipment items EL018 and EL024 for the PE Subcommittee's review.**

Preventing duplication of supply items in kits

The PE Subcommittee members noticed that there was duplication of a few supply items between requested kits and single supply items. The Subcommittee discussed if it is more appropriate if the kits are package priced or if each supply item is individually priced. The Subcommittee discussed that the spreadsheet is now enabled with supply pricing auto populated from the CMS supply list. The Subcommittee discussed a variety of options to prevent duplication of supplies. **Staff will investigate the feasibility of the different options and provide that information to the PE Subcommittee.**

Clinical Staff Time Surveys

The PE Subcommittee discussed, particularly as the evaluation and management (E/M) process goes forward, that often when there are high clinical staff times, especially for perform service times, there are concerns about the veracity of the data provided by an expert panel. One PE Subcommittee member voiced concerns that often the expert panel varies dramatically in size from one specialty to another and it may not be especially representative of the variety of physicians using the code(s). Currently there are three methods employed by specialty societies to develop the direct practice expense inputs recommendation for clinical staff times:

1. Expert panel (most common method)
2. Within the physician work survey, the physician is asked to estimate clinical staff time for certain clinical activities
3. The clinical staff are surveyed for time directly

The PE Subcommittee discussed that for the E/M services, the physicians will be asked as part of their survey to work with clinical staff to estimate clinical staff time for certain clinical activities.

The RUC approved the Practice Expense Subcommittee Report.

XI. Relativity Assessment Workgroup (Tab 37)

Doctor Scott Collins, Chair, provided the Relativity Assessment Workgroup (RAW) report:

PE Screen – High Cost Supplies

At the January 2018 RUC meeting, the Practice Expense (PE) Subcommittee discussed potential screens that would identify misvalued services and recommended a high cost supply items screen to the Relativity Assessment Workgroup (RAW). There were 58 supply items with a purchase price greater than \$500. The PE Subcommittee recommended that the RAW identify services that include supply items greater than \$500 and based upon utilization, dominant specialty and date of last review, determine if there is reason for RUC review.

The only family identified with non-facility Medicare utilization over 10,000 that has not been recently reviewed (in the last five years), with high cost supply items are CPT codes 37225, 37227 and 37229.

CPT code 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* has three high cost supply items:

- SD253 atherectomy device (Spectronetics laser or Fox Hollow) (\$4,979.67)
- SD254 covered stent (VIABAHN, Gore) (\$3,768)
- SD256 Embolic Protection Device Spider FX (EV3, documentation available) (\$1,365)

CPT code 37225 *Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with atherectomy, includes angioplasty within the same vessel, when performed* and 37229 *Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed* each contain two high cost supply items:

- SD253 atherectomy device (Spectronetics laser or Fox Hollow) (\$4,979.67)
- SD256 Embolic Protection Device Spider FX (EV3, documentation available) (\$1,365)

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.**

Re-review of Flagged Services – Review Action Plans (4 codes)

Throughout the RUC’s review of potentially misvalued services, codes have been flagged for review at later date after additional utilization was available, CPT assistant articles were published or additional information was gathered. Four codes were flagged and action plans were submitted for review. **The Relativity Assessment Workgroup reviewed these services and recommends:**

CPT Code	Recommendation
67028	Survey for April 2019. The Workgroup noted that this service is performed to treat a variety of diseases and the original valuation was based on a crosswalk code that has since be revalued.
75894	Review in two years (January 2021). This service represents the residual that remains after bundling it to other various services. The Workgroup noted that when it reviews this service again in two years that “varicose veins of lower extremities” should no longer be the primary diagnosis.
75898	Refer to CPT Assistant to provide education on how to correctly report this service.
75984	Survey for April 2019.

Site of Service Anomalies – Review Action Plans (2 codes)

The Workgroup reviewed an action plan for two site of service anomalies. CPT code 28220, identified as performed in the inpatient hospital setting but includes half discharge day management (99238) and **recommends that CPT code 28820 be placed on the LOI for survey at the April 2019 RUC meeting.** CPT code 63030 was identified as performed in the outpatient setting but includes hospital visits. **The**

Workgroup recommended to review CPT code 63030 in two years to determine if the CPT 2017 changes were effective to ensure correct reporting of this services.

CMS Other Source Codes – Review Action Plans (7 codes)

The Workgroup reviewed action plans for CMS/Other Source codes with 2017e Medicare utilization over 30,000. **The Workgroup recommends:**

CPT Code	Recommendation
74300 74301 (f) 74328 74329 (f) 74330 (f)	74301 - Refer to CPT Sept 2019/ RUC January 2020. The specialty recommended and the Workgroup agreed referring CPT code 74301 to CPT for further revision and possible deletion. Survey for April 2019 - CPT codes 74300, 74328, 74329 and 74330.
93623	Survey April 2019.
G0270	Maintain/Remove from screen. The high growth of this service is justified as that was intended for this service. This G code is necessary to be reported in addition to the CPT code 97803.
G0297	Refer to CPT May 2019 to establish a permanent code for this procedure/ survey RUC Oct 2019.
G0452	Survey for October 2019 after request to conduct targeted survey from the Research Subcommittee to avoid a bi-modal distribution.
Q0091	Survey for April 2019.

Harvard Valued – Medicare Utilization over 30,000 – Review Action Plan (1 code)

The Workgroup reviewed the action plan for CPT code 29823 *Arthroscopy, shoulder, surgical; debridement, extensive*, Harvard Valued with 2017e Medicare utilization over 30,000. **The Workgroup recommended to refer CPT code 29823 for revision. The code descriptors for 29822 and 29823 are not clear (e.g., limited versus extensive) and there are no guidelines to assist providers and coders with selecting the correct code.**

High Volume Growth – Review Action Plans (12 codes)

The Workgroup reviewed action plans for services that with 2017e Medicare utilization of 10,000 or more that increased by at least 100% from 2012 through 2017. The Workgroup recommends

CPT Code	Recommendation
00534	Maintain/Remove from screen , utilization is appropriate.
00560	Maintain/Remove from screen , utilization is appropriate and driven by TAVR procedures.
37229	Refer to this entire family of codes to CPT September 2019/RUC January 2020 to revise the descriptors and accommodate new technologies.
64566	Maintain/Remove from screen. The utilization is appropriate as it recognizes a successful non-drug, non-surgical treatment.
70496	Maintain/Remove from screen. Increase in utilization indicates appropriate evidence-based utilization of the technology associated with the treatment stroke victims.
70498	Maintain/Remove from screen , utilization appropriate.

77401	Refer to CPT May 2019/RUC Oct 2019 to better define the set of services associated with delivery of superficial radiation therapy (SRT).
93662	Survey October 2019.
93750	Survey April 2019.
95012	Review PE April 2019.
G0270	Maintain/Remove from screen. The high growth of this service is justified as that was intended for this service. This G code is necessary to be reported in addition to the CPT code 97803.
G0399	Recommend that CMS delete this service as it is already described in CPT Category I codes 95800, 95801 and 95806.

CPT Assistant Article Analysis – Review Action Plans (17 codes)

The Workgroup reviewed action plans for services that were RUC referrals to develop CPT Assistant articles from 2013-2016. **The Workgroup recommends:**

CPT Code	Recommendation
33620	Maintain. CPT Assistant article addressed issues identified.
33621	Maintain. CPT Assistant article addressed issues identified.
33622	Maintain. CPT Assistant article addressed issues identified.
51784	Maintain. CPT Assistant article addressed issues identified.
51792	Maintain. CPT Assistant article addressed issues identified.
52234	Review in two years (January 2021) to determine if article and CPT changes were effective.
52240	Review in two years (January 2021) to determine if article and CPT changes were effective.
64555	Maintain. CPT Assistant article addressed issues identified.
70371	Maintain. CPT Assistant article addressed issues identified.
76513	Survey for April 2019.
92287	Review in two years (January 2021) to determine if article and CPT changes were effective.
94060	Survey for April 2019. The Workgroup noted that 94400 may be recommended for deletion and 94640 and 94668 should be surveyed by Family Practice as they are the primary providers of these services.
94400	
94640	
94668	
94770	
95970	Maintain/Remove from screen. The new code set was just reviewed for 2019. Additionally, this service was placed on the new technology/new services list and will be re-reviewed by the RAW as appropriate.

CMS Other Source Codes – Medicare Utilization over 20,000 – Review Data

In October 2018, the Workgroup discussed future screens and recommends lowering the threshold and examining the list of CMS/Other source codes with Medicare utilization over 20,000. At the January 2019 meeting, the Workgroup did not have time to discuss this agenda item and will review at the April 2019 RUC meeting.

RAW Other Issues

The Workgroup noted that a RAND study on “Patterns of Postoperative Visits Among Medicare Fee-for-Service Beneficiaries” was recently published. **The RAW will review the data from the RAND study and discuss at the April 2019 meeting.**

RAW Informational Items

The following documents were filed as informational items: Referrals to the CPT Editorial Panel; Referrals to the CPT Assistant Editorial Review Board; Potentially Misvalued Services Progress Report and CMS/Relativity Assessment Status Report.

The RUC approved the Relativity Assessment Workgroup Report.

XII. Administrative Subcommittee (Tab 38)

Doctor Walt Larimore provided the Administrative Subcommittee report:

Review Rotating Seat Election Rules and Candidates Nominated (Tab 43)

The Administrative Subcommittee reviewed and approved the nominations for the “Any Other” and Internal Medicine rotating seats as well as reviewed the rotating seat policies and election rules.

Use of Illustrations in RUC Presentations

In January 2019, the Subcommittee fully discussed the use of illustrations and videos at the RUC meeting and possible criteria. The Subcommittee determined only a few illustrations pre-approved by the Administrative Subcommittee be allowed in the rationale section of the summary of recommendation form. The RUC discussed and noted that the purpose of illustrations is only to aid the primary RUC reviewers understand the service. **The Subcommittee recommends adding the following to the “Instructions for Specialty Societies Developing Work Value Recommendations” document (page 14):**

Use of Illustrations

Specialty societies may provide a few illustrations that are pre-approved by the Administrative Subcommittee in the rationale section of the summary of recommendation (SoR) form.

AMA staff stated that after the Administrative Subcommittee approves any illustrations, **the AMA will confirm that the illustrations are HIPAA compliant.**

The RUC approved the Administrative Subcommittee Report.

XIII. Research Subcommittee (Tab 39)

Doctor Margie Andreae, Chair, provided a summary of the Research Subcommittee report:

The Subcommittee reviewed and accepted the October 2018 Research Subcommittee report.

The Research Subcommittee report from the October 16 conference call and separate electronic review included in Tab 39 of the January 2019 agenda materials was approved without modification.

E/M Office Visit Survey Instrument and Survey Methodology

In preparation for the survey and review of Evaluation and Management (E/M) office visit services, the Research Subcommittee was requested to review the proposed survey instrument created by AMA staff with input from the CPT/RUC Workgroup on E/M.

The Research Subcommittee had a robust discussion on the draft survey template. The Subcommittee first discussed the review of direct practice expense inputs. A Subcommittee member questioned whether it would be optimal for clinical staff to complete a separate survey regarding their typical clinical staff time. Another Subcommittee member noted that it would be challenging for clinical staff to associate their activities with different office visit code levels and several other subcommittee members concurred with their concern. The Subcommittee agreed that it would be appropriate to strengthen the proposed language so that the physician or other qualified healthcare provider is strongly recommended to complete the practice expense section of the survey as a team jointly with clinical staff and their practice manager.

It was noted that the terminology concerning three calendar days prior to the date of service and seven calendar days after the date of service should be phrased consistently throughout the survey without variation. The Subcommittee agreed that would be appropriate.

The Subcommittee discussed whether it would be appropriate for survey respondents to try to differentiate between their pre-service, intra-service (face-to-face) and post-service work on the date of service, in addition to their work three calendar days prior to the date of service and seven calendar days after the date of service (5 time fields total). The Subcommittee agreed that it would be collectively challenging for the survey respondents to make the distinction between intra-service time and pre/post service time on the date of service, particularly with the code descriptors stating that time-based code selection is instead by minimum total time on the date of the encounter and does not differentiate between face to face and non-face to face on the date of the encounter. Several subcommittee members noted that their non-face-to-face work on the date of the encounter can be as intense or more intense than the face-to-face work with the patient. In addition, Subcommittee members observed that this approach would be analogous to the intra-service for hospital visits which is both the face-to-face and non-face-to-face “floor time” of the provider. Furthermore, Subcommittee members noted that some providers typically fill out the electronic medical record while face-to-face with the patient, while others wait until after the face-to-face time to complete this work.

The Subcommittee inquired whether it would be optimal for additional educational materials to be developed for potential survey respondents for this survey. AMA Staff shared their plan for the development of a recorded webinar for survey respondents; a script drafted by AMA will be submitted electronically to the Subcommittee shortly for their review and approval. The Subcommittee expressed strong interest in this approach.

The Research Subcommittee reviewed the draft survey template in detail and approved it with the following modifications (*A clean version of the revised draft template has been appended to this report*):

- **Combine questions 2B, 2C and 2D so that all of the work on the date of service is captured as a single element, instead of differentiating between face-to-face work and non-face to face work on the date of service. For consistency, the subcommittee also deleted the pre-, intra-, and post-service period definitions from the background for question 2 section because this detail would no longer be needed. Also, the parenthetical portion of the definition for ZZZ global services, which reference service periods should also be removed to avoid potential confusion.**
- **Remove the standard financial disclosure question to avoid confusion as simply performing a service is not classified as a financial conflict of interest. The Subcommittee agreed that this question would not be necessary as no financial conflicts can be identified related to the provision of office visits. Following this change, the Subcommittee also agreed to remove the header for the “additional disclosure” question of the survey while retaining the question regarding outside influence under additional disclosure.**

- **Strengthen instructions to survey respondents to complete the survey as a team with their clinical staff and practice manager, adding instructions at the beginning of the survey and the beginning of the PE section.**
- **Revise the clinical staff clinical activity “review/read x-ray, lab, pathology and other reports” to instead state “Obtain or identify need for imaging, lab or other test result(s)” for the clinical labor time question.**
- **Add an example of another type of supply for question 8, stating “(e.g., disposable speculum)”**

During the RUC’s discussion of the Research report, the RUC agreed to add the text “If none, enter 0 minutes.” with questions 2A *Within three calendar days prior to the office visit encounter* and 2C *Within seven calendar days after the day of the office visit encounter (in minutes).*

NOTE: The full text of the survey template has been appended to the January 2019 Research Subcommittee report.

The Subcommittee also discussed the process for review of vignettes for the office visit codes. Although draft vignettes were included in the draft survey instrument, the Chair noted that vignettes were not formally being reviewed and finalized until the CPT Editorial Panel meets in February. During the Subcommittee’s preliminary general discussion of vignettes, questions were raised regarding whether age and gender are necessary to include and whether some of the codes should have multiple vignettes. The Subcommittee discussed the challenges of having vignettes that are applicable to all surveying specialties versus the challenges of reviewing multiple vignettes for each code and ensuring consistency in complexity. The Subcommittee members agreed that it is rare to have more than two vignettes for a single code and that in the last survey of these codes, a single vignette was used per code. The Subcommittee members that are also members of the CPT/RUC Workgroup on E/M noted that they would meet the next day to continue working on the vignettes for each code for consideration by CPT Panel with the goal of creating a single vignette per code that would be generalizable to multiple specialties.

The Subcommittee also discussed the reference service list for the office visit codes and agreed that there should only be a single reference service list for codes 99202-99215 and a separate add-on code reference service list for the new prolonged service code. The members of the CPT/RUC Workgroup on E/M will develop a proposed RSL to be distributed to all interested parties for review.

Anesthesia Workgroup Survey Instrument, Vignettes and Valuation Methodology

At the October 2018 RUC meeting, the RUC finalized next steps in the process to survey anesthesia survey reference codes. Sixteen anesthesia codes have been selected for survey at the April 2019 Anesthesia Workgroup meeting. The purpose of the survey is to confirm the relativity of the procedures to include in the anesthesia reference service list (RSL). Through this process procedures that are found not to fit within relativity line may be removed from the list of potential codes for the anesthesia RSL.

At the request of the RUC and the Anesthesia Workgroup, ASA submitted survey materials for the April 2019 survey for review by the Research Subcommittee. These documents were reviewed by the Anesthesia Workgroup during a conference call on December 3, 2018.

Survey Instrument

At the October 2018 RUC meeting, the RUC approved the questions for the survey. RUC staff then built the survey instrument using Qualtrics, the web-based platform used for the RBRVS surveys. **The Research Subcommittee approved the custom survey template, which is available in tab 39 of the January 2019 RUC agenda materials, without modification.**

Educational Presentation

ASA was asked to develop an educational presentation for survey respondents. The submitted presentation was modeled after a similar presentation that is used for the RBRVS survey. The Anesthesia Workgroup and RUC staff reviewed the survey template and confirmed that it is appropriate. **Shortly following the in-person meeting, the Research Subcommittee also reviewed the template and approved the template as submitted.**

Survey Cover Memo/Email

A survey cover memo/email modeled after the RUC approved email for the traditional RUC survey has also been developed. The Anesthesia Workgroup and RUC staff reviewed the survey template and confirmed that it is appropriate. **The Research Subcommittee approved the survey distribution email with the following modifications to the first two paragraphs:**

You have been selected to participate in an AMA RUC survey. This survey will help our society, in concert with the RUC, to recommend appropriate valuation of anesthesia services to the Centers for Medicare & Medicaid Services. Our society needs your help to assure appropriate valuation of anesthesia services for the Medicare program. Please note, you do not need to respond to the questions for all of the codes in this survey. You may not have recent experience with one or more of the procedures. We ask that you provide responses for those services about which you have direct professional knowledge and feel comfortable answering, whether or not you currently perform the service.

The purpose of this survey is to obtain estimates of the time, intensity and complexity of the different work components when performing the following components when performing selected anesthesia services.

Time Packages Document

The Anesthesia Workgroup recommended the creation of standard Anesthesia time packages. The time package document, which is available in tab 39 of the January 2019 RUC agenda materials, provides a summary and documentation of the time packages. This documentation is consistent with the time packages approved at the last RUC meeting and the language is directly from the presentation from that meeting. This information will not be seen by survey respondents but is reference material for the RUC as well as ASA advisors reviewing the survey data and developing recommendations. **The Research Subcommittee approved the Anesthesia time packages without modification.**

Survey Summary Spreadsheet

ASA was asked to design a format to submit survey results. On the December 2018 conference call the Anesthesia Workgroup approved the use of a single survey summary spreadsheet to present survey results. They determined that an SOR was not needed. ASA submitted the survey summary spreadsheet with all of the changes requested by the Anesthesia Workgroup. **The Research Subcommittee approved the Anesthesia summary spreadsheet without modification.**

Vignettes

ASA was asked to submit vignettes for the codes that will be surveyed. Typically when surveying anesthesia codes, the vignette for the top surgical procedure reported with the anesthesia code is used. ASA took this approach. Relying on a recent analysis of Medicare claims data conducted by the AMA, ASA selected the vignette of the top surgical procedure associated with the anesthesia code. The Anesthesia Workgroup reviewed the vignettes in detail on their December 2018 call and agreed they were appropriate with minor modifications.

The Research Subcommittee agreed that the vignettes provided by the Anesthesia Workgroup and ASA were appropriate overall and only made revisions to the vignettes for codes 00560, to use the CPT 2020 vignette for the top surgical code and the vignette for code 00562 to more closely reflect the latest vignette in the RUC database. **The Research Subcommittee approved the vignettes for the 16 codes which are listed in the January 2019 Research Subcommittee report.**

Specialty Mix of RUC Survey Samples

At the October RUC meeting, a RUC member proposed for the Research Subcommittee to explore whether any additional instructions or rules are necessary for specialties regarding how to align the specialty mix of the survey sample relative to how often each specialty performs the service. For context, 58 percent of the physician work surveys for CPT 2019 included multiple specialties.

The Research Subcommittee had a brief discussion regarding whether additional information should be provided and/or new rules should be created pertaining to the specialty mix of the survey sample and survey responses. Subcommittee members express concern with making any modifications to the current process, noting the additional administrative burden it would place on specialty societies and the additional enforcement burden it would place on the RUC would not be appropriate at this time. It was noted that there is currently no hard rule requiring that specialties with a large minority of the claims participate in the survey process. **The Research Subcommittee agreed that it would continue discussing these topics at an upcoming meeting.**

The RUC approved the Research Subcommittee Report.

XIV. Multi-Specialty Points of Comparison (MPC) Workgroup (Tab 40)

Doctor Alan Lazaroff, Chair, provided a summary of the Multi-Specialty Points of Comparison (MPC) Workgroup report:

Review of Specialty Code Recommendations

The MPC Workgroup members reviewed proposals from several specialties for codes to be added or removed from the MPC list. Representatives from the specialty societies attended the meeting to provide clarity and answer questions from workgroup members. The MPC Workgroup members also noted that specialty societies should be encouraged to take full advantage of the MPC review process to both add new services and remove services that are no longer appropriate for the list. Finally, the members reminded the specialty societies of the rule that any specialty with 10% or more of the utilization has the right to comment on the appropriateness of addition or deletion of the code. AMA staff indicated that the appropriate specialties either have already been contacted or will be to ensure that the codes are appropriate. It was also noted that going forward, specialties who recommend adding a code to the MPC list should provide a list that shows how the recommended codes for addition fit in their society's hierarchy of codes. In the end, the MPC Workgroup members agreed to include all fourteen specialty recommended codes to the MPC list and agreed to delete the eight codes the specialties recommended for deletion. Moreover, the MPC Workgroup discussed the maintenance of the MPC list. The members agreed that prior to the April 2019 RUC meeting, AMA staff will review the list to determine the volume of codes that have not been reviewed in the last 10 and 15 years. The members agreed that following this staff review, the MPC Workgroup will determine next steps and a process to sunset codes that have not been recently reviewed by the RUC.

The MPC Workgroup also decided that any code on the MPC list that is scheduled for review in the current CPT cycle is to be deleted from the MPC list. Specialty societies may wish to submit such codes for re-inclusion on the MPC list after this review is completed and after CMS has designated the new value. **The MPC committee recommends that the January RUC meeting is the best opportunity**

for societies to recommend codes for addition since this follows the CMS Final Rule, thus allowing newly reviewed codes to be added.

The MPC Workgroup recommends that the following CPT codes be added to the MPC list moving forward:

Code	Long Descriptor	Work RVU	Global	Most Recent RUC Review	2017 Frequency
19303	Mastectomy, simple, complete	15.00	090	Apr-16	23,014
29580	Strapping; Unna boot	0.55	000	Oct-16	299,359
31600	Tracheostomy, planned (separate procedure);	5.56	000	Apr-16	27,002
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)	29.58	090	Jan-17	
34812	Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral (List separately in addition to code for primary procedure)	4.13	ZZZ	Jan-17	18,205
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	9.00	000	Jan-16	43,181
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	10.42	000	Jan-16	13,347
43117	Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision, with or without proximal gastrectomy; with thoracic esophagogastrostomy, with or without pyloroplasty (Ivor Lewis)	57.50	090	Oct-16	733
71046	Radiologic examination, chest; 2 views	0.22	XXX	Apr-16	
71111	Radiologic examination, ribs, bilateral; including posteroanterior chest, minimum of 4 views	0.32	XXX	Apr-16	30,514

74019	Radiologic examination, abdomen; 2 views	0.23	XXX	Apr-16	
75635	Computed tomographic angiography, abdominal aorta and bilateral iliofemoral lower extremity runoff, with contrast material(s), including noncontrast images, if performed, and image postprocessing	2.40	XXX	Apr-16	104,789
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)	0.38	ZZZ	Oct-15	413,947
77002	Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device) (List separately in addition to code for primary procedure)	0.54	ZZZ	Oct-15	476,693

The MPC Workgroup recommends that the following CPT codes be deleted from the MPC list moving forward:

Code	Long Descriptor	Work RVU	Global	Most Recent RUC Review	2017 Frequency
43760	Change of gastrostomy tube, percutaneous, without imaging or endoscopic guidance	0.90	000	Apr-07	54,095
70460	Computed tomography, head or brain; with contrast material(s)	1.13	XXX	Oct-12	31,683
70470	Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections	1.27	XXX	Apr-11	107,627
72100	Radiologic examination, spine, lumbosacral; 2 or 3 views	0.22	XXX	Feb-11	1,861,601
72114	Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views	0.32	XXX	Feb-11	96,666
74280	Radiologic examination, colon; air contrast with specific high density barium, with or without glucagon	0.99	XXX	Sept-11	12,013
76536	Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation	0.56	XXX	Apr-09	868,983
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	0.65	XXX	Apr-02	16,145

The RUC approved the MPC Workgroup Report.

XV. RUC HCPAC Review Board (Tab 41)

Doctor Timothy Tillo, DPM, Alternate Co-Chair, provided a summary of the report of the Health Care Professionals Advisory Committee Review (HCPAC) Review Board:

Doctor Tillo reported that the HCPAC had a busy meeting with four tabs and many codes. He publicly thanked Doctor Hollmann for taking time out of his busy schedule to chair a pre-facilitation committee via conference call last week.

- **Relative Value Recommendations for CPT 2020**

Trigger Point Dry Needling (Tab 41a)

Jennifer Joy Thomas, PT (APTA); Richard Rausch, PT, DPT, MBA (APTA); Anthony Hamm, DC, MS (ACA); Randy Boldt, PT (APTA)

For CPT 2020, the CPT Editorial Panel approved two new codes to report dry needling of musculature trigger points. This technique represents an alternative to pain medication and/or surgery for myofascial pain.

20560 Needle insertion(s) without injection(s), 1 or 2 muscle(s)

The Health Care Professionals Advisory Committee (HCPAC) Review Board reviewed the survey results from 115 physical therapists and chiropractors for new CPT code 20560 and determined that the proposed work RVU of 0.45, the survey 25th percentile, appropriately accounts for the work required to perform this service. The HCPAC recommends 3 minutes of pre-service time, 10 minutes intra-service time and 3 minutes immediate post-service time. Pre-service and post-service times were reduced to 3 minutes from the survey median times to account for overlap in work if other treatment(s) are performed on the same date. Typically, one additional treatment will occur, for example, 20560 plus 97140. With respect to pre-service work, reviewing the patient chart will not be repeated, but code 20560 has work distinctly related to the invasive service. With respect to post-service work, 20560 will require separate distinct documentation of the service and different patient instructions on home care. The HCPAC agreed that the pre- and post-service time of 3 minutes each did not duplicate the work of another service that may be performed at the same session.

The HCPAC compared the survey code to key reference service CPT code 97140 *Manual therapy techniques (eg, mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes* (work RVU = 0.43, 2 minutes pre-service, 15 minutes intra-service and 2 minutes post-service time) and agreed that the survey code is more intense and complex to perform, especially requiring more mental effort, judgement and physiological stress, which justifies a higher work value even with less intra-service time. The HCPAC also compared the survey code to MPC code 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)* (work RVU = 0.45, 3 minutes pre-service, 15 minutes intra-service and 3 minutes post-service time) and agreed that the time required to perform both services are identical and should be valued identically. **The HCPAC recommends a work RVU of 0.45 for CPT code 20560.**

20561 Needle insertion(s) without injection(s), 3 or more muscles

The HCPAC reviewed the survey results from 115 physical therapists and chiropractors for new CPT code 20561 and determined that the proposed work RVU of 0.60, the survey 25th percentile, appropriately accounts for the work required to perform this service. The HCPAC recommends 3 minutes of pre-evaluation time, 15 minutes intra-service time and 3 minutes immediate post-service time. Pre-service and post-service times were reduced to 3 minutes from the survey median times to account for overlap in work if other treatment(s) are performed on the same date. Typically, one additional treatment will occur, for example, 20561 plus 97140. With respect to pre-service work, reviewing the patient chart will not be repeated, but code 20561 has work distinctly related to the invasive service. With respect to post-service work, 20561 will require separate distinct documentation of the service and different patient instructions on home care. The HCPAC agreed that the pre- and post-time of 3 minutes each did not duplicate the work of another service that may be performed at the same session.

The HCPAC compared the survey code to key reference service CPT code 97810 *Acupuncture, 1 or more needles; without electrical stimulation, initial 15 minutes of personal one-on-one contact with the patient* (work RVU = 0.60, 3 minutes pre-service, 15 minutes intra-service and 3 minutes post-service time) and agreed that the time required to perform both services are identical and should be valued identically. **The HCPAC recommends a work RVU of 0.60 for CPT code 20561.**

New Technology/New Services

The HCPAC recommends that CPT codes 20560 and 20561 be placed on the New Technology list and be re-reviewed by the HCPAC in three years to ensure correct valuation and utilization assumptions.

Practice Expense

The PE Subcommittee reduced the number of needles based on the typical patient for 20561 and replaced the exam table (EF023) with the hi-lo treatment table (EF033) because it is typical for a physical therapy office. **The HCPAC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Cognitive Function Intervention (Tab 41b)

Neil Pliskin, PhD (APA); Randy Phelps, PhD (APA); Stephen Gillaspay, PhD (APA); Renee Kinder, MA, CCC-SLP (ASHA)

CPT code 97129 was originally developed to replace CPT code 97532 (cognitive skills development, each 15 minutes) in response to a 2010 RUC High Volume Growth screen and a CMS High Expenditure screen that identified several codes in the physical medicine and rehabilitation (PM&R) family. In response to CMS' concern regarding timed codes noted in the CY2019 MPFS Final Rule, the CPT Physical Medicine & Rehabilitation (PM&R) Workgroup agreed that a new procedure code for cognitive function intervention was warranted to reflect current practice and should be changed to an untimed/per day code. The PM&R family was subsequently reviewed by the Relativity Assessment Workgroup at its April 2016 meeting, and 97532 was included as part of the family. The RUC recommended that CPT code 97532 should be referred to the CPT Editorial Panel to be updated to reflect current clinical practice.

The CPT Editorial Panel approved 97129 as an untimed code at its September 2016 meeting and the RUC HCPAC valued and submitted final recommendations to CMS for inclusion in the 2018 MPFS. However, in the 2018 MPFS Final Rule, CMS assigned 97129 a procedure status of "I" (Invalid) and instead established a new G-code (G0515) for cognitive therapy, which maintained the descriptor and values from former CPT code 97532 (cognitive skills development, each 15 minutes). CMS suggested that 97129, as an untimed/per day code, did not appropriately account for the variable amounts of time spent with the patient depending on the discipline (i.e., psychology, speech-language pathology, occupational therapy, or physical therapy) and/or setting (i.e., facility-based vs. outpatient). The specialties proposed to

revise CPT code 97129 to make it time-based with a new add-on code to address CMS' concern regarding the time variance among providers. At the September 2018 CPT Editorial Panel meeting, the Panel revised 97129 and created one new code to describe cognitive function intervention services using time-based codes.

Compelling Evidence

The Health Care Professionals Advisory Committee (HCPAC) Review Board reviewed and accepted compelling evidence for CPT code 97129 and 97130 that incorrect assumptions were made in the previous valuation because according to utilization data the previous survey was conducted by a different specialty than the specialty that currently provides these services. Former code 97532 was last surveyed by psychology, physical therapy, and occupational therapy in 2000, but the primary providers of these services are now speech-language pathology at 69% and psychology at 21 % based on total Medicare utilization in 2017. Although the RUC database noted that speech-language pathologists also participated in the survey process for 97532, it was as clinical staff and related to the practice expense for the service. Speech-language pathologists (SLP) did not gain independent Medicare billing status until July 2009 and were not previously able to survey for professional work. In 2009 SLPs did resurvey some of their primary services, however 97532 was not surveyed at that time because it was not widely performed by speech language pathologists yet. . As such, the current value of G0515 (formerly 97532) does not accurately reflect speech-language pathology work as the primary provider. Compelling evidence approval allows for a potential increase over the 0.44 work RVUs for G0515.

97129 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; initial 15 minutes

The HCPAC reviewed the survey results from 105 speech language pathologists and psychologists for CPT code 97129. The HCPAC determined that the proposed work RVU of 0.50, the survey 25th percentile, appropriately accounts for the work required to perform this service. The HCPAC agreed with the specialty society that the survey times of 12 minutes pre-service, 30 minutes intra-service, and 10 minutes post-service time, indicated that the survey respondents did not understand the 15 minutes base code and 15 minute add-on coding structure, and overestimated the time needed to perform this 15 minute time-based code. The HCPAC reviewed the 25th percentile times of 7 minutes pre-service, 15 minutes intra-service, and 6 minutes post-service time and concluded that the intra-service time of 15 minutes at the 25th percentile is appropriate. The HCPAC agreed with the specialty society that the pre-service and post-service time should be decreased to 5 minutes each, which is adequate time to communicate complex information and instructions to cognitively-impaired patients and their caregivers. The HCPAC recommends 5 minutes of pre-evaluation time, 15 minutes intra-service time and 5 minutes immediate post-service time.

The HCPAC compared the survey code to similar service CPT code 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* (work RVU = 0.50, 5 minutes pre-service, 15 minutes intra-service and 5 minutes post-service time) and agreed that the time required to perform both services are identical and the work should be valued identically. **The HCPAC recommends a work RVU of 0.50 for CPT code 97129.**

97130 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; each additional 15 minutes (list separately in addition to code for primary procedure)

The HCPAC reviewed the survey results from 107 speech language pathologists and psychologists for add-on CPT code 97130. The HCPAC determined that the proposed work RVU of 0.48, the survey 25th percentile, appropriately accounts for the work required to perform this service. The HCPAC agreed with the specialty society that the survey times of 22 minutes intra-service/total time, indicated that the survey respondents did not understand the 15 minutes base code and 15-minute add-on coding structure, and overestimated the time needed to perform this 15 minute add-on time-based code. The HCPAC reviewed the 25th percentile times of 15 minutes intra-service/total time and concluded that the intra-service time of 15 minutes at the 25th percentile is appropriate. The HCPAC recommends 15 minutes intra-service time.

The HCPAC compared the survey code to similar service CPT code 97760 *Pharmacologic management, including prescription and review of medication, when performed with psychotherapy services (List separately in addition to the code for primary procedure)* (work RVU = 0.48, 15 minutes intra-service) and agreed that the time required to perform both services are identical and the work should be valued identically. **The HCPAC recommends a work RVU of 0.48 for CPT code 97130.**

Practice Expense

The HCPAC recommends the direct practice expense inputs as submitted by the specialty society.

Online Digital Evaluation Service (e-Visit) (Tab 41c)

Eileen Stellefson Myers, MPH, RDN (AND); Karen Smith, MS, MBA, RD, LD, FAND (AND)

In September 2018, the CPT Editorial Panel deleted two codes and replaced them with six new codes in the evaluation and management section to describe patient-initiated digital communications that require a clinical decision that otherwise typically would have been provided in the office. Three codes describe the physician e-visit (99421, 99422 and 99423) and three codes describe the qualified nonphysician health care professional e-visit (98970, 98971 and 98972).

The e-visit codes reviewed by the RUC and Health Care Professionals Advisory Committee (HCPAC) Review Board are one unified set of code. After a detailed discussion, the HCPAC determined that the non-physician work was equivalent to the physician work for codes 99421, 99422 and 99423 and agreed with the specialty societies that the services should be valued consistently. The separate nature of the code set (i.e., physician vs. qualified nonphysician health care professional) is artificial due to coding conventions that preclude some qualified nonphysician health care professional from billing Evaluation and Management (E/M) codes. As a result, the CPT Editorial Panel created the three nonphysician codes within this code family recognizing that the same services are rendered by providers who cannot report E/M services. The code descriptors are identical apart from the term, qualified nonphysician health care professional. RUC procedures require the codes to be surveyed separately with recommendations presented to the RUC for the physician codes and the HCPAC for the nonphysician codes. Precedent exists within HCPAC and RUC with the telephone services for valuation of the physician and qualified nonphysician health care professional codes at the same level. When the telephone services codes were valued by the RUC and HCPAC in April 2007, the HCPAC determined that the nonphysician work for codes 98966-98968 was equivalent to the physician work for codes 99441-99443. These codes (98966-98968) were identified as the top key reference services by survey respondents for each of the three nonphysician e-visit codes. In the CMS Final Rule for calendar year 2008, CMS did not express concern with the physician and nonphysician telephone services being valued equivalently, stating their agreement

with the RUC recommended values for these services on page 66368 of the Federal Register Vol. 72, No. 227.

98970 *Qualified nonphysician health care professional online digital evaluation and management service, for an established patient, for up to seven days, cumulative time during the 7 days; 5-10 minutes*

The HCPAC reviewed the survey results from 43 dietitian nutritionists for CPT code 98970 and determined that the survey 25th percentile work RVU of 0.25 appropriately accounts for the work required to perform this service. The HCPAC recommends 8 minutes intra-service time. The HCPAC noted that this service includes only intra-service time as this service starts with the qualified nonphysician health care professional (QHP) opening up the electronic communication, which differs from the top key reference service 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* (work RVU = 0.25 and 8 minutes intra-service time, 13 minutes total time), where the QHP may get a voicemail and may have an opportunity to review the medical record before engaging in the call. The e-visit is the documentation of the visit itself, the e-mail response. The HCPAC compared the surveyed code to the top key reference service 98966 and noted that these services require the same QHP intra-service time to perform. However, 98970 is more intense than 98966 because the QHP response is documented in writing. There is a higher risk and challenge within the written response, as the QHP or patient may misinterpret something within the communication. Whereas, with a telephone call, any misinterpretations would be clarified with immediate feedback. There is also a greater legal risk in providing the service because all communication is documented in writing. Additionally, 98970 is more complex because the QHP may review multiple images some of which may be hard to decipher, as well as engage in multiple communications over seven days which adds to the intensity of this service.

For additional support the HCPAC referenced MPC codes 99406 *Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes* (work RVU = 0.24 and 7 minutes intra-service/total time) and 92568 *Acoustic reflex testing, threshold* (work RVU = 0.29 and 8 minutes intra-service time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 0.25 for CPT code 98970.**

98971 *Qualified nonphysician health care professional online digital evaluation and management service, for an established patient, for up to seven days, cumulative time during the 7 days; 11-20 minutes*

The HCPAC reviewed the survey results from 48 dietitian nutritionists for CPT code 98971 and determined that the survey median work RVU of 0.50 appropriately accounts for the work required to perform this service. The HCPAC recommends 15 minutes intra-service time. The HCPAC noted that this service includes only intra-service time as this service starts with the qualified nonphysician health care professional (QHP) opening up the electronic communication, which differs from the top key reference service 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* (work RVU = 0.50 and 15 minutes intra-service time, 21 minutes total time), where the QHP may get a voicemail and may have an opportunity to review the medical record before engaging in the call. The e-visit is the documentation of the visit itself, the e-mail response. The HCPAC compared the surveyed code to the top key reference code 98967 and noted that these services require the same QHP intra-service time to perform. However, 98971 is more intense than 98967 because

the QHP response is documented in writing. There is a higher risk and challenge within the written response, as the QHP or patient may misinterpret something within the communication. Whereas, with a telephone call, any misinterpretations would be clarified with immediate feedback. There is also a greater legal risk in providing the service because all communication is documented in writing. Additionally, 98971 is more complex because the QHP may review multiple images some of which may be hard to decipher, as well as engage in multiple communications over seven days which adds to the intensity of this service.

For additional support the HCPAC referenced MPC code 97803 *Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes* (work RVU = 0.45 and 15 minutes intra-service), which demonstrates the appropriate relativity with a similar service. **The HCPAC recommends a work RVU of 0.50 for CPT code 98971.**

98972 *Qualified nonphysician health care professional online digital evaluation and management service, for an established patient, for up to seven days, cumulative time during the 7 days; 21 or more minutes*

The HCPAC reviewed the survey results from 48 dietitian nutritionists for CPT code 98972 and determined that the survey median of 0.75 was too low compared to the physician code 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* (RUC work RVU recommendation = 0.80). The HCPAC chose to recommend the same time and work values as the code described to define physician work. The HCPAC agreed that the physician work survey 25th percentile work RVU of 0.80 appropriately accounts for the work required to perform this service. The HCPAC recommends the physician work survey intra-service time of 25 minutes. The HCPAC noted that this service includes only intra-service time as this service starts with the QHP opening up the electronic communication, which differs from the top key reference service 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* (work RVU = 0.75 and 25 minutes intra-service time, 36 minutes total time) and noted that these services require similar intra-service time to perform and should be valued similarly. The HCPAC noted that 98972 requires more physician work to perform and is more intense than 98968 because it describes 21 minutes or more, rather than a range of 21-30 minutes. The service will likely require more than 21 minutes, potentially much more. Additionally, the typical patient receiving 98972 has problems and concerns greater than the average patient. The RUC HCPAC Review Board agreed that 98972 is more intense than 98968 because the physician response is documented in writing with higher risk and challenges with multiple communications, not a verbal response with immediate clarifications as detailed in the rationale for CPT code 98970.

For additional support the RUC HCPAC Review Board referenced MPC codes 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient,...* (work RVU = 0.76 and 10 minutes intra-service, 20 minutes total time) and 99213 *Office or other outpatient visit for the evaluation and management of an established patient,...* (work RVU = 0.97 and 15 minutes intra-service, 23 minutes total time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 0.80 for CPT code 98972.**

Practice Expense

The RUC recommends the direct practice expense inputs as submitted by the specialty society.

New Technology/New Services

The HCPAC recommends that CPT codes 98970, 98971, 98972 be placed on the New Technology list and be re-reviewed by the HCPAC in three years to ensure correct valuation and utilization assumptions.

- **CMS Request/Relativity Assessment Identified Codes**

Health and Behavior Assessment and Intervention (Tab 41d)

Randy Phelps, PhD (APA); Stephen Gillaspay, PhD (APA)

In September 2018, CPT replaced six codes with nine new codes to more accurately reflect current clinical practices in describing health behavior assessment services.

Compelling Evidence

The nine codes used to describe Health Behavior Assessment and Intervention in this family reflect significant changes in the healthcare delivery system since they were originally described and valued in 2001. During that time there has been an increasing focus on the role of psychosocial factors in health, as well as a shift toward explicit assessment and intervention in these factors, particularly in primary care. The RUC rationale for the original valuation of this family was a flawed methodology. The RUC valued these services primarily based on the psychiatric interview code 90801, a 60-minute service with 2.80 RVU. RUC divided the value by 4, yielding a 15-minute service at 0.70 RVUs. That was based on the expectation that each of the new codes, reported in 15-minute increments, would typically be reported four (4) times per patient encounter, comprising a comparable 60-minute service to 90801. However, the values are within the 0.44-0.50 range which is not consistent with the methodology. It should also be noted that 90801, the primary service on which the existing Health and Behavior codes were built upon, is no longer an existing or valid code and the comparable service has different valuation today.

The assumption that every code would typically be reported for 60 minutes (four (4) 15-minute increments) was incorrect. Below is the current utilization, based on the actual 2016 Medicare Units of Service Performed on Same Date, for the code set. As detailed in the chart, there is considerable variability across the code set in the mean number of units per encounter across all the 15-minute codes in the family.

CPT® Code	Description	Number of Unique Occurrences (Same Day, Same Patient, Same Provider)			
		Mean	25th Percentile	Median	75th Percentile
96150	Health and behavior assessment	3.29	2	3	4
96151	Health and behavior re-assessment	2.30	1	2	3
96152	Health and behavior individual intervention	3.11	2	4	4
96153	Health and behavior group intervention	4.78	4	4	6
96154	Health and behavior family intervention, with patient present	5.31	3	5	8
96155	Health and behavior family intervention, without patient present	N/A	N/A	N/A	N/A

It is also clear that there is an anomalous relationship in the surveyed family of codes when compared to the psychotherapy family of codes, on which it was based in 2001. The original and current surveys show that health and behavior services are very similar to the parallel mental health service, in terms of the modality by which the service is delivered as well as intensity. Differences in comparable code values between the two families were greatly increased when the psychotherapy code set was reevaluated by the RUC in 2012. As detailed in the chart below, all the codes in current Health and Behavior code set are valued significantly lower when times and work RVUs are calculated to match those parallel services in the updated psychotherapy code set.

Psychotherapy			Health Behavior Assessment and Intervention			
CPT® Code	Units of Time	RVU	CPT® Code	Calculated Time	RVU	Calculated RVU
90791	60 mins	3.00	96150	15 min x 4 units = 60 mins	0.50	2.00
90832	30 mins	1.50	96152	15 mins x 2 units = 30 mins	0.48	0.92
90853	60 mins	0.59	96153	15 min x 4 units = 60 mins	0.10	0.40
90847	50 mins	2.50	96154	15 mins x 3.33 units = 50 mins	0.45	1.50
90846	50 mins	2.40	96155	15 mins x 3.33 units = 50 mins	0.44	1.47

For the family there is increasing intensity and complexity based on the service and number of patients involved. The HCPAC work recommendations for this family as outlined below have the appropriate rank order for the typical length of service starting with the lowest total work RVU for the health behavior assessment, including reassessment and moving through the individual intervention, group intervention, family intervention without patient present and family intervention with patient present.

Health and Behavior Assessment & Intervention Recommendations						
CPT Code	Code Descriptor	Intra	Proposed RVW	Converted Units	Total Time (mins)	Total RVWs
<i>Assessment</i>						
96156	Health behavior assessment, including re-assessment	45	2.10	1	45	2.10
<i>Individual Intervention</i>						
96158	Health behavior individual intervention, initial 30 minutes	30	1.45	1	60	2.45
96159	each additional 15 minutes	15	0.5	2		

Group Intervention						
Per Patient						
96164	Health behavior group intervention; initial 30 minutes	30	0.21	1	60	0.41
96165	each additional 15 minutes	15	0.10	2		
Per Session (x 7 typical patients/group)						
96164	Health behavior group intervention; initial 30 minutes	30	0.21	1	420	2.87
96165	each additional 15 minutes	15	0.10	2		
Family Intervention WITH patient present						
96167	Health behavior family intervention (with patient present); initial 30 minutes	30	1.55	1	75	3.20
96168	each additional 15 minutes	15	0.55	3		
Family Intervention WITHOUT patient present						
96170	Health behavior family intervention (without the patient present); initial 30 minutes	30	1.50	N/A	N/A	N/A
96171	each additional 15 minutes	15	0.54			

96156 Health behavior assessment, including re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)

The HCPAC reviewed the survey results from 90 psychologists and determined that the survey median work RVU of 3.00 overestimates the work required to perform this service. The HCPAC agreed with the specialty society that the survey respondents had estimated the value of the survey code that has 45 minutes of intra-service time, to be equal to that of the key reference service CPT code 90791 *Psychiatric diagnostic evaluation* (work RVU = 3.00 and 60 minutes intra-service time) that has 60 minutes of intra-service time. Further, the HCPAC agreed with the specialty society that the survey 25th percentile work RVU of 1.87 was too low of a value and did not accurately capture the complexity and intensity of current practice. The HCPAC determined that a direct crosswalk to CPT code 90845 *Psychoanalysis* (work RVU = 2.10 and 45 minutes intra-service time) is appropriate. The HCPAC recommends 10 minutes pre-service time, 45 minutes intra-service time and 15 minutes post-service time.

The HCPAC compared the surveyed code to MPC code 90834 *Psychotherapy, 45 minutes with patient* (work RVU = 2.00 and 45 minutes intra-service time) and 99215 *Office or other outpatient visit for the evaluation and management of an established patient,...* (work RVU = 2.11 and 35 minutes intra-service time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 2.10 for CPT code 96156.**

96158 Health behavior intervention, individual, face-to-face; initial 30 minutes

The HCPAC reviewed the survey results from 116 psychologists and determined that the survey 25th percentile work RVU of 1.45 appropriately accounts for the work required to perform this service. The HCPAC recommends 5 minutes pre-service time, 30 minutes intra-service time and 10 minutes post-service time. The HCPAC compared the surveyed code to the top key reference service 90832 *Psychotherapy, 30 minutes with patient* (work RVU = 1.50, 5 pre-service, 30 intra and 10 post-service time) and noted that these services require similar work and should be valued similarly.

For additional support the HCPAC referenced CPT code 99491 *Chronic care management services, provided personally by a physician or other qualified health care professional, at least 30 minutes of physician or other qualified health care professional time, per calendar month,...* (work RVU = 1.45 and 30 minutes intra-service time) and noted that the services have identical intra-service time and should be valued identically. **The HCPAC recommends a work RVU of 1.45 for CPT code 96158.**

96159 Health behavior intervention, individual, face-to-face; each additional 15 minutes (list separately in addition to code for primary service)

The HCPAC reviewed the survey results from 113 psychologists and determined that both the survey median value of 0.80 and the 25th percentile value of 0.66 were valued too high for this add-on service. The HCPAC determined that the survey respondents did not select ZZZ codes as their top key reference or second key reference services because the base and add-on code structure is not common to psychologists and they are not yet familiar with their usage. Because most of the survey respondents did not utilize any of the ZZZ codes available on the reference service list, the value of the add-on codes was overestimated. The HCPAC determined that a direct crosswalk to CPT code 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)* (work RVU = 0.50 and 15 minutes intra-service time) is appropriate. The HCPAC recommends 15 minutes intra-service time.

The HCPAC compared the surveyed code to CPT code 88177 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for diagnosis, each separate additional evaluation episode, same site (List separately in addition to code for primary procedure)* (work RVU = 0.42 and 15 minutes intra-service time) and 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)* (work RVU = 0.54 and 15 minutes intra-service time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 0.50 for CPT code 96159.**

96164 Health behavior intervention, group (2 or more patients), face-to-face; initial 30 minutes

The HCPAC reviewed the survey results from 41 psychologists with the understanding that the survey respondents were asked to evaluate the group service in total and not based on an individual group participant. Also, a custom survey question was added that asked respondents to provide the average number of patients that attend a typical health behavior group intervention session. The question yielded a median response of seven patients. The intent was to obtain per session data on the service, that could then be divided by the average number of patients to yield the per patient data. The HCPAC agreed with the specialty that the median per session work value of 1.25 RVUs converted to the per patient work value of 0.18 RVUs was too low. The HCPAC determined that a direct crosswalk to CPT code 96365 *Intravenous infusion, for therapy, prophylaxis, or diagnosis (specify substance or drug); initial, up to 1 hour* (work RVU = 0.21 and 2 minutes pre-service, 5 minutes intra-service and 2 minutes post-service time) is appropriate. The HCPAC recommends 2 minutes pre-service time, 5 minutes intra-service time, 2 minutes post-service time, for 9 minutes total time for surveyed code 96164.

The HCPAC compared the surveyed code to CPT code 96401 *Chemotherapy administration, subcutaneous or intramuscular; non-hormonal anti-neoplastic* (work RVU = 0.21 and 4 minutes pre-service, 3 minutes intra-service, 2 minutes post-service time and 9 minutes total time), noting that the total time is identical to the surveyed code and should be valued identically. The HCPAC also compared the survey code to CPT code 97804 *Medical nutrition therapy; group (2 or more individual(s)), each 30 minutes* (work RVU = 0.25 and 2 minutes pre-service, 6 minutes intra-service and 2 minutes post-service time), which is a smaller group of typically 5 patients and an appropriately lower total work value per session at 1.25 work RVUs. **The HCPAC recommends a work RVU of 0.21 for CPT code 96164.**

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)

The HCPAC reviewed the survey results from 40 psychologists and determined that the survey respondents did not select ZZZ codes as their top key reference or second key reference services because the base and add-on code structure is not common to psychologists and they are not yet familiar with their usage. The HCPAC determined that a direct crosswalk to add-on code 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)* (work RVU = 0.10 and 4 minutes intra-service time) is appropriate. The HCPAC recommends 4 minutes intra-service time for add-on code 96165.

The HCPAC compared the surveyed code to CPT code 96411 *Chemotherapy administration; intravenous, push technique, each additional substance/drug (List separately in addition to code for primary procedure)* (work RVU = 0.20 and 4 minutes intra-service and 7 minutes total), which is an add-on code for each additional substance/drug administered requiring pre- and post-service time and should be valued higher than the surveyed code. **The HCPAC recommends a work RVU of 0.10 for CPT code 96165.**

96167 Health behavior intervention, family (with the patient present), face-to-face; initial 30 minutes

The HCPAC reviewed the survey results from 52 psychologists and determined that both the survey median value of 2.18 and the 25th percentile value of 1.58 were valued too high for this service. The HCPAC determined that a direct crosswalk to CPT code 76873 *Ultrasound, transrectal; prostate volume study for brachytherapy treatment planning (separate procedure)* (work RVU = 1.55 and 30 minutes intra-service time) is appropriate. The HCPAC recommends 5 minutes pre-service time, 30 minutes intra-service time, and 10 minutes post-service time for surveyed code 96167.

The HCPAC compared the surveyed code to CPT code 99203 *Office or other outpatient visit for the evaluation and management of a new patient,...* (work RVU = 1.42 and 30 minutes intra-service time) and 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...* (work RVU = 1.70 and 40 minutes intra-service time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 1.55 for CPT code 96167.**

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)

The HCPAC reviewed the survey results from 52 psychologists and determined that the survey respondents did not select ZZZ codes as their key reference or second key reference services because the base and add-on code structure is not common to psychologists and they are not yet familiar with their usage. Also, if the survey respondent was attempting to value this service relative to the base code, 96167, there is a very limited number of ZZZ codes that fall within the appropriate range. The HCPAC determined that a direct crosswalk to add-on code 96571 *Photodynamic therapy by endoscopic application of light to ablate abnormal tissue via activation of photosensitive drug(s); each additional 15*

minutes (*List separately in addition to code for endoscopy or bronchoscopy procedures of lung and gastrointestinal tract*) (work RVU = 0.55 and 15 minutes intra-service time) is appropriate. The HCPAC recommends 15 minutes intra-service time for add-on code 96168.

The HCPAC compared the surveyed code to MPC code 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)* (work RVU = 0.50 and 15 minutes intra-service time) and 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)* (work RVU = 0.60 and 15 minutes intra-service time and 17 minutes total time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 0.55 for CPT code 96168.**

96170 Health behavior intervention, family (without the patient present), face-to-face; initial 30 minutes

The HCPAC reviewed the survey results from 36 psychologists and determined that the survey 25th percentile work RVU of 1.50 appropriately accounts for the work required to perform this service. The HCPAC recommends 5 minutes pre-service time, 30 minutes intra-service time and 10 minutes post-service time. The HCPAC compared the surveyed code to the second key reference service 90832 *Psychotherapy, 30 minutes with patient* (work RVU = 1.50, 5 pre-service, 30 intra-service and 10 post-service time) and noted that these services require identical work and should be valued identically.

For additional support the HCPAC referenced CPT code 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* (work RVU = 1.50 and 30 minutes intra-service time) and noted that the services have identical intra-service time and should be valued identically. **The HCPAC recommends a work RVU of 1.50 for CPT code 96170.**

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)

The HCPAC reviewed the survey results from 36 psychologists and determined that both the survey median value of 0.90 and the 25th percentile value of 0.59 were valued too high for this add-on service. The HCPAC determined that the survey respondents did not select ZZZ codes as their key reference or second key reference services because the base and add-on code structure is not common to psychologists and they are not yet familiar with their usage. The HCPAC determined that a direct crosswalk to CPT code 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)* (work RVU = 0.54 and 15 minutes intra-service time) is appropriate. The HCPAC recommends 15 minutes intra-service time for add-on code 96171.

The HCPAC compared the surveyed code to MPC code 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)* (work RVU = 0.50 and 15 minutes intra-service time) and 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)* (work RVU = 0.60 and 15 minutes intra-service time and 17 minutes total time), which demonstrates the appropriate relativity among similar services. **The HCPAC recommends a work RVU of 0.54 for CPT code 96171.**

Practice Expense

The PE Subcommittee removed supply item SA034, *kit, therapeutic toys-games (50% of the time)* from the codes where it was recommended because although it is required to provide the service it is reusable and would be considered an indirect supply. The PE Subcommittee did add supply item SM022, *sanitizing cloth-wipe (surface, instruments, equipment)* to clean the toys and games for reuse. The HCPAC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Ultrasonic Wound Assessment (Tab 41e)

Richard Rausch, PT, DPT, MBA (APTA); Brooke Bisbee, DPM (APMA); Randy Boldt, PT (APTA)

In 2005, the AMA RUC began the process of flagging services that represent new technology or new services as they were presented to the Committee. This service was flagged for CPT 2015 and reviewed at the October 2018 Relativity Assessment Workgroup meeting. The Workgroup indicated that the utilization is continuing to increase for this service. The RUC recommended that this service be resurveyed for physician work and practice expense for January 2019.

Compelling Evidence

The specialty societies indicated that there is compelling evidence that the physician work for CPT code 97610 *Low frequency, non-contact, non-thermal ultrasound, including topical application(s), when performed, wound assessment, and instruction(s) for ongoing care, per day*, has changed due to changes in the patient population. This service was last reviewed by the HCPAC in 2013. The technology was new in 2013 and the HCPAC and societies were concerned that the respondents overestimated the intra-service time and work because a wound size was not designated and therefore a crosswalk code was used to value the service. The current survey vignette specifies a wound size. With the new information regarding wound size communicated to the survey respondents, the patient population has changed as it is more clearly defined. This is reflected in the survey results with a median work value of 0.40 in comparison to a median work value of 0.51 in the survey conducted in 2013.

The HCPAC reviewed the survey results from 42 podiatrists and physical therapists for CPT code 97610 and agreed with the specialty society that the work RVU of 0.40, the survey median, appropriately accounts for the work required to perform this service. The HCPAC recommends 6 minutes of pre-service evaluation time, 15 minutes intra-service time and 5 minutes post-service time.

The HCPAC compared the surveyed code to key reference service 97035 *Application of a modality to 1 or more areas; ultrasound, each 15 minutes* (work RVU = 0.21 and 13 minutes total time), a service similar to the survey code but requiring 50% less time and estimated to be less intense and complex to perform and second key reference service 29581 *Application of multi-layer compression system; leg (below knee), including ankle and foot* (work RVU = 0.60 and 25 minutes total time), a service with similar total time, but more complex to perform. The HCPAC agreed codes 97035 and 29581 appropriately bracket code 97610. **The HCPAC recommends a work RVU of 0.40 for CPT code 97610.**

Practice Expense

The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

The RUC filed the HCPAC Report.

XVI. Emerging Issues Workgroup (Tab 42)

Doctor Kathy Krol provided the Emerging CPT/RUC Issues Workgroup report to the RUC:

Update on Digital Medicine Payment Advisory Group (DMPAG)

Kathy Krol, MD and Ezequiel Silva, III, MD provided the Workgroup with a background on the DMPAG Workgroup composition, process, summary of coding applications and work completed to date. Doctor Krol indicated that anyone can reach out to the DMPAG with suggestions for coding gaps in the telehealth/digital medicine space.

Update on CPT/RUC Evaluation & Management Workgroup

Peter Hollmann, MD provided the Workgroup with a summary of the current Evaluation and Management E/M Workgroup progress to date and current coding proposal details that will be reviewed at the February 2019 CPT meeting.

Appreciation was expressed to Doctors Hollmann, Levy and the workgroup members for the effort and commitment to represent all of medicine in developing a better alternative to E/M documentation.

The RUC approved the Emerging Issues Workgroup Report.

XVII. RUC Rotating Seat Elections

- Matthew Grierson, MD, American Academy of Physical Medicine & Rehabilitation (AAPMR), was elected to the RUC's Any Other rotating seat.
- Omar S. Hussain, DO, American Thoracic Society (ATS) and American College of Chest Physicians (CHEST), was elected to the RUC's Internal Medicine rotating seat.
- The term for the rotating seats is two years, beginning in March 2019 and ending in February 2021 with the provision of final recommendations to CMS.

XVIII. New Business/Other Issues (Tab 44)

A RUC member proposed to create a screen that looks at services currently in the database with surveys of less than the minimum required (<30). However, the RUC just reviewed this issue in January 2018. In January 2018, AMA staff compiled a list of all the services surveyed in the last five years that had a survey response below the minimum threshold of 30 responses with information on what the RUC recommendation was based on (ie, survey data point, crosswalk or maintained existing work RVU). The result was 28 services.

- Only 3 of these services have Medicare utilization greater than 10,000
- Over half of these recommendations were not based on the survey data (15 of 28)
- CMS accepted 15 of the 28 RUC recommendations for these services (not the same services in the above bullet point)

The Administrative Subcommittee reviewed the history of low survey responses in February 2018 and determined that the RUC should not automatically recommend contractor pricing codes that have a low response rate (under 30), but continue its current process and review each unique code set individually. The Subcommittee indicated that its main concern is that new Category I CPT codes are created when in reality the services are not widely performed and a valid survey with 30 responses is not obtainable. The

Administrative Subcommittee recommended and the RUC approved to RUC flag new Category I services with a survey response below 30 to be reviewed in three years by the Relativity Assessment Workgroup. 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.

The RUC adjourned at 5:00 p.m. on Saturday, January 19, 2019.