AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
RUC RECOMMENDATIONS FOR CPT 2012

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AMA
AMERICAN MEDICAL ASSOCIATION

American Medical Association
515 N. State Street
Chicago, Illinois 60654

ama-assn.org
312.464.5000

October 3, 2011

Donald Berwick, MD
Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services
Attn: CMS-1524-P
Mail Stop C4-26-05
7500 Security Blvd
Baltimore, MD 21244-1850

Subject: Additional RUC Recommendations for Consideration for Final Rule on the 2012 Medicare Physician Payment Schedule

The American Medical Association (AMA)/Specialty Society RVS Update Committee (RUC) met September 22-24, 2011 to review specialty society data and develop relative value recommendations for individual physician services. A significant portion of the agenda was devoted to issues that relate to CPT 2013 or newly identified potentially misvalued services. These items will be submitted to CMS in the future. However, given the immediate urgency for items related to 2012, we submit these recommendations to you at this time. In addition, the RUC recommends immediate consideration of certain methodological and policy changes for 2012. The RUC submission includes the following issues for consideration by the Centers for Medicare and Medicaid Services (CMS):

- Chronic Care Coordination Workgroup Implementation and Initial Recommendations
- Separate Payment for High Cost Medical Supplies (Balloon Sinuplasty for 2012)
- Kyphoplasty – Non-Facility Practice Expense Input Recommendations
- Molecular Pathology – CPT 2012 Tier 1 and Tier II Recommendations
- Pacemaker or Pacing Cardioverter-Defibrillator – 2012 Bundled CPT Code Recommendations
- Psychoanalysis – 4th Five-Year Review Recommendation
- Update on Review of RUC's Multi-Specialty Points of Comparison (MPC) Codes
- Positioning Time in Non-Manipulation Fracture Codes

Chronic Care Coordination Workgroup – Implementation and Initial Recommendations

Immediately following our meeting with you on July 29, 2011, the AMA worked to create a joint workgroup of CPT Editorial Panel and RUC members to consider specific alternatives to a re-review of the valuation of 91 Evaluation and Management (E/M) services. The workgroup, named the Chronic Care Coordination Workgroup (C3W), will provide strategic direction to the CPT and RUC in response to the CMS request to address the adequacy of coding and valuation of care coordination services and management of chronic diseases. The following individuals will participate on the C3W:

Name	CPT/RUC	Position within Committee	Specialty
Al Bothe, MD	CPT & RUC	CPT Liaison to the RUC	General Surgery
Katherine Bradley, RN, PhD	HCPAC	Former HCPAC Member	Nursing
Kenneth Brin, MD	CPT	Vice Chairman	Cardiology
Jane Dillon, MD	RUC	Alternate Member	Otolaryngology
Richard Duszak, MD	CPT	Member	Radiology
David Ellington, MD	CPT	Member	Family Medicine
David Hitzeman, DO	RUC	Member, Vice Chair of Administrative Subcommittee	Osteopathic Medicine
Peter Hollmann, MD	CPT	Chairperson	Geriatrics
Doug Leahy, MD	RUC	Alternate Member	Internal Medicine
Barbara Levy, MD	RUC	Chairperson	Gynecology
Chad Rubin, MD	RUC	Alternate Member	General Surgery
Peter Smith, MD	RUC	Member	Thoracic Surgery
Arthur Traugott, MD	RUC	Vice Chairman	Psychiatry
Ken Simon, MD Edith Hambrick, MD		CMS Observers (Doctor Simon is a voting member of CPT Editorial Panel)	

The C3W has convened several conference calls and convened one face-to-face meeting. We were particularly pleased that CMS staff and medical officers participated in these meetings. It is imperative that the Workgroup understand the limitations and obstacles that preclude the Agency from recognizing separate payment for existing care coordination CPT codes, particularly those already assigned values and ready for immediate implementation. An immediate solution to incentivize care coordination is required, and it is, therefore, critical that medicine and CMS work closely together to ensure consensus and effective implementation.

We are pleased to announce that the C3W has reached consensus that the CPT Editorial Panel and the RUC should work toward coding and payment solutions that promote care coordination and team based care. The Workgroup also recognizes that a number of services, already described in CPT and valued by the RUC, provide a short-term opportunity to begin payment for better care coordination. The RUC does not fully understand all of the CMS rationale precluding payment

for these services in the past. However, if costs were of concern, CMS should consider the current environment in a reassessment. Not only will payment for these services save Medicare money in unnecessary office and emergency room visits, potential savings in Medicare Parts A and D will also offset upfront payment for non-face-to-face-services. In addition, the RUC's work on misvalued codes provides an opportunity to offset the costs, negating any impact to the Medicare conversion factor.

The RUC urges CMS to consider immediate implementation of the previous RUC recommendations for the following services on January 1, 2012:

Anticoagulant Management (CPT Codes 99363 and 99364)

In 2007, the CPT Editorial Panel created the following CPT codes to describe anticoagulant management:

99363 *Anticoagulant management for an outpatient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; initial 90 days of therapy (must include a minimum of 8 INR measurements)*

99364 *Anticoagulant management for an outpatient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; each subsequent 90 days of therapy (must include a minimum of 3 INR measurements)*

CMS has published relative values for these codes, based on information provided by the RUC, which would result in nominal payment ($41 per month for initial 90 days and $14 per month for subsequent 90 days of management). However, CMS has to date considered these services "bundled" into E/M and not separately paid.

Immediate implementation of CPT codes 99363 and 99364 *Anticoagulant management* would signal that CMS is serious about providing incentives for care coordination. These services are also cost effective, eliminating unnecessary face-to-face physician services which are required as a substitute to a more common sense strategy to pay for the management of these patients. As stated in our earlier recommendations (and included in the attachments):

> *In 2001, the Centers for Medicare and Medicaid Services (CMS) stated that the standard of care for anticoagulant services was suboptimal and the current payment policy requires the physician to have the beneficiary schedule an office visit to discuss prothrombin time tests results and necessary adjustments to receive separate payment. Although it is clinically optimal for a physician to discuss results with a patient and make an adjustment during a face-to-face encounter under some circumstances, physicians often engage in these activities outside of a face-to-face encounter with the patient. The CPT Editorial Panel agreed with the specialty that bundling this post service time into the payment for the visit is unfair when physicians are managing patients on long-term anticoagulants. In addition, the Panel believed that CMS policy provides inadequate avenues for physicians to be paid for managing patients on long term anticoagulant and may contribute to the problem of underutilization of anticoagulant drugs that has adverse effects on the health of patients. Failure to*

> *receive anticoagulant drugs when indicated can increase patient risk of thrombosis and embolism, and under or over anticoagulation can increase patient risk of bleeding. The CPT Editorial Panel discussed the issue at its February 2006 meeting and created two new codes to allow the reporting of anticoagulant management services. To ensure appropriate utilization of these codes, the Panel added minimum International Normalized Ratio (INR) measurements, eight for the initial anticoagulant management and three for subsequent therapy, and stated that this service cannot also be reported with another Evaluation and Management (E/M) code.*

While unfortunate that CMS elected to deny separate payment of this important bundled service in the past, there is a new opportunity to consider implementation. In their comments related to the July 19 Proposed Rule on the 2012 Medicare Physician Payment Schedule, specialty societies ranging from primary care (American College of Physicians, American Academy of Family Physicians and American Geriatrics Society) to internal medicine subspecialties (Infectious Disease Society of America) to surgery (American College of Surgeons and American Academy of Otolaryngology – Head and Neck Surgery) united in their support of separate payment for anticoagulant management.

This proposal has the support of multiple specialty societies, and has many features that are completely aligned with the stated goals of CMS as it transforms the payment system into a vehicle for quality improvement and cost savings. There is ample evidence that better anticoagulation management can reduce thromboembolic and bleeding events that are devastating to Medicare Beneficiaries and add cost to health care. These anticipated outcomes would be an **easily measurable** expectation of implementing the anticoagulation codes.

This proposal would identify a discrete population of patients with a chronic condition that would have historical Medicare utilization data regarding Part A, B and D services. Upon initiation of funding, this patient population would be identified and ongoing health care utilization collected for comparison to this historical baseline. Additional comparisons could be made to Medicare Beneficiaries with similar conditions, but who are either not managed with the anticoagulation codes or who are being treated with newer, more expensive direct thrombin inhibitors whose cost effectiveness and outcome measures rely on limited clinical trial evidence.

Should these codes be funded, the RUC would be eager to participate in exploring the cost and quality measurement aspects of implementation with CMS, as the results may be generalizable to other planned interventions to link payment policy to anticipated positive outcomes. This highly feasible immediate implementation would also provide real experience to practicing physicians, organized medicine, and CMS in working toward other similar bundled care coordination codes. **The RUC recommends that CMS implement separate payment for CPT codes 99363 and 99364 *Anticoagulant Management* beginning January 1, 2012.**

Education and Training for Patient Self-Management (CPT Codes 98960-98962)

In 2006, the CPT Editorial Panel implemented three codes to describe patient education and training. CMS accepted direct practice expense inputs submitted by the RUC, however, the Agency implemented the codes as bundled within E/M services. These services are clearly separate and distinct from E/M, requiring 30 minutes of education provided by non-physician clinical staff.

98960 *Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient*

98961 *2-4 patients*

98962 *5-8 patients*

The vignette for 98960 is as follows and describes the patient that would benefit from care coordination and team based care:

> *A 60 year-old man with a symptomatic established illness or disease, e.g. diabetes or asthma, or the desire to delay disease co-morbidities, e.g. cardiovascular co-morbidities, is referred by a physician to a qualified, non-physician health care professional, e.g. RD or RN, for education/training.*

The estimated national payment for these services, based on CMS published relative values, range from $10-$26, dependent upon the number of patients in the education session. **Immediate implementation of the education and training services (CPT codes 98960-98962) is recommended to recognize the costs associated with team based service.**

Medical Team Conference (CPT Codes 99366-99368)

Another service that would be included in a medical home or global payment in the long-term, but could be implemented short-term to recognize team based care is the medical team conference (CPT Codes 99366-99368). When a physician is involved in a team conference with the patient and other health care professionals, an E/M service may be reported. However, if the patient is not present (CPT 99367), no separate reporting is allowed by Medicare. Non-physicians, such as dieticians, physical and occupational therapists, are not allowed to separately report the time that they spend in team conferences, whether the patient is present (CPT 99366) or not (CPT 99368). Similar to the education and training codes described above, these time-based team codes are important in capturing real costs to a physician's practice. **Immediate implementation of the medical team conferences (CPT codes 99366-99368) is recommended to recognize the costs associated with team based care.**

Telephone Services (CPT Codes 99441-99443 and 98966-98969)

While technical issues related to audit standards and appropriateness may have precluded CMS from considering separate payment for telephone service in the past, the CPT Editorial Panel's revisions for *CPT 2008* and the enclosed RUC's recommendations illustrate that there is a path forward to appropriately pay for these services. Documentation for these services is required and the instructions are clear:

> Telephone services are non-face-to-face evaluation and management (E/M) services provided by a physician to a patient using the telephone. These codes are used to report episodes of care by the physician initiated by an established patient or guardian of an established patient. If the telephone service ends with a decision to see the patient within 24 hours or next available urgent visit appointment, the code is not reported; rather the encounter is considered part of the preservice work of the subsequent E/M service, procedure, and visit.

Likewise, if the telephone call refers to an E/M service performed and reported by the physician within the previous seven days (either physician requested or unsolicited patient follow-up) or within the postoperative period of the previously completed procedure, then the service(s) are considered part of that previous E/M service or procedure. (Do not report 99441-99443, if reporting 99441-99444 performed in the previous seven days.)

99441 *Telephone evaluation and management service provided by a physician 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*

99442 *11-20 minutes of medical discussion*

99443 *21-30 minutes of medical discussion*

(For telephone services provided by a qualified nonphysician health care professional, see 98966-98968)

(Do not report 99441-99443 when using 99339-99340, 99374-99380 for the same call (s))

(Do not report 99441-99443 for anticoagulation management when reporting 99363-99364)

Relative values are already developed and published by CMS for these services. The CPT Editorial Panel would welcome the opportunity to clarify language to provide the assurance that CMS may require to consider implementation of these codes. CMS may also consider a modest roll-out of these services to beneficiary groups who may benefit the most from such care coordination. Another alternative is to cap the number of phone calls per beneficiary per month (eg, two calls per month). The concerns about misuse of phone calls should be alleviated in part by the ease of understanding by the Medicare patient of the involved service. Medicare beneficiaries will easily understand an Explanation of Benefits (EOB) statement that describes telephone calls and determine whether or not a call had been convened for the time stated clearly in the CPT short description (eg, 99441 *Phone E/M by Phys 5-10 minutes).*

The RUC recommends that CMS implement separate payment for Telephone Services (CPT Codes 99441-99443 and 98966-98969) beginning January 1, 2012.

Medical Home

We recognize that the recommendation to identify and pay for individual, fragmented CPT codes describing only components of overall care coordination may not be consistent with a systematic move to more global payment models. However, immediate needs require that such an approach be implemented while a more comprehensive approach is developed. One such comprehensive approach was the RUC's recommendations related to medical home (see attached). The descriptors for the medical home demonstration incorporated all of the individual care coordination tasks discussed in the above recommendations.

In May 2008, CMS applauded the RUC for its work on medical home. Yet, the demonstration project was never implemented and organized medicine has never received an explanation regarding the impediments to implementing this specific proposal. On September 26, 2011, CMS announced a new Comprehensive Primary Care Initiative, where partnering with private and other public payors, CMS proposes to implement a medical home payment model in 5-7 geographic locations in 2012. Unlike the demonstration project previously envisioned that allowed physicians to with various practice capabilities to participate, this new initiative is directed only at advanced primary care practices and payment amounts will be dependent on the complexity of the patient.

We are pleased that CMS is moving this issue forward in the new initiative. Great effort and expense has already been undertaken by many practices and organizations across our nation to work toward practice improvement through patient centered medical home. We believe that if CMS builds upon both these efforts, and the work that the RUC has already done in valuing the Patient Centered Medical Home, the outcome will lead to greater acceptance and success of this critical project. The Chronic Care Coordination Workgroup would benefit from a new conversation with CMS to better understand the concerns regarding the previously considered model and the decision-making that led to the structure of the new initiative. These discussions would also be helpful to the CPT Editorial Panel in considering how best to describe this model of team-based coordinated care.

CMS will note than in comments to the Proposed Rule on the 2012 Medicare Physician Payment Schedule, a wide range of specialties supported the RUC's efforts on medical home and proposed that this model be considered in lieu of a review of E/M valuation. We applaud CMS for moving in the direction of recognizing payment for medical home care coordination. However, a broader implementation is warranted. **We urge CMS to immediately engage with the CPT Editorial Panel and the RUC to clarify and resolve any issues that impede a broad and expedient implementation.**

The Chronic Care Coordination Workgroup will continue to convene over the coming months to provide strategic leadership to the CPT Editorial Panel and the RUC in addressing the coding and valuation of coordination of care and the prevention and management of chronic disease. **We urge CMS to immediately implement separate payment for anticoagulant management and other non face-to-face services to demonstrate that CMS is prepared to incentivize care coordination and foster delivery reform.**

Separate Payment for High Cost Medical Supplies (Balloon Sinuplasty for 2012)

The RUC has repeatedly requested that CMS create J codes for high cost supplies so that these expenses may be monitored closely and paid appropriately. The RUC submitted the following comment to CMS on August 24, 2011:

> ***Distinct Reporting for High Cost Disposable Supplies***
>
> The RUC has repeatedly called on CMS to separately identify and pay for high cost disposable supplies using distinct J codes, rather than bundle into the service described by CPT. There are approximately 20 supply items that CMS has priced in excess of $1,000, for example. **The RUC urges CMS to consider the**

establishment of J codes for high cost supplies. The pricing of these supplies should be based on a transparent process, where items are annually reviewed and updated.

CMS provided the RUC with the attached 2011 claims data for the CPT codes that include a supply item identified as costing more than $1,000 per unit. While the mean, mode, and median for each CPT code indicate that typically only one unit of service is billed, additional analysis was conducted on one specific family of services, balloon sinuplasty (CPT codes 31295-31297).

Balloon sinuplasty was reviewed by the Practice Expense Subcommittee and the RUC in February 2010. The committees assumed that one unit of service would be reported in estimating practice expense inputs. The RUC recommended one kit (either SA106 or SA107) per CPT code. CMS priced these kits at $2600 and $1295, respectively. Following implementation of the codes on January 1, 2011, anecdotal reports surfaced that multiple units of services were being reported and the corresponding number of kits were not utilized. CMS reviewed the first six months of claims data for 2011 and determined that the typical claim does include multiple units of service, as follows:

Code	billed in more than one unit	billed in more than 2 units
31295	57%	24%
31296	54%	21%
31297	74%	48%

The RUC again urges CMS to implement new policy that high cost supplies be assigned HCPCS codes (e.g. J codes) to better monitor appropriate payment. Further, the RUC recommends that CMS immediately remove the sinus surgery kit (SA106 and SA107) from the direct practice expense inputs for the procedure codes 31295-31297. CMS should instead create two new HCPCS codes to describe these sinus surgery kits to ensure that appropriate payment is made relative to the price of these supplies.

Kyphoplasty – Non-Facility Practice Expense Input Recommendations

In the July 19, 2011 Proposed Rule on the 2012 Medicare Physician Payment Schedule, CMS stated that stakeholders had requested the CPT codes 22523-22525 *Percutaneous Kyphoplasty* be priced in the non-facility setting. CMS suggested that the RUC might assess whether non-facility pricing is appropriate. The RUC does not believe that it is within the Committee's expertise to determine whether or not a service can be performed in the office setting safely or effectively. The RUC did solicit specialty societies to provide an opportunity for data collection and submission. The American College of Radiology and the Society for Interventional Radiology submitted direct practice expenses for the non-facility setting for these CPT codes. The RUC reviewed this information and the recommended practice costs are included in the attached submission.

Molecular Pathology – CPT 2012 Tier 1 and Tier II Recommendations

The RUC understands that CMS is currently reviewing the new molecular pathology section for *CPT 2012* to determine which services will be paid on the Medicare Physician Payment Schedule versus the Clinical Lab Fee Schedule. Throughout 2011, CMS has urged the specialty and the RUC to provide data to help CMS make an informed decision. While the RUC does not make recommendations regarding the assignment of a service to a particular payment schedule, the Committee did review a significant volume of data presented by the College of American Pathologists. Recommendations for the Tier I and Tier II Molecular Pathology services to be described in *CPT 2012* are included in the attached submission. The RUC considers all of these codes to be new technology.

Pacemaker or Pacing Cardioverter-Defibrillator – 2012 Bundled CPT Code Recommendations

As part of the RUC's efforts to recommend code bundling for services reported by the same physician on the same date of service, the CPT Editorial Panel created a new code structure for pacemaker and cardioverter defibrillators for *CPT 2012*. The RUC submitted interim recommendations to CMS for these services in May 2011. At the September 22-24 RUC meeting, the Committee reviewed new survey data from cardiologists and has formulated revised recommendations. The revised RUC recommendations for new CPT codes 33212-33231 are included in the attached submission.

Psychoanalysis – 4th Five-Year Review Recommendation

CMS referred 90845 *Psychoanalysis* to the RUC as part of the 4th Five-Year Review of the RBRVS. In October 2010, the RUC referred the entire psychiatry section to the CPT Editorial Panel for further review. The Editorial Panel and the specialties involved all agreed that no further revision is needed for psychoanalysis. Therefore, the specialty presented their data for this service to the RUC. The RUC recommendations for CPT code 90845 are included in the attached submission.

Update on Review of RUC's Multi-Specialty Points of Comparison (MPC) Codes

In the *Final Rule* for the 2011 Medicare Physician Payment Schedule, CMS requested that the RUC review high volume services included on the RUC's Multi-Specialty Points of Comparison (MPC). The RUC has engaged in a more comprehensive review of the MPC, reconstructing the document to ensure that it includes true cross-specialty services. Several of the specific codes identified by CMS were scheduled for review at the September 2011 RUC meeting, with specialty society data submitted. Review of each of the following codes, however, led to significant concerns with the survey data, and in some cases, coding and payment policy for the individual codes. The RUC recommended the following course of actions for these services.

31231 *Nasal endoscopy, diagnostic, unilateral or bilateral (separate procedure)* – Re-survey for the February 2012 RUC meeting with improved vignette to describe the typical unilateral vs. bilateral and better define the work of the involved local anesthetic in the survey instrument.

43239, 45380, 45385 *GI Endoscopy Services* – The specialty societies representing gastroenterology presented that appropriate surveys could not be conducted until after the specialty had an opportunity to resolve payment policy issues related to the provision of moderate

sedation. The RUC understands that gastroenterology will be working with the CPT Editorial Panel and CMS to resolve this coding and payment policy question as it relates to all of GI endoscopy services (120+ services). In the meantime, the RUC will remove all such services from the MPC. The specialty societies indicated that they plan to engage with the RUC on a workplan to survey all 120+ codes once the issues related to moderate sedation have been addressed.

77003 *Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid)* – The RUC noted many issues with the survey conducted for this service that is performed concurrently with an injection procedure. The specialties did not include the new 2012 CPT descriptor in the survey and there were issues related to the clinical vignette. The RUC urged the specialty to develop a new vignette and instructions to inform the respondent that the injection is reported separately. The Research Subcommittee will review the revised vignette and instructions prior to the survey data collection for the February 2012 RUC meeting.

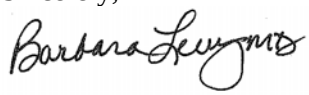
Positioning Time in Non-Manipulation Fracture Codes

In the June 6, 2011, *Proposed Rule* for the 4th Five-Year Review of the RBRVS, CMS requests that the RUC examine all the non-manipulation fracture codes to determine if positioning time was incorporated into the work RVU for the codes and if so, whether the need for positioning time was documented.

The American Academy of Orthopaedic Surgeons (AAOS) submitted a letter to the RUC explaining that of the 50 non-manipulation fracture codes, only 5 have been reviewed by the RUC and most included 2 minutes of positioning time. The time was documented in the service descriptions. Magnitude estimation was utilized in developing the work relative values for these services. The remaining 45 codes were part of the Harvard study and did not include any positioning time. **The RUC agrees with the AAOS assessment included in this submission, recognizing that the services were valued using magnitude estimation, not via a building block method. The two minutes of positioning time was documented in the service descriptions for the few individual services reviewed by the RUC.**

The RUC appreciates the opportunity to provide comment and recommendations related to the 2012 Medicare Physician Payment Schedule. If you have any questions regarding this submission, I would welcome the opportunity to speak to you personally, in particular related to our continuing work on care coordination. Of course, your staff may also contact Sherry Smith at the AMA for clarification regarding these recommendations.

Sincerely,



Barbara S. Levy, MD

cc: RUC Participants

Attachments

CPT Source	Deleted	Source 2010 Utilization	New/ Revised Code	New/Revised Code Utilization (reference 2009)	Percent	Source RVU	RUC Rec RVU	RUC Tab	New/ Revised Total RVUs	Total Source RVUs
33212		12722	33212	135	0.011	5.52	5.26	4	710	745
33212		12722	Savings	12587	0.989	5.52	0.00	4	0	69480
33213		49320	33213	486	0.010	6.37	5.61	4	2726	3096
33213		49320	33221	486	0.010	6.37	6.00	4	2916	3096
33213		49320	Savings	48348	0.980	6.37	0.00	4	0	307977
33233		65466	33233	14368	0.219	3.39	3.39	4	48708	48708
33233		65466	33227	14818	0.226	1.70	5.50	4	81499	25117
33233		65466	33228	35257	0.539	1.70	5.77	4	203433	59761
33233		65466	33229	1023	0.016	1.70	6.04	4	6179	1734
33240		34727	33240	284	0.008	7.64	6.05	4	1718	2170
33240		34727	33230	335	0.010	7.64	6.32	4	2117	2559
33240		34727	33231	335	0.010	7.64	6.59	4	2208	2559
33240		34727	Savings	33773	0.973	7.64	0.00	4	0	258026
33241		41263	33262	6098	0.148	1.65	6.06	4	36954	10031
33241		41263	33263	15280	0.370	1.65	6.33	4	96722	25136
33241		41263	33264	9182	0.223	1.65	6.60	4	60601	15104
33241		41263	33241	10703	0.259	3.29	3.29	4	35213	35213
71090	D	233398	Savings	233398	1.000	0.54	0.00	4	0	126035
83912		350640	81210	7000	0.020	0.37	0.37	5	2590	2590
83912		350640	81225	2000	0.006	0.37	0.37	5	740	740
83912		350640	81226	2000	0.006	0.37	0.43	5	860	740
83912		350640	81227	4000	0.011	0.37	0.38	5	1520	1480
83912		350640	81245	5000	0.014	0.37	0.37	5	1850	1850
83912		350640	81257	5000	0.014	0.37	0.50	5	2500	1850
83912		350640	81261	5000	0.014	0.37	0.52	5	2600	1850
83912		350640	81262	700	0.002	0.37	0.61	5	427	259
83912		350640	81263	400	0.001	0.37	0.52	5	208	148
83912		350640	81264	4000	0.011	0.37	0.58	5	2320	1480
83912		350640	81265	15000	0.043	0.37	0.40	5	6000	5550
83912		350640	81266	300	0.001	0.37	0.41	5	123	111
83912		350640	81267	2000	0.006	0.37	0.45	5	900	740
83912		350640	81268	300	0.001	0.37	0.51	5	153	111
83912		350640	81292	1000	0.003	0.37	1.40	5	1400	370
83912		350640	81293	500	0.001	0.37	0.52	5	260	185
83912		350640	81294	800	0.002	0.37	0.80	5	640	296
83912		350640	81295	1000	0.003	0.37	1.40	5	1400	370
83912		350640	81296	500	0.001	0.37	0.52	5	260	185
83912		350640	81297	800	0.002	0.37	0.80	5	640	296

CPT Source	Deleted	Source 2010 Utilization	New/ Revised Code	New/Revised Code Utilization (reference 2009)	Percent	Source RVU	RUC Rec RVU	RUC Tab	New/ Revised Total RVUs	Total Source RVUs
83912		350640	81298	500	0.001	0.37	0.80	5	400	185
83912		350640	81299	600	0.002	0.37	0.52	5	312	222
83912		350640	81300	500	0.001	0.37	0.65	5	325	185
83912		350640	81301	1000	0.003	0.37	0.50	5	500	370
83912		350640	81302	200	0.001	0.37	0.65	5	130	74
83912		350640	81303	50	0.000	0.37	0.52	5	26	19
83912		350640	81304	150	0.000	0.37	0.52	5	78	56
83912		350640	81310	5000	0.014	0.37	0.39	5	1950	1850
83912		350640	81317	600	0.002	0.37	1.40	5	840	222
83912		350640	81318	200	0.001	0.37	0.52	5	104	74
83912		350640	81319	400	0.001	0.37	0.80	5	320	148
83912		350640	81331	250	0.001	0.37	0.39	5	98	93
83912		350640	81332	1000	0.003	0.37	0.40	5	400	370
83912		350640	81340	4000	0.011	0.37	0.63	5	2520	1480
83912		350640	81341	1000	0.003	0.37	0.45	5	450	370
83912		350640	81342	6000	0.017	0.37	0.57	5	3420	2220
83912		350640	81350	750	0.002	0.37	0.37	5	278	278
83912		350640	81355	4000	0.011	0.37	0.38	5	1520	1480
83912		350640	81370	15000	0.043	0.37	0.54	5	8100	5550
83912		350640	81371	10000	0.029	0.37	0.60	5	6000	3700
83912		350640	81372	4000	0.011	0.37	0.52	5	2080	1480
83912		350640	81373	4000	0.011	0.37	0.37	5	1480	1480
83912		350640	81374	10000	0.029	0.37	0.34	5	3400	3700
83912		350640	81375	2000	0.006	0.37	0.60	5	1200	740
83912		350640	81376	2000	0.006	0.37	0.50	5	1000	740
83912		350640	81377	2000	0.006	0.37	0.43	5	860	740
83912		350640	81378	2000	0.006	0.37	0.45	5	900	740
83912		350640	81379	1000	0.003	0.37	0.45	5	450	370
83912		350640	81380	1000	0.003	0.37	0.45	5	450	370
83912		350640	81381	1000	0.003	0.37	0.45	5	450	370
83912		350640	81382	1000	0.003	0.37	0.45	5	450	370
83912		350640	81383	1000	0.003	0.37	0.45	5	450	370
83912		350640	83912	211140	0.602	0.37	0.37	5	78122	78122
83912		211140	81400	2000	0.009	0.37	0.32	6	640	740
83912		211140	81401	2000	0.009	0.37	0.40	6	800	740
83912		211140	81402	2000	0.009	0.37	0.50	6	1000	740
83912		211140	81403	2000	0.009	0.37	0.52	6	1040	740
83912		211140	81404	2000	0.009	0.37	0.65	6	1300	740

CPT Source	Deleted	Source 2010 Utilization	New/ Revised Code	New/Revised Code Utilization (reference 2009)	Percent	Source RVU	RUC Rec RVU	RUC Tab	New/ Revised Total RVUs	Total Source RVUs
83912		211140	81405	2000	0.009	0.37	0.80	6	1600	740
83912		211140	81406	1000	0.005	0.37	1.40	6	1400	370
83912		211140	81407	1000	0.005	0.37	1.85	6	1850	370
83912		211140	81408	1000	0.005	0.37	2.35	6	2350	370
83912		211140	83912	196140	0.929	0.37	0.37	6	72572	72572
90845		5,418	90845	5,418	1.000	1.79	2.10	10	11378	9698

Total Source RVUs	1,214,103
Total New/Revised RVUs	824,087
RVU Difference	390,016
CF	$33.9764
CF Redistribution	13,251,335

Additional RUC Recommendations for Consideration for Final Rule on the 2012 Medicare Physician Paym

September 2011

CPT Code	Pre-Service Evaluation	Pre-Service Positioning	Pre-Service Scrub Dress & Wait	Intra-Service	Immediate Post Service	99291	99231	99232	99233	99224	99225	99238	99212	99213	Total Time
11056	5	2	0	10	2										19
11720	5	2	0	5	2										14
11721	5	2	0	10	2										19
33212	15	1	6	45	20							0.5		1	129
33213	15	1	6	46	20							0.5		1	130
33221	15	1	6	50	20							0.5		1	134
33227	15	1	6	45	20							0.5		1	129
33228	15	1	6	50	20							0.5		1	134
33229	15	1	6	60	20							0.5		1	144
33230	15	3	15	60	20							0.5		1	155
33231	15	3	15	60	20							0.5		1	155
33240	15	3	15	45	20							0.5		1	140
33262	15	3	15	60	20							0.5		1	155
33263	15	3	15	60	20							0.5		1	155
33264	15	3	15	60	20							0.5		1	155
81210	0	0	0	15	0										15
81225	0	0	0	13	0										13
81226	0	0	0	15	0										15
81227	0	0	0	14	0										14
81245	0	0	0	15	0										15
81257	0	0	0	20	0										20
81261	0	0	0	21	0										21
81262	0	0	0	20	0										20
81263	0	0	0	23	0										23
81264	0	0	0	22	0										22
81265	0	0	0	17	0										17
81266	0	0	0	15	0										15
81267	0	0	0	18	0										18
81268	0	0	0	20	0										20
81292	0	0	0	60	0										60
81293	0	0	0	28	0										28
81294	0	0	0	30	0										30
81295	0	0	0	60	0										60
81296	0	0	0	28	0										28
81297	0	0	0	30	0										30
81298	0	0	0	30	0										30
81299	0	0	0	28	0										28
81300	0	0	0	30	0										30
81301	0	0	0	20	0										20
81302	0	0	0	30	0										30
81303	0	0	0	28	0										28
81304	0	0	0	28	0										28
81310	0	0	0	19	0										19
81317	0	0	0	60	0										60
81318	0	0	0	28	0										28
81319	0	0	0	30	0										30
81331	0	0	0	15	0										15
81332	0	0	0	15	0										15
81340	0	0	0	25	0										25
81341	0	0	0	19	0										19
81342	0	0	0	25	0										25
81350	0	0	0	15	0										15
81355	0	0	0	15	0										15
81370	0	0	0	15	0										15
81371	0	0	0	30	0										30
81372	0	0	0	15	0										15
81373	0	0	0	15	0										15
81374	0	0	0	13	0										13
81375	0	0	0	15	0										15
81376	0	0	0	15	0										15
81377	0	0	0	15	0										15
81378	0	0	0	20	0										20
81379	0	0	0	15	0										15
81380	0	0	0	15	0										15
81381	0	0	0	12	0										12
81382	0	0	0	15	0										15
81383	0	0	0	15	0										15
81400	0	0	0	10	0										10

Additional RUC Recommendations for Consideration for Final Rule on the 2012 Medicare Physician Paym

September 2011

CPT Code	Pre-Service Evaluation	Pre-Service Positioning	Pre-Service Scrub Dress & Wait	Intra-Service	Immediate Post Service	99291	99231	99232	99233	99224	99225	99238	99212	99213	Total Time
81401	0	0	0	15	0										15
81402	0	0	0	20	0										20
81403	0	0	0	28	0										28
81404	0	0	0	30	0										30
81405	0	0	0	30	0										30
81406	0	0	0	60	0										60
81407	0	0	0	60	0										60
81408	0	0	0	80	0										80
90845	5	0	0	50	5										60

Additional RUC Recommendations for Consideration for Final Rule on the 2012 Medicare Physician Paym

September 2011

CPT Code	Pre-Service Evaluation	Pre-Service Positioning	Pre-Service Scrub Dress & Wait	Intra-Service	Immediate Post Service	99291	99231	99232	99233	99224	99225	99238	99212	99213	Total Time

Additional RUC Recommendations for Consideration for Final Rule on the 2012 Medicare Physician Paym

September 2011

CPT Code	Pre-Service Evaluation	Pre-Service Positioning	Pre-Service Scrub Dress & Wait	Intra-Service	Immediate Post Service	99291	99231	99232	99233	99224	99225	99238	99212	99213	Total Time

AMA/Specialty Society RVS Update Committee
Summary of Recommendations

April 2006

Anticoagulant Management Services

In 2001, the Centers for Medicare and Medicaid Services (CMS) stated that the standard of care for anticoagulant services was suboptimal and the current payment policy requires the physician to have the beneficiary make an office visit to discuss prothrombin time tests results and necessary adjustments to receive separate payment. Although it is clinically optimal for a physician to discuss results with a patient and make an adjustment during a face-to-face encounter under some circumstances, physicians often engage in these activities outside of a face-to-face encounter with the patient. The CPT Editorial Panel agreed with the specialty that bundling this post service time into the payment for the visit is unfair when physicians are managing patients on long-term anticoagulants. In addition, the Panel believed that CMS policy provides inadequate avenues for physicians to be paid for managing patients on long term anticoagulant may contribute to the problem of underutilization of anticoagulant drugs that has adverse effects on the health of patients. Failure to receive anticoagulant drugs when indicated can increase patient risk of thrombosis and embolism, and under or over anticoagulation can increase patient risk of bleeding. The CPT Editorial Panel discussed the issue at its February 2006 meeting and created two new codes to allow the reporting of anticoagulant management services. To ensure appropriate utilization of these codes, the Panel added minimum International Normalized Ratio (INR) measurements, eight for the initial anticoagulant management and three for subsequent therapy, and stated that this service cannot also be reported with another Evaluation and Management (E/M) code.

99363

The RUC reviewed the specialty society's survey results for new CPT code 99363 *Anticoagulant management for an outpatient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; initial 90 days of therapy (must include a minimum of 8 INR measurements.* The RUC agreed that INR testing is typically performed 10 times over the initial 90 days of therapy to appropriate control anticoagulation. The typical code that is currently billed for this service is a 99211 *Office or other outpatient visit for the evaluation and management of an established patient, that may not require the presence of a physician. Usually, the presenting problem(s) are minimal. Typically, 5 minutes are spent performing or supervising these services* (Work RVU = 0.17). The current RVU total for ten E/M codes is similar (10 x 0.17 = 1.70) to the specialty survey median and recommended value (1.65) for the new code 99363. The RUC and the specialty agreed that the physician work and time of new code 99363 was similar to the work of ten 99211 E/M services. The RUC and

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specialty also agreed that the intra-service physician time would typically total 50 minutes rather than what the surveyed median time of 100 minutes.

The RUC recommends a relative work value of 1.65 for code 99363 with an intra-service and total time of 50 minutes.

99364

The RUC reviewed the survey data for CPT code 99364 *Anticoagulant management for a patient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; each subsequent 90 days of therapy (must include a minimum of three INR measurements).* The RUC agreed that the typical code that is currently billed for this services is a 99211 *Office or other outpatient visit for the evaluation and management of an established patient, that may not require the presence of a physician. Usually, the presenting problem(s) are minimal. Typically, 5 minutes are spent performing or supervising these services* (Work RVU = 0.17). The RUC agreed that there are typically four INR measurements in each subsequent 90 days of therapy. The current RVU total for four 99211 services is similar (4 x 0.17 = 0.68) to the specialty survey median value (0.63) for the new code 99364. The RUC and the specialty agreed that the physician work and time of new code 99364 was similar to the work of four 99211 E/M services. The RUC and specialty also agreed that the intra-service physician time would typically total 20 minutes rather than the surveyed median time of 40 minutes.

The RUC recommends a relative work value of 0.63 for code 99364 with an intra-service and total time of 20 minutes.

Practice Expense

The RUC reviewed the direct practice expense inputs for these codes and recommended a total of 90 minutes of clinical labor time for 99363 and 24 minutes for 99364, for phone calls and assisting the physician with patient information and chart review.

New Technology/Services

The RUC identified codes 99363 and 99364 as new services to be reviewed again under the RUC's new technology process. **The RUC recommends that these codes are put on the new technology/services list and return to the RUC for re-review considering its utilization patterns once this service has become more widespread.**

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Medicine **Case Management Services** **Anticoagulant Management** Anticoagulant services are intended to describe the outpatient management of warfarin therapy, including ordering, review, and interpretation of International Normalized Ratio (INR) testing, communication with patient, and dosage adjustments as appropriate. When reporting these services, the work of anticoagulant management may not be used as a basis for reporting an Evaluation and Management service or Care Plan Oversight time during the reporting period. Do not report these services with 99371-99373, 0074T when telephone or on-line services address anticoagulation with warfarin management. If a significant, separately identifiable E/M service is performed, report the appropriate E/M service code using modifier 25. These services are outpatient services only. When anticoagulation therapy is initiated or continued in the inpatient or observation setting, a new period begins after discharge and is reported with 99364. Do not report 99363-99364 with 99217-99239, 99291-99300, 99304-99318 or other code(s) for physician review, interpretation and patient management of home INR testing for a patient with mechanical heart valve(s). Any period less than 60 continuous outpatient days is not reported. If less than the specified minimum number of services per period are performed, do not report the anticoagulant management services (99363-99364).				
●99363	ZZ1	Anticoagulant management for an outpatient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; initial 90 days of therapy (must include a minimum of 8 INR measurements	XXX	1.65
●99364	ZZ2	each subsequent 90 days of therapy (must include a minimum of three INR measurements)	XXX	0.63

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

Recommended Work Relative Value

CPT Code:99363 Global Period: XXX Specialty Society RVU: **1.65**

RUC RVU: **1.65**

CPT Descriptor: Anticoagulant management for a patient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; initial 90 days of therapy (must include a minimum of eight INR measurements)

(Do not report 99605-99606 for final period of less than 60 days. If treatment is interrupted and resumed, use 9936X2 for the period(s) of re-treatment)

(Do not report Evaluation and Management (E/M) service for these services or include these services when selecting the E/M service. If a significant, separately identifiable E/M service is performed, report the appropriate E/M service code.)

(Do not report 99605-99606 with 99371-99373 or 0074T when telephone or on-line services are for anticoagulation with warfarin management)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 69-year old female established patient is found to have atrial fibrillation. A stress echocardiogram done a year previously as part of an evaluation of chest pain did not demonstrate valvular heart disease. Her rate is controlled and her history does not suggest that this has occurred in the past 24 hours. The physician explains the risks and benefits of anticoagulation and initiates therapy. (Diagnosis of atrial fibrillation and face-to-face services at initiation of therapy is reported separately as evaluation and management service.)

Percentage of Survey Respondents who found Vignette to be Typical: 76%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: none

Description of Intra-Service Work: For each prothrombin time test, a physician must: access the patient's medical record, review the results, and determine if any dosage adjustment and/or change in care plan is necessary. The physician may make dosage adjustments and/or care plan changes to account for: acute illness, possible drug interactions, diet changes affecting vitamin K intake; and/or procedures that require withholding or alternative anticoagulation. The physician then must make a notation in the medical record, contact the patient to convey the results/instructions, and arrange repeat testing at the appropriate interval.

Description of Post-Service Work: none

SURVEY DATA

RUC Meeting Date (mm/yyyy)	04/2006		
Presenter(s):	Doug Leahy, MD James J. Anthony, MD ACC Representative		
Specialty(s):	Internal Medicine, Neurology, Cardiology		
CPT Code:	99363		
Sample Size:	181	**Resp n:** 38	**Response:** 20.9 %
Sample Type:	Panel		

code: 99363

	Low	25th pctl	Median*	75th pctl	High
Survey RVW:	0.25	0.89	**1.65**	1.95	4.61
Pre-Service Evaluation Time:			**0.0**		
Pre-Service Positioning Time:			**0.0**		
Pre-Service Scrub, Dress, Wait Time:			**0.0**		
Intra-Service Time:	0.00	72.00	**50.00**	157.50	900.00

Post-Service	Total Min**	CPT code / # of visits
Immed. Post-time:	**0.00**	
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**

**Physician standard total minutes per E/M visit: 99291 (63); 99292 (32); 99233 (41); 99232 (30); 99231 (19); 99238 (36); 99215 (59); 99214 (38); 99213 (23); 99212 (15); 99211 (7).

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU
99375	XXX	1.73

CPT Descriptor Physician supervision of a patient under care of home health agency (patient not present) in home, domiciliary or equivalent environment (eg, Alzheimer's facility) requiring complex and multidisciplinary care modalities involving regular physician development and/or revision of care plans, review of subsequent reports of patient status, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 30 minutes or more

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU
77290	XXX	1.56

CPT Descriptor 1 Therapeutic radiology simulation-aided field setting; complex

MPC CPT Code 2	Global	Work RVU
92004	XXX	1.67

CPT Descriptor 2 Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; comprehensive, new patient, one or more visits

Other Reference CPT Code	Global	Work RVU

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 12 **% of respondents:** 31.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 99363**	**Key Reference CPT Code: 99375**
Median Pre-Service Time	0.00	10.00
Median Intra-Service Time	50.00	32.00
Median Immediate Post-service Time	0.00	15.00
Median Critical Care Time	0.0	0.00
Median Other Hospital Visit Time	0.0	0.00
Median Discharge Day Management Time	0.0	0.00
Median Office Visit Time	0.0	0.00
Median Total Time	**50.00**	**57.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3.33	3.42
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.92	3.33
Urgency of medical decision making	3.67	2.83

Technical Skill/Physical Effort (Mean)

Technical skill required	2.67	2.67
Physical effort required	1.92	2.08

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	4.00	3.25
Outcome depends on the skill and judgment of physician	3.67	3.42
Estimated risk of malpractice suit with poor outcome	4	3.08

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1

Time Segments (Mean)

Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	3.33	3.33
Post-Service intensity/complexity	0.00	0.00

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

A panel of representatives from ACP, AAN, and ACC reviewed the survey data, which was provided by internists, neurologists, and cardiologists. 76% of the survey respondents indicated that the vignette is typical. Survey respondents were asked to indicate the number of INRs that a patient typically receives during an initial 90-day period and the amount of time they personally spend furnishing anticoagulant management services described in the CPT code. The survey median number of INRs is 10 and the median physician time is 100 minutes. 32% of the survey respondents picked 99375 as the key reference service code. The panel noted that the 100 minutes of total physician time for the surveyed code is more than the 57 minutes of total time for 99375. Further, it noted that the mean intensity/complexity measure value for

the surveyed code is higher than for 99375 for four indicators; lower four indicators, and equal for one indicator. Considering that the work RVU for 99375 is 1.73, the specialties are comfortable recommending the survey median work RVU of 1.65.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Anticoagulant management service(s) that take place during a face-to-face encounter are currently reported using evaluation and management (E/M) services, typically established patient office visit codes, 99211-99215.

Physicians can bill CPT 99211 when a nurse (or other office personnel) meets with a patient in the office to discuss the prothrombin time test results. To bill using CPT 99211, the physician does not have to see the patient face to face but must be available in the suite if needed.

Physicians can bill a higher E/M service, CPT 99212-99215, if they choose to personally relay the prothrombin time results, evaluate the patient, and/or adjust the anticoagulant drug dosage. Physicians could also relay the results while evaluating and treating a related or unrelated condition. Physicians factor the anticoagulant monitoring activities into their decision regarding the level of E/M service that is appropriate to bill.

Anticoagulant management services that take place outside a face-to-face encounter are not separately reportable.

Medicare pays separately for home prothrombin time monitoring using a home device for beneficiaries with mechanical heart valves. CMS created HCPCS Level II code G0250 to allow reporting of the associated physician service after its 2001 national decision establishing coverage of a home prothrombin time monitor for home anticoagulant management. Code G0250 is defined as:

Physician review, interpretation and patient management of home INR testing for a patient with mechanical heart valve(s) who meet other coverage criteria; per four tests (does not require face-to-face service)

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Internal Medicine How often? Commonly

Specialty Neurology How often? Commonly

Specialty Cardiology How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period?

We have attempted to estimate the number of times the code would be performed on Medicare patients using the information in the RUC database on the number of INR tests billed. We have assumed our numbers based on estimating the number of INRs that would be part of an initial as compared to a subsequent monitoring, and then dividing that number by the average number of INRs (10) for the first 90 days. We are unable to estimate the number of times the code would be billed on other patients because of a lack of data.

If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 659,107 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty Internal Medicine Frequency 329553 Percentage 49.99 %

Specialty Neurology Frequency 164776 Percentage 24.99 %

Specialty Cardiology Frequency 164776 Percentage 24.99 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

Recommended Work Relative Value

CPT Code:99364 Global Period: XXX Specialty Society RVU: **0.63**

RUC RVU: **0.63**

CPT Descriptor: each subsequent 90 days of therapy (must include a minimum of three INR measurements

(Do not report 99605-99606 for final period of less than 60 days. If treatment is interrupted and resumed, use 99606 for the period(s) of re-treatment)

(Do not report Evaluation and Management (E/M) service for these services or include these services when selecting the E/M service. If a significant, separately identifiable E/M service is performed, report the appropriate E/M service code.)

(Do not report 99605-99606 with 99371-99373 or 0074T when telephone or on-line services are for anticoagulation with warfarin management)ts)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 69-year old female with chronic atrial fibrillation and no valvular heart disease managed for anticoagulant therapy with warfarin

Percentage of Survey Respondents who found Vignette to be Typical: 79%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: none

Description of Intra-Service Work: For each prothrombin time test, a physician must: access the patient's medical record, review the results, and determine if any dosage adjustment and/or change in care plan is necessary. The physician may make dosage adjustments and/or care plan changes to account for: acute illness, possible drug interactions, diet changes affecting vitamin K intake; and/or procedures that require withholding or alternative anticoagulation. The physician then must make a notation in the medical record, contact the patient to convey the results/instructions, and arrange repeat testing at the appropriate interval.

Description of Post-Service Work: none

SURVEY DATA

RUC Meeting Date (mm/yyyy)	04/2006				
Presenter(s):	Doug Leahy, MD James J. Anthony, MD ACC representative				
Specialty(s):	Internal Medicine, Neurology, Cardiology				
CPT Code:	99364				
Sample Size: 181	**Resp n:** 38	**Response:** 20.9 %			
Sample Type:	Panel				
	Low	**25th pctl**	**Median***	**75th pctl**	**High**
Survey RVW:	0.17	0.46	**0.80**	1.12	3.46
Pre-Service Evaluation Time:			**0.0**		
Pre-Service Positioning Time:			**0.0**		

code: 99364

Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		0.00	30.00	**20.00**	71.25	600.00
Post-Service	**Total Min****	**CPT code / # of visits**				
Immed. Post-time:	**0.00**					
Critical Care time/visit(s):	**0.0**	99291x **0.0**	99292x **0.0**			
Other Hospital time/visit(s):	**0.0**	99231x **0.0**	99232x **0.0**	99233x **0.0**		
Discharge Day Mgmt:	**0.0**	99238x **0.00**	99239x **0.00**			
Office time/visit(s):	**0.0**	99211x **0.0**	12x **0.0**	13x **0.0**	14x **0.0**	15x **0.0**

**Physician standard total minutes per E/M visit: 99291 (63); 99292 (32); 99233 (41); 99232 (30); 99231 (19); 99238 (36); 99215 (59); 99214 (38); 99213 (23); 99212 (15); 99211 (7).

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU
99212	XXX	0.45

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a problem focused history; a problem focused examination; straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU
90853	XXX	0.59

CPT Descriptor 1 Group psychotherapy (other than of a multi-family group)

MPC CPT Code 2	Global	Work RVU
92012	XXX	0.67

CPT Descriptor 2 Ophthalmological services: medical examination and evaluation, with initiation or continuation of diagnostic and treatment program; intermediate, established patient

Other Reference CPT Code	Global	Work RVU

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 12 **% of respondents:** 31.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 99364**	**Key Reference CPT Code: 99212**
Median Pre-Service Time	0.00	0.00
Median Intra-Service Time	20.00	10.00
Median Immediate Post-service Time	0.00	5.00
Median Critical Care Time	0.0	0.00
Median Other Hospital Visit Time	0.0	0.00
Median Discharge Day Management Time	0.0	0.00
Median Office Visit Time	0.0	0.00
Median Total Time	**20.00**	**15.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	2.58	2.63
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.42	2.63
Urgency of medical decision making	3.17	2.55

Technical Skill/Physical Effort (Mean)

Technical skill required	1.67	2.00
Physical effort required	1.58	1.75

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.92	3.08
Outcome depends on the skill and judgment of physician	3.58	3.50
Estimated risk of malpractice suit with poor outcome	4.42	3.67

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1

Time Segments (Mean)

Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.75	2.75
Post-Service intensity/complexity		

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

A panel of representatives from ACP, AAN, and ACC reviewed the survey data, which was provided by internists, neurologists, and cardiologists. 79% of the survey respondents indicated that the vignette is typical. Survey respondents were asked to indicate the number of INRs that a patient typically receives during a subsequent 30-day period and the amount of time they personally spend furnishing anticoagulant management services described in the CPT code. The survey median number of INRs is 4 and the median physician time is 40 minutes.

32% of the survey respondents picked 99212 as the key reference service code. 99212 has a work RVU of 0.45 and a total physician time of 15 minutes. The panel noted that the surveyed code involves more physician time than for the reference service code. Further, the panel noted that the mean intensity/complexity measure value for the surveyed code is higher than for 99212 for four indicators; lower four indicators, and equal for one indicator. Based on these comparisons, the panel determined that the survey median RVU of 0.80 is too high and that the survey 25th percentile RVU of 0.46 is too low. The panel then looked back at its work RVU recommendation for 99605, the initial 90-day anticoagulant management period, anticoagulation, of 1.65. The typical number of INRs for 99605 is 10 INR, compared to 4--with the amount of total physician time being 10 minutes per INR for both 99605 and 99606. Assuming INR work is identical, 4 INRs would require a work value of 40% of the initial code's 10 INRs, which would lead to 0.66. The committee also looked at the halfway point between the 25th percentile and the median, which would be a value of 0.63. With this information, the committee decided to recommend a work value of 0.63 for the subsequent visits.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Anticoagulant management service(s) that take place during a face-to-face encounter are currently reported using evaluation and management (E/M) services, typically established patient office visit codes, 99211-99215.

Physicians can bill CPT 99211 when a nurse (or other office personnel) meets with a patient in the office to discuss the prothrombin time test results. To bill using CPT 99211, the physician does not have to see the patient face to face but must be available in the suite if needed.

Physicians can bill a higher E/M service, CPT 99212-99215, if they choose to personally relay the prothrombin time results, evaluate the patient, and/or adjust the anticoagulant drug dosage. Physicians could also relay the results while evaluating and treating a related or unrelated condition. Physicians factor the anticoagulant monitoring activities into their decision regarding the level of E/M service that is appropriate to bill.

Anticoagulant management services that take place outside a face-to-face encounter are not separately reportable.

Medicare pays separately for home prothrombin time monitoring using a home device for beneficiaries with mechanical heart valves. CMS created HCPCS Level II code G0250 to allow reporting of the associated physician service after its

2001 national decision establishing coverage of a home prothrombin time monitor for home anticoagulant management. Code G0250 is defined as:
Physician review, interpretation and patient management of home INR testing for a patient with mechanical heart valve(s) who meet other coverage criteria; per four tests (does not require face-to-face service).

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Internal Medicine How often? Commonly

Specialty Neurology How often? Commonly

Specialty Cardiology How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period?
We have attempted to estimate the number of times the code would be performed on Medicare patients using the information in the RUC database on the number of INR tests billed. We have assumed our numbers based on estimating the number of INRs that would be part of an initial as compared to a subsequent monitoring, and then dividing that number by the average number of INRs (4) for each subsequent 90 days. We are unable to estimate the number of times the code would be billed on other patients because of a lack of data.
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
3,295,537 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty Internal Medicine Frequency 1647769 Percentage 50.00 %

Specialty Neurology Frequency 823884 Percentage 24.99 %

Specialty Cardiology Frequency 823884 Percentage 24.99 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

AMTA/Specialty Society Update Process
PEAC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

99363
CPT Long Descriptor: Anticoagulant management for a patient taking warfarin, physician review and interpretation of International Normalized Ratio (INR) testing, patient instructions, dosage adjustment (as needed), and ordering of additional tests; initial 90 days of therapy (must include a minimum of eight INR measurements)

Sample Size:__N/A – consensus panel____ Response Rate: (%):_____ Global Period:_____

Geographic Practice Setting %: N/A consensus panel Rural____ Suburban_____
Urban_____ N/A -

Type of Practice %: _____Solo Practice N/A consensus panel
_____Single Specialty Group
_____Multispecialty Group
_____Medical School Faculty Practice Plan

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

Members from the three specialties who surveyed work values were asked to consider the direct inputs for the practice expense for the code based on staff recommendations. These members have worked extensively on RUC issues in the past and are familiar with the requirements. Those inputs were discussed at a conference call and finalized at that time.

Please describe the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities: For each INR performed, staff will access the patient's medical record, review the results, and determine if any dosage adjustment and/or change in care plan is necessary. Staff will also communicate results/dosage adjustment/care plan changes back to the patient. In cases in which blood is drawn at the physician's office staff may also discuss patient's status during the draw. This work would require 10 minutes of staff time. There is an average of 10 INR measurements performed in the initial 90 day period, so the recommended staff time for the RN/LPN/MTA is 100 minutes.

Post-Service Clinical Labor Activities:

AMTA/Specialty Society Update Process
PEAC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs
99364

CPT Long Descriptor:
each subsequent 90 days of therapy (must include a minimum of three INR measurements

(Do not report 99363-99364 for final period of less than 60 days. If treatment is interrupted and resumed, use 99364 for the period(s) of re-treatment)

(Do not report Evaluation and Management (E/M) service for these services or include these services when selecting the E/M service. If a significant, separately identifiable E/M service is performed, report the appropriate E/M service code.)

(Do not report 99363-99364 with 99371-99373 or 0074T when telephone or on-line services are for anticoagulation with warfarin management)

Global Period:_xxx__

Sample Size:__N/A – consensus panel____ Response Rate: (%):_____

Geographic Practice Setting %: N/A – consensus panel Rural____ Suburban_____
Urban_____

Type of Practice %: _____Solo Practice N/A – consensus panel
_____Single Specialty Group
_____Multispecialty Group
_____Medical School Faculty Practice Plan

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

For each INR performed, staff will access the patient's medical record, review the results, and determine if any dosage adjustment and/or change in care plan is necessary. This work would require 10 minutes of staff time. Staff will also communicate results/dosage adjustment/care plan changes back to the patient. In cases in which blood is drawn at the physician's office staff may also discuss patient's status during the draw. There is an average of 4 INR measurements performed in the subsequent 90 day periods, so the recommended staff time for the RN/LPN/MTA is 40 minutes.

Please describe the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Intra-Service Clinical Labor Activities: access the patient's medical record, review the results, and determine if any dosage adjustment and/or change in care plan is necessary

Post-Service Clinical Labor Activities:

	A	B	C	D	E	F	G
1							
2				CPT Code: 99363		CPT Code 99364	
3	RUC Recommendation			Code Descriptor		Code Descriptor	
4	LOCATION	CMS Code	Staff Type	Non Facility	Facility	Non Facility	Facility
5	GLOBAL PERIOD -	XXX					
6	TOTAL CLINICAL LABOR TIME	L037D	RN/LPN/MTA	90.0	0.0	24.0	0.0
7	TOTAL PRE-SERV CLINICAL LABOR TIME			0.0	0.0	0.0	0.0
8	TOTAL SERVICE PERIOD CLINICAL LABOR TIME	L037D	RN/LPN/MTA	90.0	0.0	24.0	0.0
9	TOTAL POST-SERV CLINICAL LABOR TIME			0.0	0.0	0.0	0.0
10	PRE-SERVICE						
11	Start: Following visit when decision for surgery or procedure made						
12	Complete pre-service diagnostic & referral forms						
13	Coordinate pre-surgery services						
14	Schedule space and equipment in facility						
15	Provide pre-service education/obtain consent						
16	Follow-up phone calls & prescriptions						
17	Other Clinical Activity (please specify)						
18	End:When patient enters office/facility for surgery/procedure						
19	SERVICE PERIOD						
20	Start: When patient enters office/facility for surgery/procedure						
21	Pre-service services						
22	Review charts (3 minutes per INR)	L037D	RN/LPN/MTA	30		12	
23	Greet patient and provide gowning						
24	Obtain vital signs						
25	Provide pre-service education/obtain consent						
26	Prepare room, equipment, supplies						
27	Setup scope (non facility setting only)						
28	Prepare and position patient/ monitor patient/ set up IV						
29	Sedate/apply anesthesia						
30	Intra-service						
31	Assist physician in performing procedure						
32	Post-Service						
33	Monitor pt. following service/check tubes, monitors, drains						
34	Clean room/equipment by physician staff						
35	Clean Scope						
36	Clean Surgical Instrument Package						
37	Complete diagnostic forms, lab & X-ray requisitions						
38	Review/read X-ray, lab, and pathology reports						
39	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
40	Discharge day management 99238 --12 minutes 99239 --15 minutes						
41	Other Clinical Activity (please specify): communicate results/dosage changes etc to patient	L037D	RN/LPN/MTA	60	2 phone calls per INR	12	1 phone call per INR
42	End: Patient leaves office						
43	POST-SERVICE Period						
44	Start: Patient leaves office/facility						
45	Conduct phone calls/call in prescriptions						
46	*Office visits:* Greet patient,escort to room; provide gowning; interval history & vital signs and chart; assemble previous test reports/results;assist physician during exam; assist with dressings, wound care, suture removal; prepare dx test, prescription forms; post service education, instruction, counseling; clean room/equip, check supplies; coordinate home or outpatient care						
47	*List Number and Level of Office Visits*						
48	99211 16 minutes		16				
49	99212 27 minutes		27				
50	99213 36 minutes		36				
51	99214 53 minutes		53				
52	99215 63 minutes		63				
53	Other						
54							
55	*Total Office Visit Time*			0	0	0	0
56	Other Activity (please specify)						
57	End: with last office visit before end of global period						

	A	B	C	D	E	F	G
2				**CPT Code: 99363**		**CPT Code 99364**	
3	**RUC Recommendation**			**Code Descriptor**		**Code Descriptor**	
4	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
58	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**				
59	Patient Education Booklet	SK062	1	**1**		0	0
60							
61							
62							
63							
64							
65							
66	**Equipment**	**CMS Code**	**Unit**				
67	none						
68							
69							

AMA/Specialty Society RVS Update Committee
Summary of Recommendations

April 2005

Education and Training for Patient Self Management

The CPT Editorial Panel created three new codes to describe educational and training services prescribed by a physician and provided by a qualified, non-physician healthcare professional. There is no physician work associated with these services. The RUC considered recommendations for direct practice expense inputs only. The RUC reviewed inputs for CPT code 98960 *Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient*, 98961 *2-4 patients* and 98962 *5-8 patients*. **The RUC assessed and modified the practice expense inputs, which are attached to this recommendation.**

CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
● 98960	K1	Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient	XXX	0.00 (PE Inputs Only)
● 98961	K2	2-4 patients	XXX	0.00 (PE Inputs Only)
● 98962	K3	5-8 patients	XXX	0.00 (PE Inputs Only)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

CPT Code: 98960, 98961 and 98962

AMA/Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

CPT Long Descriptor: Education and training for patient self-management by a qualified, non-physician health care professional, e.g. RD or RN, using a standardized curriculum

[Note: The CPT panel approved this generic code set with the intent it would be used by many qualified health care professionals. While the code is 'generic,' there may be instances where the service includes different equipment based on the practitioner's skill set, the patient/client's educational objectives/desired outcomes, and the specific nature of the education and training provided.]

The American Dietetic Association (ADA) and the American Association of Clinical Endocrinologists (AACE) compiled this PE summary of recommendations which represents the "typical" clinical labor time, supplies and equipment performed by clinical endocrinologists and dieticians.

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

Both the American Dietetic Association (ADA) and the American Association of Clinical Endocrinologists (AACE) individually convened expert practice expense panels to collect data for the Education and Training codes. Both groups' expert panelists represent a variety of practice settings and geographic locations.

Once each group's data was obtained, ADA and AACE then compiled each group's respective data obtained from the PE expert panel for clinical labor time, supplies and equipment.

CPT Long Descriptor:
Education and training for patient self-management by a qualified, non-physician health care professional e.g. RD or RN, using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes;

98961	Group 2-4
98962	Group 5-8

[Note: The CPT panel approved this generic code set with the intent it would be used by many qualified health care professionals. While the code is 'generic,' there may be instances where the service includes different equipment based on the practitioner's skill set, the patient/client's educational objectives/desired outcomes, and the specific nature of the education and training provided.]

The American Dietetic Association (ADA) and the American Association of Clinical Endocrinologists (AACE) compiled this PE summary of recommendations, which represents the

"typical" clinical labor time, supplies and equipment performed by registered dietitians and clinical endocrinologists' staff.

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

Both the American Dietetic Association (ADA) and the American Association of Clinical Endocrinologists (AACE) individually convened expert practice expense panels to collect data for the Education and Training codes. Both groups' expert panelists represent a variety of practice settings and geographic locations.

Once each group's data was obtained, ADA and AACE then compiled each group's respective data obtained from the PE expert panel for clinical labor time, supplies and equipment.

Please describe the clinical activities of your staff:

98960 Disease Education Vignette
Typical Patient: A 35 year-old woman with a symptomatic established illness or disease, e.g. diabetes or asthma, or the desire to delay disease co-morbidities, e.g. cardiovascular co-morbidities, is referred by a physician to a qualified, non-physician health care professional for education/training, eg. RD or RN.

The qualified, non-physician health care professional:
Pre-Service

- Reviews relevant parts of the patient's medical record
- Reviews the physician referral

Intra-Service

- Assesses the individual's psychological, social, environmental factors, lifestyle habits, health literacy, and learning styles;
- Using a standardized curriculum, provides education/training to self-manage the illness/disease, or delay the disease co-morbidities, or use a device;
- Answers the patient's questions as part of the education and training group session

Post-Service

- Establishes a plan for follow-up evaluation and ongoing assessment of outcomes, and communicates to the patient;
- Documents the education/training provided and describes the plan for follow-up

98961 and 98962 Group Education & Training Vignette

Typical Patient: A 60 year-old man with a symptomatic established illness or disease, e.g. diabetes or asthma, or the desire to delay disease co-morbidities, e.g. cardiovascular co-morbidities, is referred by a physician to a qualified, non-physician health care professional, e.g. RD or RN, for group education/training.

CPT Code: 98960, 98961 and 98962

The qualified, non-physician health care professional:
Pre-Service

- Reviews relevant parts of the patient's medical record for all patients involved in the group
- Reviews the physician referral for each patient

Intra-Service

- Assesses the groups' psychological, social, environmental factors, lifestyle habits, health literacy, and learning styles;
- Using a standardized curriculum, provides education/training to self-manage the illness/disease, or delay the disease co-morbidities, or use a device;
- Answers the patients' questions as part of the education and training group session

Post-Service

- Establishes a plan for follow-up evaluation and ongoing assessment of outcomes, and communicates to each patient in the group;
- Documents the education/training provided and describes the plan for follow-up education/training for each patient in the group.

	A	B	C	D	E	F
1						
2						
3						
4				**CPT Code**	**CPT Code**	**CPT Code**
5	**RUC April/May 2005**			**98960 --Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient**	**98961-- Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; group 2-4 (AVERAGE SIZE IS 3)**	**98962-- Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; group 5-8 (AVERAGE SIZE IS 6)**
6	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Non Facility**	**Non Facility**
7	**GLOBAL PERIOD**					
8	**TOTAL CLINICAL LABOR TIME**	**RD (L043B) and RN (LO51A)**	**RD & RN**	**38.0**	**18 (for each individual in the group)**	**13 (for each individual in the group)**
9	**TOTAL PRE-SERV CLINICAL LABOR TIME**	**RD (L043B) and RN (LO51A)**	**RD & RN**	**3.0**	**3.0**	**3.0**
10	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	**RD (L043B) and RN (LO51A)**	**RD & RN**	**30.0**	**10.0**	**5.0**
11	**TOTAL POST-SERV CLINICAL LABOR TIME**	**RD (L043B) and RN (LO51A)**	**RD & RN**	**5.0**	**5.0**	**5.0**
12	**PRE-SERVICE**					
13	**Start: Following visit when decision for surgery or procedure made**					
14	Complete pre-service diagnostic & referral forms			**3**	**3**	**3**
15	Coordinate pre-surgery services					
16	Schedule space and equipment in facility					
17	Provide pre-service education	RD (L043B) and RN (LO51A)				
18	Follow-up phone calls & prescriptions					
19	Other Clinical Activity (please specify)	RD (L043B) and RN (LO51A)				
20	**End:When patient enters office/facility for surgery/procedure**					
21	**SERVICE PERIOD**					
22	**Start: When patient enters office/facility for surgery/procedure**					
23	**Pre-service services**					
24	Review charts					
25	Greet patient					
26	Obtain vital signs					
27	Provide pre-service education/obtain consent					
28	Prepare room, equipment, supplies					
29	Setup scope (non facility setting only)					
30	Prepare and position patient/ monitor patient/ set up IV					
31	Sedate/apply anesthesia					

	A	B	C	D	E	F
4				**CPT Code**	**CPT Code**	**CPT Code**
5	**RUC April/May 2005**			**98960 --Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient**	**98961-- Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; group 2-4 (AVERAGE SIZE IS 3)**	**98962-- Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; group 5-8 (AVERAGE SIZE IS 6)**
6	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Non Facility**	**Non Facility**
32	**Intra-service**					
33	Perform education	RD (L043B) and RN (LO51A)	RD & RN	30	10	5
34	**Post-Service**					
35	Monitor pt. following service/check tubes, monitors, drains					
36	Clean room/equipment, store equipment/models; media equipment					
37	Clean Scope					
38	Clean Surgical Instrument Package					
39	Complete diagnostic forms, lab & X-ray requisitions: documentation & record outcomes data	RD (L043B) and RN (LO51A)	RD & RN			
40	Review/read X-ray, lab, and pathology reports					
41	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions					
42	Discharge day management 99238 --12 minutes 99239 --15 minutes					
43	Other Clinical Activity (please specify)					
44	**End: Patient leaves office**					
45	**POST-SERVICE Period**					
46	**Start: Patient leaves office/facility**					
47	Conduct phone calls/call in prescriptions	RD (L043B) and RN (LO51A)	RD & RN	1	1	1
48	documentation and recording outcomes			4	4	4
49	*List Number and Level of Office Visits*					
50	99211 16 minutes		16			
51	99212 27 minutes		27			
52	99213 36 minutes		36			
53	99214 53 minutes		53			
54	99215 63 minutes		63			
55	Other					
56						
57	*Total Office Visit Time*					
58	Other Activity (please specify)					
59	**End: with last office visit before end of global period**					

	A	B	C	D	E	F
4				**CPT Code**	**CPT Code**	**CPT Code**
5	**RUC April/May 2005**			**98960 --Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient**	**98961-- Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; group 2-4 (AVERAGE SIZE IS 3)**	**98962-- Education and training for patient self-management by a qualified, non-physician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; group 5-8 (AVERAGE SIZE IS 6)**
6	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Non Facility**	**Non Facility**
60	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**			
61	patient education booklet	SK062	item	1	1	1
62						
63						
64						
65	**Equipment**	**CMS Code**	**Unit**			
66	computer, desktop, with monitor	ED021	1	1	33%	17%
67	printer, laser, paper	ED032	1	1	17%	8%
68	software	EQ187	1	1	33%	17%
69	PC projector ($1700)	new item- see cost data	1	1	33%	27%
70	equipment and/or models	EQ123	1	1	33%	27%
71	scale	EF016	1		7%	3%

AMA/Specialty Society RVS Update Committee
Summary of Recommendations

February and April 2007

Team Conferences

In November 2006, the CPT Editorial Panel created CPT codes 99365 *Medical team conference with interdisciplinary team of health care professionals, face to face with patient and/or family, 30 minutes or more; participation by physician* and 99367 *Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician* to differentiate team conferences at which the patient is present and when the patient is not present.

The CPT Editorial Panel also developed new codes corresponding to non-physician services. The RUC reviewed and submitted the following recommendations on the physician (MD/DO) services only. The HCPAC independently reviewed and submitted separate recommendations on the non-physicians services.

The CPT Executive Committee subsequently reconsidered CPT code 99365. Discussions initiated by the RUC process indicated that team conference services by the physician with the patient and/or family present may be reported using appropriate E/M codes. A research of materials from the creation of the E/M codes indicates that the language concerning face-to-face time and counseling and coordination of care appears to have been included so as to address meetings conducted for the purpose of coordinating care. The Executive Committee confirmed that the E/M codes would be appropriate when counseling and coordination of care dominate the service and the patient and/or family is present. It is unlikely any significant number of team conferences would not be for the purpose of counseling and/or coordination of care. The E/M codes have greater flexibility than a single code for a team conference by a physician, patient and/or family present. Therefore, the RUC proposed the CPT code 99365 be rescinded. The introductory text from the team conference section is revised to account for this interpretation by removing other restrictions and referencing E/M. The requirement for direct participation in the care of the patient remains in response to concerns that the E/M codes would be improperly reported when the physician role was simply to attend a conference about the patient. **The CPT Executive Committee recommends that CPT code 99365 be rescinded.**

The RUC reviewed the survey data for 99367 and compared it to its reference code 99374 *Physician supervision of a patient under care of home health agency (patient not present) in home, domiciliary or equivalent environment* (Work RVU=1.10). The RUC agreed that 99374 was a good reference for the surveyed code as both codes are non-face-to-face services. Although, when comparing the two codes, the RUC noted that 99374 was deemed to be a slightly more intense procedure to perform and had slightly more total service time associated with it as compared to the surveyed code (40 minutes and 34 minutes, respectively), the RUC believed these two codes to be equal in overall work. Therefore, the RUC recommends a

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work RVU of 1.10 RVUs for 99367 which is a value slightly below the 25th percentile of the survey data. **The RUC recommends 1.10 work RVUs for 99367.**

Practice Expense:
The RUC recommends no practice expense inputs for 99367.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
~~Physician case management is a process in which a physician is responsible for direct care of a patient, and for coordinating and controlling access to or initiating and/or supervising other health care services needed by the patient.~~ Case management is a process in which a physician or another qualified health care professional is responsible for direct care of a patient and, additionally, for coordinating, managing access to, initiating and/or supervising other healthcare services needed by the patient. **Medical Team Conferences** Medical team conferences include face-to-face participation by a minimum of three qualified health care professionals from different specialties or disciplines (each of whom provide direct care to the patient), with or without the presence of the patient, family member(s), community agencies, surrogate decision maker(s) (eg, legal guardian) and/or caregivers(s). The participants are actively involved in the development, revision, coordination and implementation of healthcare services needed by the patient. Reporting participants shall have performed face to face evaluations/treatments of the patient, independent of any team conference, within the previous 60 days. Physicians may report their time spent in a team conference with the patient and/or family present using Evaluation and Management codes and time as the key controlling factor for code selection when counseling and/or coordination of care dominates the service. These introductory guidelines do not apply to services reported using Evaluation and Management codes (see E/M services guidelines). However, the physician must be directly involved with the patient, providing face to face services outside of the conference visit with other providers or agencies. Reporting participants shall document their participation in the team conference as well as their contributed information and subsequent treatment recommendations No more than one individual from the same specialty may report 99365-99368 at the same encounter. Individuals should not report when their participation in the medical team conference is part of a facility or organizational service contractually provided by the organizational or facility provider.				

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
The team conference starts at the beginning of the review of an individual patient and ends at the conclusion of the review. Time related to record keeping and report generation is not reported. The reporting participant shall be present for all time reported. The time reported is not limited to the time that the participant is communicating to the other team members or patient and/or family. Time reported for medical team conferences may not be used in the determination of time for other services such as care plan oversight (99374-99380), home, domiciliary or rest home care plan oversight (99339-99340), prolonged services (99354-99359), psychotherapy, or any Evaluation and Management service. For team conferences where the patient is present for any part of the duration of the conference, report the team conference face-to-face codes.				
D 99361		~~Medical conference by a physician with interdisciplinary team of health professionals or representatives of coummunity agencies to coordinate activities of patient care (patient not present); approximately 30 minutes~~	XXX	N/A
D 99362		~~approximately 60 minutes~~ (99361, 99362 have been deleted. To report, see 99365-9936X4)	XXX	N/A
Medical Team Conference, Direct (Face-to-Face) Contact With Patient and/or Family				
D ●99365	C1	~~Medical team conference with interdisciplinary team of health care professionals, face to face with patient and/or family, 30 minutes or more; participation by physician~~	XXX	The CPT Editorial Panel's Executive Committee has deleted this procedure and has revised the introductory language to reflect this deletion

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Medical Team Conference, Without Direct (Face-To-Face) Contact with Patient and/or Family				
●99367	C3	Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician	XXX	1.10

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:99367 Tracking Number C3 Specialty Society Recommended RVU: **1.10**
Global Period: XXX RUC Recommended RVU: **1.10**

CPT Descriptor: Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A patient with a neurological disorder, weight loss and functional limitations lives at home with a caregiver. The functional limitations include impaired cognition, mobility, communication and dependencies in basic activities of daily living. The condition is such that the problems and functional limitations are likely to be alleviated with appropriate care and therapies. The optimal care plan needs to be devised in a coordinated manner given the multiple domains requiring attention (biomedical, psychological, social and functional) and multiple healthcare professionals involved in the care of the patient. After undergoing evaluations (each reported separately) by the appropriate disciplines/specialties a team conference is convened.

Percentage of Survey Respondents who found Vignette to be Typical: 83%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: Chart review prior to conference.

Description of Intra-Service Work: The conference is attended by the physician and/or non-physician providers.

Description of Post-Service Work: This service includes the individual clinician's post conference creation of documentation of his/her participation in the team conference, including documenting contributed information and treatment recommendations, and review of the care plan for the patient.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	04/2007					
Presenter(s):	Alan Lazaroff, MD					
Specialty(s):	American Geriatrics Society, American Academy of Pediatrics, American Psychiatric Association, American Academy of Physical Medicine & Rehabilitation					
CPT Code:	99367					
Sample Size:	192	**Resp N:** 23	**Response:** 11.9 %			
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	5.50	**10.00**	47.50	1000.00
Survey RVW:		0.33	1.15	**1.30**	1.45	2.50
Pre-Service Evaluation Time:				**10.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		10.00	20.00	**30.00**	30.00	45.00
Immediate Post Service-Time:	**15.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				

Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☐ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code:	99367	
		Specialty Recommended
Physician Work RVU:		**1.10**
Pre-Service Evaluation Time:		**5.0**
Pre-Service Positioning Time:		**0.0**
Pre-Service Scrub, Dress, Wait Time:		**0.0**
Intra-Service Time:		**30.00**
Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99374	XXX	1.10	**RUC Time**

CPT Descriptor Physician supervision of a patient under care of home health agency (patient not present) in home, domiciliary or equivalent environment (eg, Alzheimer's facility) requiring complex and multidisciplinary care modalities involving regular physician development and/or revision of care plans, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 15-29 minutes

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
99375	XXX	214,339	1.73	**RUC Time**

CPT Descriptor 1 Physician supervision of a patient under care of home health agency (patient not present) in home, domiciliary or equivalent environment (eg, Alzheimer's facility) requiring complex and multidisciplinary care modalities involving regular physician development and/or revision of care plans, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care,

integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 30 minutes or more

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
99242	XXX	1.34	**RUC Time**

CPT Descriptor Office consultation for a new or established patient, which requires these three components: an expanded problem focused history; an expanded problem focused examination; straightforward medical decision making. Counseling and coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 11 **% of respondents:** 47.8 **%**

TIME ESTIMATES (Median)	**CPT Code: 99367**	**Key Reference CPT Code:** 99374	**Source of Time** **RUC Time**
Median Pre-Service Time	5.00	5.00	
Median Intra-Service Time	30.00	20.00	
Median Immediate Post-service Time	5.00	9.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**40.00**	**34.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	2.83	2.43
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.83	3.52
Urgency of medical decision making	3.00	2.78

Technical Skill/Physical Effort (Mean)

Technical skill required	3.48	3.09
Physical effort required	3.83	3.35

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.17	3.00
Outcome depends on the skill and judgment of physician	3.17	2.74
Estimated risk of malpractice suit with poor outcome	2.57	2.35

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.35	2.91
Intra-Service intensity/complexity	3.74	3.22
Post-Service intensity/complexity	3.13	2.91

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

An expert panel was convened with representatives from AGS. AAP, APA, and AAPMR reviewed changes in recommendations and support the AGS changes.

The description of pre service work says: N/A – this did not go to the respondents and the N/A was incorrect – there is chart review involved before the conference – the surveyees thought this took 10 min – our expert panel thought 5 min was sufficient; the description of post-service work, which also did not go to surveyees, incorrectly included some intraservice work. The only post-service work is the last sentence of the post service work description – specifically, documentation of the physicians participation and any management plan, as appropriate and review of the summary report when it comes out. The surveyees estimated that this took 15 min. We believe that the surveyees may have incorrectly assumed that post service work also included a phone call to the patient or preparing the post conference summary. Therefore, our expert panel reduced the post service time to 5 min.

Work RVUs – Our expert panel recommends 1.1 RVUs for 99367 and 1.20 RVUs for X1. The most appropriate comparator code to 99367 is 99374 which was the reference service chosen most often by respondents. Both codes are non-face-to-face codes and the intensity of 99367 is slightly lower than 99374 because multiple physicians are present at the conference and only a single physician performs 99374. 99374 has an intraservice time of 20 min and a total time of 34 minutes while 99367 has an intraservice time of 30 min and a total time of 40 minutes. The recommended work RVU of 1.1, which is identical to 99374, is based on the longer intraservice time and slightly lower intensity of 99367 as compared to 99374. This RVU is below the survey 25th percentile and places the two codes in proper rank order.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 99361

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pediatrics How often? Commonly

Specialty Geriatrics How often? Commonly

Specialty Physical Medicine & Rehabilitation How often? Sometimes

Estimate the number of times this service might be provided nationally in a one-year period? 802000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty Pediatrics Frequency 200000 Percentage 24.93 %

Specialty Geriatrics Frequency 550000 Percentage 68.57 %

Specialty Physical Medicine & Rehabilitation Frequency 2000 Percentage 0.24 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 538,900 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty Pediatrics Frequency 0 Percentage 0.00 %

Specialty Geriatrics Frequency 522500 Percentage 96.95 %

Specialty Physical Medicine & Rehabilitation Frequency 1400 Percentage 0.25 %

Do many physicians perform this service across the United States? Yes

Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

AMA/Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Facility Direct Inputs

CPT Long Descriptor: Medical Team Conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician

Sample Size: 9Response Rate: (%): 56% Global Period: XXX

Geographic Practice Setting %: Rural____ Suburban_____ Urban_____

Type of Practice %: _____Solo Practice
_____Single Specialty Group
_____Multispecialty Group
_____Medical School Faculty Practice Plan

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

An expert panel was used to develop direct cost inputs. An expert panel was convened with representatives from AGS. AAP, APA, and AAPMR reviewed changes in recommendations and support the AGS changes.

Please describe the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

None.

Intra-Service Clinical Labor Activities:

None.

Post-Service Clinical Labor Activities:

None.

CPT Code: 99367

AMTA/Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

CPT Long Descriptor: Medical Team Conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician

Sample Size: 9Response Rate: (%): 56% Global Period: XXX

Geographic Practice Setting %: Rural____ Suburban_____ Urban_____

Type of Practice %: _____Solo Practice
_____Single Specialty Group
_____Multispecialty Group
_____Medical School Faculty Practice Plan

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

An expert panel was used to develop direct cost inputs. An expert panel was convened with representatives from AGS. AAP, APA, and AAPMR reviewed changes in recommendations and support the AGS changes.

Please describe the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

None.

Intra-Service Clinical Labor Activities:

None.

Post-Service Clinical Labor Activities:

None.

	A	B	C	F	G
1					
2				**CPT Code 99367**	
3	**Meeting Date: March 26, 2007**			**Code Descriptor: Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician**	
4	**LOCATION**	**Code**	**Staff Type**	**Non Facility**	**Facility**
5	**GLOBAL PERIOD**			**XXX**	**XXX**
6	**TOTAL CLINICAL LABOR TIME**	**L037D**	**RN/LPN/MA**	**0.0**	**0.0**
7	**TOTAL PRE-SERV CLINICAL LABOR TIME**	**L037D**	**RN/LPN/MA**	**0.0**	**0.0**
8	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	**L037D**	**RN/LPN/MA**	**0.0**	**0.0**
9	**TOTAL POST-SERV CLINICAL LABOR TIME**	**L037D**	**RN/LPN/MA**	**0**	**0**
10	**PRE-SERVICE**				
11	**Start: When appointment for service is made**				
12	Review/read X-ray, lab, and pathology reports				
13	Other Clinical Activity (please specify)	**L037D**	**RN/LPN/MA**	**0**	**0**
14	**End: Patient arrival at office for service**				
15	**SERVICE PERIOD**				
16	**Start: Patient arrival at office for service**				
17	Greet patient and provide gowning	**L037D**	**RN/LPN/MA**	**0**	**0**
18	Obtain vital signs				
19	Prep and position patient				
20	Prepare room, equipment, supplies				
21	Assist physician during exam	**L037D**	**RN/LPN/MA**	**0**	**0**
22	Education/instruction/counseling				
23	Coordinate home or outpatient care	**L037D**	**RN/LPN/MA**	**0**	**0**
24	Clean room/equipment				
25	Other Clinical Activity (please specify)				
26	**End: Patient leaves office**				
27	**POST-SERVICE Period**				
28	**Start: Patient leaves office/facility**				
29	Conduct phone calls between visits with patient, family, pharmacy/call in prescriptions	**L037D**	**RN/LPN/MA**	**0**	**0**
30	Other activity (please specify)				
31	*Total Office Visit Time*			0	0
32	**End: When appointment for next office visit is made**				
33	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**		
34	None				
35					

RUC HCPAC Review Board
Summary of Recommendations

February 2007

Team Conferences

The CPT Editorial Panel created CPT codes 99366 *Medical team conference with interdisciplinary team of health care professionals, face to face with patient and/or family, 30 minutes or more; participation by non-physician qualified health care professional* and 99368 *Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by non-physician qualified health care professional* to differentiate team conferences at which the patient is present and when the patient is not present and differentiate the various healthcare professionals who may participate in the team conference.

The HCPAC reviewed the specialty societies survey results for codes 99366 and 99368. These services are performed by a health care professionals from various professions. Therefore, six different professions were involved in surveying these services to appropriately capture the typical time and work involved. Approximately 160 health care professionals completed the surveys for 99366 and 145 completed surveys for 99368, with median annual service performance rates of 30 and 35, respectively.

The HCPAC thoroughly reviewed the specialty societies survey results and recommendations for codes 99366 *Team Conference, health care professionals, patient present* and 99368 *Team Conference, health care professionals, patent not present*. The HCPAC agreed that 99366 would involve slightly more physician work than 99368 because there is more involvement when the patient and/or family is present. The HCPAC concluded that the survey results were flawed because the survey respondents had overestimated physician time due to the key reference service chosen 99242 *Office consultation for a new or established patient* (work RVU=1.34). CPT code 99242 is not a service typically performed by these health care professionals. The reference service poorly compared to the work and time involved to perform these team conference services. The survey resulted in inappropriately high RVUs compared to other health care professional services and there was not appropriate rationale for the health care professionals' recommended work relative value units.

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In order to standardized the time to 30 minutes and properly value these team conference services, the HCPAC then performed a weighted average based on the survey median work values per specialty, with an intra-service time of 30 minutes. The weighted RVU for 99366 was calculated as follows:

Weighted Average for 99366

A	B	C	D	E
HCPAC Society	**Proposed Intra-Service Time / Survey Median Intra-Time**	**Column B x Survey Median Work Value**	**Column C x Percentage of Total Respondents**	**Total**
ASHA	30/35 = 0.86	0.86 x 1.13 = 0.97	0.97 x 28% = 0.27	0.27
ADA	30/45 = 0.66	0.66 x 1.37 = 0.91	0.91 x 24% = 0.22	0.22
APA	30/60 = 0.50	0.50 x 1.25 = 0.63	0.63 x 21% = 0.13	0.13
AOTA	30/52.5 = 0.57	0.57 x 1.20 = 0.68	0.68 x 16% = 0.11	0.11
APTA	30/35 = 0.86	0.86 x 1.10 = 0.94	0.94 x 7% = 0.06	0.06
NASW	30/45 = 0.66	0.66 x 1.30 = 0.86	0.86 x 4% = 0.03	0.03
			Weighted RVU =	**0.82**

The weighted average calculation produced a work relative value of 0.82. The HCPAC determined that a 0.82 work RVU was appropriate when compared to commonly reported codes by other health care professionals such as occupational therapists, physical therapists and dieticians. For example, code 97110 *Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility* valued at (RVU=0.45) or code 97803 *Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes* valued at (RVU=0.37), both which are valued at 15 minute increments. Therefore, if these services are doubled to 30 minutes, for a comparable reference to code 99366, the RVUs equal 0.90 and 0.74 respectively. Thus placing the RVU recommendation of 0.82 for 99366 appropriately relative to similar health care professional services. **The HCPAC recommends a work RVU of 0.82 for code 99366.**

The HCPAC analyzed the survey pre-, intra-, and post-service survey times and determined that these times were too high, relative to similar services performed by health care professionals. The HCPAC compared the surveyed pre/intra/post times to the aforementioned commonly reported codes by other health care professionals, 97110 (2/14/2 minutes) and 97803 (0/15/0 minutes). If these 15 minute timed reference codes are doubled to adequately compare this 30 minute service, the times of 5/30/5 for 99366 and 99368 are appropriate. Additionally, these timed codes state 30 minutes or more in the code descriptor and the HCPAC felt that 30 minutes intra-service time appropriately measured the intensity and complexity involved in performing these services. **The HCPAC recommends a pre-service time of 5 minutes, intra-service time of 30 minutes, and immediate post-service time of 5 minutes for 99366.**

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The HCPAC analyzed the specialty societies survey data for code 99368 *Team Conference, health care professionals, patent not present*. The HCPAC determined to crosswalk the percentage difference of the survey recommended RVU with the final recommended RVU for code 99366 (0.82/1.25) and apply this percentage difference to the survey recommended RVU to establish an appropriate rank order. The resulting work RVU recommendation is 0.72. **The HCPAC recommends a pre-service time of 5 minutes, intra-service time of 30 minutes, and immediate post-service time of 5 minutes for 99368. The HCPAC recommends a work RVU of 0.72 for code 99368.**

Practice Expense

The HCPAC reviewed the practice expense associated with 99366 and determined that typically when a patient is present they are greeted and receive a educational booklet. However, there are at least three health care professionals involved, so the greet time and one booklet are divided by 3 to apportion between providers who will all bill for this service. The HCPAC recommends less than one minute of greeting the patient (0.33 minutes, 1 minute of meet and greet time divided by 3 health care professionals). The HCPAC determined that a blended RN/LPN/MTA clinical labor mix typically provides the greeting. Additionally, the HCPAC recommends 1/3 or 0.33 of a patient education booklet as part of the medical supplies for code 99366. The HCPAC determined that there is no practice expense associated with code 99368.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
~~Physician case management is a process in which a physician is responsible for direct care of a patient, and for coordinating and controlling access to or initiating and/or supervising other health care services needed by the patient.~~ Case management is a process in which a physician or another qualified health care professional is responsible for direct care of a patient and, additionally, for coordinating, managing access to, initiating and/or supervising other healthcare services needed by the patient. **Medical Team Conferences** Medical team conferences include face-to-face participation by a minimum of three qualified health care professionals from different specialties or disciplines (each of whom provide direct care to the patient), with or without the presence of the patient, family member(s), community agencies, surrogate decision maker(s) (eg, legal guardian) and/or caregivers(s). The participants are actively involved in the development, revision, coordination and implementation of healthcare services needed by the patient. Reporting participants shall have performed face to face evaluations/treatments of the patient, independent of any team conference, within the previous 60 days.				

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Reporting participants shall document their participation in the team conference as well as their contributed information and subsequent treatment recommendations. No more than one individual from the same specialty may report 99365-99368 at the same encounter. Individuals should not report when their participation in the medical team conference is part of a facility or organizational service contractually provided by the organizational or facility provider. The team conference starts at the beginning of the review of an individual patient and ends at the conclusion of the review. Time related to record keeping and report generation is not reported. The reporting participant shall be present for all time reported. The time reported is not limited to the time that the participant is communicating to the other team members or patient and/or family. Time reported for medical team conferences may not be used in the determination of time for other services such as care plan oversight (99374-99380), home, domiciliary or rest home care plan oversight (99339-99340), prolonged services (99354-99359), psychotherapy, or any Evaluation and Management service. For team conferences where the patient is present for any part of the duration of the conference, report the team conference face-to-face codes. (When evaluation and management services are performed separate from the team conference, the appropriate E/M service may be reported with modifier 25)				
D 99361		~~Medical conference by a physician with interdisciplinary team of health professionals or representatives of coummunity agencies to coordinate activities of patient care (patient not present); approximately 30 minutes~~	XXX	
D 99362		~~approximately 60 minutes~~ (99361, 99362 have been deleted. To report, see 99365-99368)	XXX	

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Medical Team Conference, Direct (Face-to-Face) Contact With Patient and/or Family				
D ●99365	C1	~~Medical team conference with interdisciplinary team of health care professionals, face to face with patient and/or family, 30 minutes or more; participation by physician~~	XXX	The CPT Editorial Panel's Executive Committee has deleted this procedure and has revised the introductory language to reflect this deletion
●99366	C2	participation by non-physician qualified health care professional (Team conference services of less than 30 minutes duration are not reported separately)	XXX	0.82
Medical Team Conference, Without Direct (Face-to-Face) Contact With Patient and/or Family				
●99367	C3	Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by physician	XXX	1.10 (RUC Recommendation)
●99368	C4	participation by non-physician qualified health care professional (Team conference services of less than 30 minutes duration are not reported separately)	XXX	0.72

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:99366 Tracking Number C2 Specialty Society Recommended RVU: **1.34**
Global Period: XXX RUC Recommended RVU: **0.82**

CPT Descriptor: Medical team conference with interdisciplinary team of health care professionals, face to face with patient and/or family, 30 minutes or more; participation by non-physician qualified health care professional

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: Typical Patient - A patient with a neurological disorder, weight loss and functional limitations lives at home with a caregiver. The functional limitations include impaired cognition, mobility, communication and dependencies in basic activities of daily living. The condition is such that the problems and functional limitations are likely to be alleviated with appropriate care and therapies. The optimal care plan needs to be devised in a coordinated manner given the multiple domains requiring attention (biomedical, psychological, social and functional) and multiple healthcare professionals involved in the care of the patient. After undergoing evaluations (each reported separately) by the appropriate disciplines/specialties a team conference is convened.

Percentage of Survey Respondents who found Vignette to be Typical: 79%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The non-physician providers gather data and review the patient's chart and other pertinent information to prepare for the team consultation. Documentation and records from the individual provider is also collected and reviewed for the team consultation

Description of Intra-Service Work: The conference is attended by the non-physician and/or physician providers and the patient/patient's family member(s). After discussion, the group devises and approves a plan which includes specified goals, use of medical, nutrition and rehabilitative services and referral to community support services. All participants are engaged in the development, review and formulation of the care plan for the patient. Patient/patient's family member(s) receive educational brochure pertinent to the care plan.

Description of Post-Service Work: A summary report is written and made available to all participants and patient/patient's caregiver but its generation/compilation are reported separately.

Follow-up phone call to the patient/patient's family member(s) to assess understanding and implementation of the patient care plan.

This service does include the individual clinician's post conference creation of documentation of his/her participation in the team conference, including documenting contributed information and treatment recommendations, and review of the care plan for the patient.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	02/2007		
Presenter(s):	Jane White, PhD, RD, FADA; James Georgoulakis, PhD; Robert C. Fifer, PhD, CCC-A; DorisTomer MSW, LCSW		
Specialty(s):	American Dietetic Association; American Occupational Therapy Association; American Physical Therapy Association; American Psychological Association; American Speech, Language, and Hearing Association; National Association of Social Workers		
CPT Code:	99366		
Sample Size:	605	**Resp N:** 159	**Response:** 26.2 %
Sample Type:			

CPT Code: 99366

		Low	25th pctl	Median*	75th pctl	High
Service Performance Rate		0.00	5.00	**30.00**	72.50	2500.00
Survey RVW:		0.00	1.00	**1.25**	1.50	49.50
Pre-Service Evaluation Time:				**15.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		10.00	30.00	**45.00**	60.00	260.00
Immediate Post Service-Time:	**20.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**				
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**				
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**				
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☐ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code:	99366	
		Specialty Recommended
Physician Work RVU:		**1.34**
Pre-Service Evaluation Time:		**5.0**
Pre-Service Positioning Time:		**0.0**
Pre-Service Scrub, Dress, Wait Time:		**0.0**
Intra-Service Time:		**30.00**
Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99242	XXX	1.34	**RUC Time**

CPT Descriptor Office consultation for a new or established patient, which requires these three key components: an expanded problem focused history; an expanded problem focused examination; and straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
99243	XXX	4,897,411	1.88	**RUC Time**

CPT Descriptor 1 Office consultation for a new or established patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source
99374	XXX	1.10	**RUC Time**

CPT Descriptor Physician supervision of a patient under care of home health agency (patient not present) in home, domiciliary or equivalent environment (eg, Alzheimer's facility) requiring complex and multidisciplinary care modalities involving regular physician development and/or revision of care plans, review of subsequent reports of patient status, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 15-29 minutes

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 49 **% of respondents:** 30.8 **%**

TIME ESTIMATES (Median)	**CPT Code: 99366**	**Key Reference CPT Code: 99242**	**Source of Time Harvard Time**
Median Pre-Service Time	5.00	0.00	
Median Intra-Service Time	30.00	30.00	
Median Immediate Post-service Time	5.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**40.00**	**30.00**	
Other time if appropriate		45.00	

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3.82	3.73
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.98	3.90
Urgency of medical decision making	3.47	3.47

Technical Skill/Physical Effort (Mean)

Technical skill required	4.04	4.02
Physical effort required	2.55	2.55

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.18	3.29
Outcome depends on the skill and judgment of physician	3.98	3.82
Estimated risk of malpractice suit with poor outcome	2.82	2.78

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.12	3.04
Intra-Service intensity/complexity	3.98	3.92
Post-Service intensity/complexity	3.35	3.29

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

After completing a convenience survey among HCPAC (non-physician) society providers (159 responses obtained), an expert panel (including APA, APTA, AOTA, ASHA, NASW and ADA) was convened to review and determine final work RVU recommendations for team conference codes 993699366 and 99368. After noting similarities in the reference service code and work RVU proposed values across all of these societies, the HCPAC societies contacted the physician groups who surveyed the team conference codes 993699365 and 99367 (AAP, APA, AGS and AAPMR) to review and discuss the work RVU recommendations.

While the HCPAC and physician groups have different experiences with completing the AMA work surveys, based on the collective number of survey responses and similar data across all groups, the work RVU data was merged. The HCPAC and physician panel agreed on the survey median work RVU of 1.34 for 99366 and 99365. This decision was based on the expert panel's agreement that the work effort is the same regardless of provider type who participates in the team conference. The 1.34 work RVU for 99366 is further supported based on the HCAPC survey data indicating the service involves 45 minutes intra-service time, longer than many of the intra-services times for codes included on the reference service list.

Additionally, the panel felt 99365 and 99366 include more intense work effort than 99367 and 99368 since the patient and/or family member are present during the team conference. A dynamic, highly engaged conference is required to plan and implement the care plan with the patient and family member(s). In the 99365 and 99366 work effort, the healthcare provider(s) translate clinical information in layman's terms for increased comprehension by the family/patient, respond to the family/patient questions, incorporate new information from the family/patient into the decision-making process, and adjust the care plan based on new information and family/patient input. All these activities increase the healthcare provider's work effort. The recommended work value is also supported by the complexity of the patient/patient's condition that requires active participation of at least 3 healthcare providers who participate on the team conference.

The expert panel feels the recommended work RVU of 1.34 for team conference codes 99366 and 99365 places these codes in correct rank order with the reference service code (99242; work RVU 1.34) as well as other E/M codes.

The panel reviewed E/M codes which represent much less time with the patient- 99214 (work RVU 1.42 for 25 minutes) and 99213 (work RVU = 0.92 for 15 minutes). The panel feels the recommended work value for 99366 and 99365 represents correct rank order based on this E/M code review.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 99361 however this code does not match the new description of 9936X2

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty ADA and ASHA	How often? Commonly
Specialty APTA and AOTA	How often? Commonly
Specialty APA and NASW	How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period? 100000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty ADA and ASHA	Frequency 33333	Percentage 33.33 %
Specialty APTA and AOTA	Frequency 33333	Percentage 33.33 %
Specialty APA and NASW	Frequency 33333	Percentage 33.33 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 100,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty ADA and ASHA	Frequency 33333	Percentage 33.33 %
Specialty APTA and AOTA	Frequency 33333	Percentage 33.33 %
Specialty APA and NASW	Frequency 33333	Percentage 33.33 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? No

If no, please select another crosswalk and provide a brief rationale. 97110 (times 2) or 97803 (times 2) or a blend of these two codes.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

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Attestation Statement

As a RUC Advisor, I attest that the integrity of the RUC survey and summary of recommendation forms are based on accurate and complete data to the best of my knowledge. As a RUC Advisor, I acknowledge that violations would be addressed by the executive committee (i.e., RUC Chair, AMA Representative and Alternate AMA Representative).

Robert C Fifer PhD

Robert C. Fifer, PhD, CCC-A; American Speech-Language Hearing Association

Mary Foto

Mary Foto, OTR; American Occupational Therapy Association

James Georgoulakis

James Georgoulakis, PhD; American Psychological Association

Doris F. Tomer, LCSW

Doris F. Tomer MSW, LCSW; National Association of Social Workers

Jane White, PhD, RD

Jane White, PhD, RD, FADA; American Dietetic Association

Erik Van Doorne, PT; American Physical Therapy Association

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:99368 Tracking Number C4 Specialty Society Recommended RVU: **1.30**
Global Period: XXX RUC Recommended RVU: **0.72**

CPT Descriptor: Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by non-physician qualified health care professional

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: Typical Patient - A patient with a neurological disorder, weight loss and functional limitations lives at home with a caregiver. The functional limitations include impaired cognition, mobility, communication and dependencies in basic activities of daily living. The condition is such that the problems and functional limitations are likely to be alleviated with appropriate care and therapies. The optimal care plan needs to be devised in a coordinated manner given the multiple domains requiring attention (biomedical, psychological, social and functional) and multiple healthcare professionals involved in the care of the patient. After undergoing evaluations (each reported separately) by the appropriate disciplines/specialties a team conference is convened.

Percentage of Survey Respondents who found Vignette to be Typical: 74%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The non-physician providers gather and review the patient's chart and other pertinent information to prepare for the team consultation. Documentation and records from the individual provider is collected and reviewed for the team consultation

Description of Intra-Service Work: The conference is attended by the non-physician and/or physician providers. After presentation of the case, all providers present their findings and recommendations. After discussion, the group devises and approves a plan which includes specified goals, use of medical, nutrition and rehabilitative services and referral to community support services. All participants are engaged in the development, review and formulation of the care plan for the patient.

Description of Post-Service Work: A summary report is written and made available to all participants and patient/patient's family but its generation/compilation are reported separately. A patient brochure regarding the care plan is also provided separately to the patient/patient's family member(s).

Follow-up phone call to the patient/patient's caregiver assess understanding and implementation of the patient care plan.

This service does include the individual clinician's post conference creation of documentation of his/her participation in the team conference, including documenting contributed information and treatment recommendations, and review of the care plan for the patient.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	02/2007		
Presenter(s):	Jane White, PhD, RD, FADA; James Georgoulakis, PhD; Robert C. Fifer, PhD, CCC-A; DorisTomer MSW, LCSW		
Specialty(s):	American Dietetic Association; American Occupational Therapy Association; American Physical Therapy Association; American Psychological Association; American Speech, Language, and Hearing Association; National Association of Social Workers		
CPT Code:	99368		
Sample Size:	602	**Resp N:** 144	**Response:** 23.9 %
Sample Type:			

CPT Code: 99368

		Low	25th pctl	Median*	75th pctl	High
Service Performance Rate		0.00	5.00	**35.00**	100.00	5800.00
Survey RVW:		0.00	0.99	**1.10**	1.40	46.00
Pre-Service Evaluation Time:				**15.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		5.00	20.00	**30.00**	60.00	180.00
Immediate Post Service-Time:	**15.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**				
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**				
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**				
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☐ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code: 99368	
	Specialty Recommended
Physician Work RVU:	**1.30**
Pre-Service Evaluation Time:	**5.0**
Pre-Service Positioning Time:	**0.0**
Pre-Service Scrub, Dress, Wait Time:	**0.0**
Intra-Service Time:	**30.00**

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service?

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99379	XXX	1.10	**RUC Time**

CPT Descriptor Physician supervision of a nursing facility patient (patient not present) requiring complex and multidisciplinary care modalities involving regular physician development and/or revision of care plans, review of subsequent reports of patient status, review of related laboratory and other studies, communication (including telephone calls) for purposes of assessment or care decisions with health care professional(s), family member(s), surrogate decision maker(s) (eg, legal guardian) and/or key caregiver(s) involved in patient's care, integration of new information into the medical treatment plan and/or adjustment of medical therapy, within a calendar month; 15-29 minutes

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
CPT Descriptor 1				
MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source
CPT Descriptor 2				

Other Reference CPT Code	Global	Work RVU	Time Source
99242	XXX	1.34	**RUC Time**

CPT Descriptor Office consultation for a new or established patient, which requires these three key components: an expanded problem focused history; an expanded problem focused examination; and straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 27 **% of respondents:** 18.7 **%**

TIME ESTIMATES (Median)	**CPT Code: 99368**	**Key Reference CPT Code:** 99379	**Source of Time RUC Time**
Median Pre-Service Time	5.00	5.00	
Median Intra-Service Time	30.00	20.00	
Median Immediate Post-service Time	5.00	10.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**40.00**	**35.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	4.15	3.93
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	3.81
Urgency of medical decision making	3.11	3.11

Technical Skill/Physical Effort (Mean)

Technical skill required	4.37	4.33
Physical effort required	2.56	2.48

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.33	3.41

Outcome depends on the skill and judgment of physician	4.04	4.00
Estimated risk of malpractice suit with poor outcome	2.85	2.89

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.52	3.48
Intra-Service intensity/complexity	3.89	3.85
Post-Service intensity/complexity	3.33	3.30

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

After completing a convenience survey among HCPAC (non-physician) society providers (144 responses obtained), an expert panel (including APA, APTA, AOTA, ASHA, NASW and ADA) was convened to review and determine final work RVU recommendations for team conference codes 99366 and 99368. After noting similarities in the reference service code and work RVU proposed values across all of these societies, the HCPAC societies contacted the physician groups who surveyed the team conference codes 99365 and 99367 (AAP, APA, AGS and AAPMR) to review and discuss the work RVU recommendations.

While the HCPAC and physician groups have different experiences with completing the AMA work surveys, based on the collective number of survey responses and similar data across all groups, the work RVU data was merged. The HCPAC and physician panel agreed on the survey median work RVU of 1.30 for 99368 and 99367. This decision was based on the expert panel's agreement that the work effort is the same regardless of provider type who participates in the team conference.

The 1.30 recommended work value demonstrates rank order between 993899366 and 99368 where 99368 has a lower work RVU since the patient and/or family member are not present during the team conference. Survey data supports the lower value for 99368 with an intra-service time of 30 minutes compared to 99366 intra-service time of 45 minutes.

The HCPAC and physician expert panel feels the recommended work RVU of 1.30 for team conference codes 99368 and 99367 places these codes in correct rank order with other reference service codes that have lower pre-, intra- and post service times (99379 work RVU 1.10, and 99374 work RVU 1.10). Rank order for the proposed 99368 and 99367 RVU of 1.30 is also supported through the expert panels' review of E/M codes 99213 and 99214; both represent less time with the patient (99213 work RVU 0.92 for 15 minutes and 99214 work RVU 1.42 for 25 minutes).

The recommended work value is also supported by the complexity of the patient/patient's condition that requires active participation of at least 3 healthcare providers who participate on the team conference. The conferences are 30 minutes or more, requiring interpretation of the multi-disciplinary clinical findings and spontaneous decision making to formulate the care plan.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 99361

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty ADA and ASHA	How often? Commonly
Specialty APTA and AOTA	How often? Commonly
Specialty APA and NASW	How often? Commonly

Estimate the number of times this service might be provided nationally in a one-year period? 100000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty ADA and ASHA	Frequency 33333	Percentage 33.33 %
Specialty APTA and AOTA	Frequency 33333	Percentage 33.33 %
Specialty APA and NASW	Frequency 33333	Percentage 33.33 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 100,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty ADA and ASHA	Frequency 33333	Percentage 33.33 %
Specialty APTA and AOTA	Frequency 33333	Percentage 33.33 %
Specialty APA and NASW	Frequency 33333	Percentage 33.33 %

Do many physicians perform this service across the United States? Yes

Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? No

If no, please select another crosswalk and provide a brief rationale. 97110 (times 2) or 97803 (times 2) or a blend of these two codes.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

Attestation Statement

As a RUC Advisor, I attest that the integrity of the RUC survey and summary of recommendation forms are based on accurate and complete data to the best of my knowledge. As a RUC Advisor, I acknowledge that violations would be addressed by the executive committee (i.e., RUC Chair, AMA Representative and Alternate AMA Representative).

Robert C. Fifer, PhD, CCC-A; American Speech-Language Hearing Association

Mary Foto, OTR; American Occupational Therapy Association

James Georgoulakis, PhD; American Psychological Association

Doris F. Tomer MSW, LCSW; National Association of Social Workers

Jane White, PhD, RD, FADA; American Dietetic Association

Erik Van Doorne, PT; American Physical Therapy Association

CPT Code: 99368

CPT Code: 99366

AMTA/Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

CPT Long Descriptor: Medical Team Conference with interdisciplinary team of health care professionals, face-to-face with patient and/or family, 30 minutes or more; participation by non-physician qualified health care professional.

An expert consensus panel was used to develop direct practice expense inputs for the team conference code 99366. The expert panel included HCPAC representatives from American Physical Therapy Association; American Psychological Association; American Speech, Language, and Hearing Association and the American Dietetic Association. These groups based their discussions on PE data obtained from the respective group's members.

Please describe the clinical activities of your staff:

Pre-Service Clinical Labor Activities:
None

Intra-Service Clinical Labor Activities:
The clinical staff person greets the patient and/or family member(s) and takes them to the conference room.

Post-Service Clinical Labor Activities:
None.

Supplies: (see PERC spreadsheet)
One patient education booklet

	A	B	C	D
1	RUC Practice Expense Recommendation			
2	**Meeting Date: February 2007**			**99366**
3				**Code Descriptor: Medical team conference with interdisciplinary team of health care professionals, face-to-face with patient and/or family, 30 minutes or more; participation by non-physician qualified health care professional (assumes 3 providers participate in the team conference)**
4	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**
5	**GLOBAL PERIOD**			**XXX**
6	**TOTAL CLINICAL LABOR TIME**			**0.33**
7	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**0.00**
8	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**	**LO37D**	**RN/LPN/MTA**	**0.33**
9	**TOTAL POST-SERV CLINICAL LABOR TIME**			**0.00**
10	**PRE-SERVICE**			
11	**Start: When appointment for service is made**			
12	Review/read X-ray, lab, and pathology reports			
13	Other Clinical Activity (please specify)			
14	**End: Patient arrival at office for service**			
15	**SERVICE PERIOD**			
16	**Start: Patient arrival at office for service**			
17	Greet patient and provide gowning	**LO37D**	**RN/LPN/MTA**	**0.33**
18	Obtain vital signs			
19	Prep and position patient			
20	Prepare room, equipment, supplies			
21	Assist physician during exam			
22	Education/instruction/counseling			
23	Coordinate home or outpatient care			
24	Clean room/equipment			
25	Other Clinical Activity (please specify)			
26	**End: Patient leaves office**			
27	**POST-SERVICE Period**			
28	**Start: Patient leaves office/facility**			
29	Conduct phone calls between visits with patient, family, pharmacy/call in prescriptions			
30	Other activity (please specify)			
31	*Total Office Visit Time*			
32	**End: When appointment for next office visit is made**			
33	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**	
34	Patient education booklet	**SK062**		**0.33**
35				
36				
37	**Equipment**	**CMS Code**	**Utilization Percentage**	
38	None			
39				
40				
41				
42				
43				
44				
45				
46				

DATE: January 9, 2007

TO: William Rich, MD
Chair, AMA/Specialty Society RVS Update Committee

FROM: The American Occupational Therapy Association; American Physical Therapy Association; American Psychological Association; American Speech, Language, and Hearing Association; National Association of Social Workers, and the American Dietetic Association

Re: Direct Practice Expense Inputs for Code 99368 (team conference code without patient/family member present; Tracking Code C4)

Dear Dr Rich:

Code 99368 (*Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, 30 minutes or more; participation by non-physician qualified health care professional*) is one of the team conference codes being considered at the February 2007 RUC meeting.

The American Occupational Therapy Association; American Physical Therapy Association; American Psychological Association; American Speech, Language, and Hearing Association; National Association of Social Workers, and the American Dietetic Association convened an expert panel to review direct practice expense for this code, 99368, and 99366. The panel determined there is no direct practice expense for 99368 in either the facility or non-facility setting.

If you have any questions, please contact Pam Michael, MBA, RD, American Dietetic Association staff, at 312-899-4747 or PMichael@eatright.org. Thank you.

AMA/Specialty Society RVS Update Committee
Summary of Recommendations

February 2007

Non Face-to-Face Physician Services

The CPT Editorial Panel created four new codes describing Evaluation and Management services performed by a physician via telephone or on-line. Typically these calls involve the physician obtaining a history of the patient, assessing the patient's condition, making a medical decision and communicating that decision via the phone/e-mail to the patient. Over the last two decades medicine has seen the rapid increase of medical information and communications technology. Combined with changing consumer and health plan expectations for enhanced access to care, a new focus on chronic disease management and continued pressure to reduce the codes of medical services, physicians are providing more care to patients in a "non-face-to-face" manner. Additionally, these services describe physician work that is currently not captured in any other CPT codes.

The CPT Editorial Panel also developed new codes corresponding to non-physician services. The RUC reviewed and submitted the following recommendations on the physician (MD/DO) services only. The HCPAC independently reviewed and submitted separate recommendations on the non-physicians services.

The RUC reviewed the specialty societies' survey results for codes 99441-99444 *Telephone and Online Evaluation and Management services.* Physicians from various specialties perform these services. Therefore, seven different specialties were involved in surveying these services to appropriately capture the typical physician time and work involved. Approximately 500 physicians completed the surveys for 99441-99443, with median annual service performance rates of 190, 100, and 35, respectively. Additionally, 150 physicians completed the survey for code 99444 *Online Evaluation and Management*, indicating a median annual performance rate of 10.

99441
The RUC reviewed the specialty societies survey results for code 99441 *Telephone Evaluation and Management, 5-10 minutes of medical discussion* and thoroughly discussed the physician time and work involved in this service. The RUC determined that the physician time for 99441 was slightly lower than the survey reference service code 99212 *Office or other outpatient visit for the Evaluation and Management of an established patient* (RVU=0.45, 2 minutes pre-, 10 minutes intra- and 4 minutes post-service time). The presenting specialty societies and the RUC agreed that the physician work for code 99441 should be lower than the survey

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reference code 99212 but slightly higher than 99211 *Office or other outpatient visit for the Evaluation and Management of an established patient, that may not require the presence of a physician* (RVU=0.17, 5 minutes intra-service and 2 minutes post-service time). The RUC determined that using a magnitude estimation of 150% of the work RVUs for code 99211 would appropriately place 99441 in the proper rank order within the Evaluation and Management services family (0.17 x 150% = 0.25**). The RUC recommends a work RVU of 0.25 for code 99441. The RUC recommends 1 minute pre-service, 8 minutes intra-service and 4 minutes post-service time for code 99441.**

99442 and 99443

The RUC reviewed the specialty societies survey results for codes 99442 *Telephone Evaluation and Management, 11-20 minutes of medical discussion* and 99443 *Telephone Evaluation and Management, 21-30 minutes of medical discussion* and thoroughly discussed the physician time and work involved in these services. The RUC determined that the RVU presented by the specialty societies for 99442, the 25th percentile work relative value of 0.60, was slightly high in relation to the RUC recommended value for 99441 (0.25 RVUs). The presenting specialty societies and the RUC agreed using a magnitude estimation for 99442 and 99443 would be appropriate to properly values these services within the Evaluation and Management family of services. The RUC determined that 99442 would be twice the recommended value for 99441 (0.25 x 2 = 0.50). Additionally, the RUC determined that 99443 would be three times the recommended value for 99441 (0.25 x 3 = 0.75). **The RUC recommends a work RVU of 0.50 for code 99442 and 1 minute pre-service, 15 minutes intra-service and 5 minutes post-service physician time. The RUC recommends a work RVU of 0.75 for code 99443 and 1 minute pre-service, 25 minutes intra-service and 10 minutes post-service physician time.**

99444

The RUC discussed code 99444 *Online Evaluation and Management* and concluded that the definition of work and physician time and complexity involved in this service were unclear, therefore making it difficult to recommend a specific work relative value. The specialty societies agreed and recommended that code 99444 be carrier-priced. The specialty societies indicated that they will bring this code back to CPT in order to develop a clearer definition of this service. **The RUC recommends that code 99444 be carrier-priced for CY 2008.**

Practice Expense

The PERC and RUC reviewed the direct practice expenses for 99441-99443 and slightly modified the conduct phone calls/call in prescriptions by the RN/LPN/MTA from 4 to 3 minutes and "other clinical activity" to zero. The presumption was that the typical service would include the clinical staff calling in a prescription. **The RUC recommends the modified practice expense as attached.**

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New Technology and New Physician Work

The RUC recommends that codes 99441-99443 be added to the new technology list to review potential changes in valuation after experience in reporting of these services has occurred. Additionally, the RUC recommends that these services involve new physician work not currently compensated within the physician payment system.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Telephone services are non-face-to-face E/M services provided by a physician to a patient using the telephone. These codes are used to report episodes of care by the physician initiated by an established patient or guardian of an established patient. If the telephone service ends with a decision to see the patient within 24 hours or next available urgent visit appointment, the code is not reported; rather the encounter is considered part of the preservice work of the subsequent E/M service, procedure and visit. Likewise if the telephone call refers to an E/M service performed and reported by the physician within the previous seven days (either physician requested or unsolicited patient follow-up) or within the period of the previously completed procedure, then the service(s) are considered part of that previous E/M service or procedure. (Do not report 99441-99443 if reporting 99441-99444 performed in the previous seven days.)				
●99441	O1	Telephone evaluation and management service provided by a physician to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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	XXX	0.25
●99442	O2	11-20 minutes of medical discussion	XXX	0.50
●99443	O3	21-30 minutes of medical discussion (Do not report 99441-99443 when using 99339-99340, 99374-99380 for the same call(s)) (Do not report 99441-99443 for anticoagulation management when reporting 99363-99364)	XXX	0.75
Online Medical Evaluation An online electronic medical evaluation is a non-face-to-face E/M service by a physician to a patient using Internet resources in response to a patient's online inquiry. Reportable services involve the physician's personal timely response to the patient's inquiry and must involve permanent storage (electronic or hard copy) of the encounter. This service is reported only once for the same episode of care during a secen day period, although multiple physicians				

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
could report their exchange with the same patient. If the online medical evaluation refers to an E/M service previously performed and reported by the physician within the previous seven days (either physician requested or unsolicited patient follow-up) or within the postoperative period of the previously completed procedure, then the service(s) are considered covered by the previous E/M service or procedure. A reportable service encompasses the sum of communication (eg, related telephone calls, prescription provision, laboratory orders) pertaining to the online patient encounter.				
●99444	O4	Online evaluation and management service provided by a physician to an established patient, guardian or health care provider not originating from a related E/M service provided within the previous 7 days, using the Internet or similar electronic communications network (Do not report 99444 when using 99339-99340, 99374-99380 for the same communication(s)) (Do not report 99444 for anticoagulation management when reporting 99363 to 99364)	XXX	Carrier-Priced
~~**Telephone Calls**~~				
D 99371		~~Telephone call by a physician to patient or for consultation or medical management or for coordinating medical management with other health care professionals (eg, nurses, therapists, social workers, nutritionists, physicians, pharmacists); simple or brief (eg, to report on tests and/or laboratory results, to clarify or alter previous instructions, to integrate new information from other health professionals into the medical treatment plan, or to adjust therapy)~~	XXX	N/A
D 99372		~~intermediate (eg, to provide advice to an established patient on a new problem, to initiate therapy that can be handled by telephone, to discuss test results in detail, to coordinate medical management of a new problem in an established patient, to discuss and evaluate new information and details, or to initiate new plan of care)~~	XXX	N/A
D 99373		~~complex or lengthy (eg, lengthy counseling session with anxious or distraught patient, detailed or prolonged discussion with family members regarding seriously ill patient, lengthy communication necessary to coordinate complex services of several different health professionals working on different aspects of the total patient care~~	XXX	N/A

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
		~~plan)~~ ~~(99371-99373 have been deleted. To report telephone evaluation and management services, see 99441-99443)~~		
Category III **Online Medical Evaluation** ~~An online medical evaluation is a type of Evaluation and Management (E/M) service provided by a physician or qualified health care professional to a patient using internet resources in response to the patient's online inquiry. Reportable services involve the physician's personal timely response to the patient's inquiry and must involve permanent storage (electronic or hard copy) of the encounter. This service should not be reported for patient contacts (eg, telephone calls) considered to be pre-service or post-service work for other E/M or non-E/M services. A reportable service would encompass the sum of communication (eg, related telephone calls, prescription provision, laboratory orders) pertaining to the online patient encounter or problem(s)~~.				
D 0074T		~~Online evaluation and management service, per encounter, provided by a physician, using the Internet or similar electronic communications network, in response to a patient's request, established patient~~ (0074T has been deleted. To report, use 99444)		N/A

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:99441 Tracking Number O1 Specialty Society Recommended RVU: **0.35**
Global Period: XXX RUC Recommended RVU: **0.25**

CPT Descriptor: Telephone evaluation and management service provided by a physician to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A patient known to the physician calls with a new complaint. The physician obtains a brief history and the patient's present medication use and makes treatment recommendations, all of which are recorded in the patient's medical record. The patient is instructed and advised to call if the symptoms fail to improve with the recommended treatment. The call lasts 8 minutes. No office visit is required.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The physician reviews records and communicates with other professionals regarding the patient as appropriate.

Description of Intra-Service Work: The physician obtains a brief history via phone, assesses the patients condition, makes a medical decision, and communictates that decision via phone to the patient.

Description of Post-Service Work: The physician documents the telephone call and oversees care plan. The physician also has discussion with family members or other health professionals associated with the delivery of care to this patient until the next E/M service is provided.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	02/2007					
Presenter(s):	Lee Mills, MD (AAFP), Charles Scott, MD (AAP), Robert Stomel, DO (AOA), Eileen Moynihan, MD (ACRh)					
Specialty(s):	AAFP, AAN, AAP, ACP, ACRh, AOA, SIR					
CPT Code:	99441					
Sample Size:	4351	**Resp N:** 496	**Response:** 11.3 %			
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	50.00	**190.00**	500.00	4000.00
Survey RVW:		0.04	0.35	**0.45**	0.75	3.77
Pre-Service Evaluation Time:				**2.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		2.00	5.00	**8.00**	10.00	45.00
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				

Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA
Check here ☒ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code: 99441		
		Specialty Recommended
Physician Work RVU:		**0.35**
Pre-Service Evaluation Time:		**1.0**
Pre-Service Positioning Time:		**0.0**
Pre-Service Scrub, Dress, Wait Time:		**0.0**
Intra-Service Time:		**8.00**
Immediate Post Service-Time:	**4.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99212	XXX	0.45	**CMS Time File**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a problem focused history; a problem focused examination; straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
99212	XXX	26,139,270	0.45	**CMS Time File**

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a problem focused history; a problem focused examination; straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 198 **% of respondents:** 39.9 **%**

TIME ESTIMATES (Median)	**CPT Code: 99441**	**Key Reference CPT Code:** 99212	**Source of Time CMS Time File**
Median Pre-Service Time	1.00	2.00	
Median Intra-Service Time	8.00	10.00	
Median Immediate Post-service Time	4.00	4.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**13.00**	**16.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.06	2.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.13	2.00
Urgency of medical decision making	2.19	2.04
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.15	2.12
Physical effort required	2.00	2.05
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.16	2.13

Outcome depends on the skill and judgment of physician	2.22	2.15
Estimated risk of malpractice suit with poor outcome	2.35	2.21

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.10	2.00
Intra-Service intensity/complexity	2.07	2.03
Post-Service intensity/complexity	2.09	2.04

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The RUC advisors for the participating specialty societies met by conference call to review and discuss the survey results. All of the surveying organizations except the American College of Physicians (ACP) used a panel sample; ACP used a random sample.

For 993XX1, the advisors noted that respondents rated the intensity and complexity of 993XX1 very similar to the key reference code, 99212, with the ratings for 993XX1 being slightly higher in each time segment and for all areas except physical effort. The advisors also noted the nearly identical total time of 993XX1 and 99212. The advisors agreed that 99212 was an appropriate key reference service, since a self-limited or minor presenting problem (as described in 99212) is consistent with a telephone evaluation and management service of 5 to 10 minutes duration (as described in 993XX1). Accordingly, consistent with the survey data, the specialty societies agreed to recommend the survey median of 0.45 work RVUs for 993XX1, which is also the current work RVUs assigned to the key reference code, 99212.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and

accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario. (not applicable)

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) This service was not previously reported.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty (See attached table.) How often?

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 28500200
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty (See attached table.) Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,586,320 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty (See attached table.) Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

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Attestation Statement

As a RUC Advisor, I attest that the integrity of the RUC survey and summary of recommendation forms are based on accurate and complete data to the best of my knowledge. As a RUC Advisor, I acknowledge that violations would be addressed by the executive committee (i.e., RUC Chair, AMA Representative and Alternate AMA Representative).

Lee Mills, MD
RUC Advisor, American Academy of Family Physicians

Scott Manaker, MD, PhD, FACP
RUC Advisor, American College of Physicians

David Hitzeman, DO
RUC Advisor, American Osteopathic Assocation

Steve Krug, MD
RUC Advisor, American Academy of Pediatrics

Eileen Moynihan, MD
RUC Advisor, American College of Rheumatology

Robert L. Vogelsang, MD
RUC Advisor, Society of Interventional Radiology

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:99442 Tracking Number O2 Specialty Society Recommended RVU: **0.60**
Global Period: XXX RUC Recommended RVU: **0.50**

CPT Descriptor: Telephone evaluation and management service provided by a physician to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A patient calls the office of a physician to discuss new acute illness symptoms. The physician obtains a brief history and makes treatment recommendations, all of which are recorded in the patient's medical record. The patient is instructed and advised to call if symptoms are increasing. The call lasts 15 minutes. No office visit is required.

Percentage of Survey Respondents who found Vignette to be Typical: 84%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The physician reviews records and communicates with other professionals regarding the patient as appropriate.

Description of Intra-Service Work: The physician obtains history via phone, assesses the patients condition, makes a medical decision, and communictates that decision via phone to the patient.

Description of Post-Service Work: The physician documents the telephone call and oversees care plan. The physician also has discussion with family members or other health professionals associated with the delivery of care to this patient until the next E/M service is provided.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	02/2007					
Presenter(s):	Lee Mills, MD (AAFP), Charles Scott, MD (AAP), Robert Stomel, DO (AOA), Eileen Moynihan, MD (ACRh)					
Specialty(s):	AAFP, AAN, AAP, ACP, ACRh, AOA, SIR					
CPT Code:	99442					
Sample Size:	4351	**Resp N:** 496	**Response:** 11.3 %			
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	30.00	**100.00**	250.00	3000.00
Survey RVW:		0.25	0.60	**0.90**	1.00	4.10
Pre-Service Evaluation Time:				**3.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		4.00	10.00	**15.00**	15.00	50.00
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				

Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☒ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code: 99442	
	Specialty Recommended
Physician Work RVU:	**0.60**
Pre-Service Evaluation Time:	**1.0**
Pre-Service Positioning Time:	**0.0**
Pre-Service Scrub, Dress, Wait Time:	**0.0**
Intra-Service Time:	**15.00**
Immediate Post Service-Time:	**5.00**

Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99213	XXX	0.92	**CMS Time File**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: an expanded problem focused history; an expanded problem focused examination; medical decision making of low complexity. Counseling and coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
99213	XXX	111,261,211	0.92	**CMS Time File**

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: an expanded problem focused history; an expanded problem focused examination; medical decision making of low complexity. Counseling and coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient and/or family.

Most Recent

CPT Code: 99442

MPC CPT Code 2 | Global | Medicare Utilization | Work RVU | Time Source

CPT Descriptor 2

Other Reference CPT Code | Global | Work RVU | Time Source

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 172 **% of respondents:** 34.7 **%**

TIME ESTIMATES (Median)	**CPT Code: 99442**	**Key Reference CPT Code:** 99213	**Source of Time CMS Time File**
Median Pre-Service Time	1.00	3.00	
Median Intra-Service Time	15.00	15.00	
Median Immediate Post-service Time	5.00	5.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**21.00**	**23.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	2.64	2.28
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.80	2.56
Urgency of medical decision making	2.83	2.48

Technical Skill/Physical Effort (Mean)

Technical skill required	2.66	2.53
Physical effort required	2.26	2.17

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	2.85	2.66

Outcome depends on the skill and judgment of physician	3.39	3.33
Estimated risk of malpractice suit with poor outcome	3.22	2.86

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.09	2.11
Intra-Service intensity/complexity	3.04	3.10
Post-Service intensity/complexity	2.44	2.39

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The RUC advisors for the participating specialty societies met by conference call to review and discuss the survey results. All of the surveying organizations except the American College of Physicians (ACP) used a panel sample; ACP used a random sample. For 993XX2, the advisors noted that respondents rated the intensity and complexity of 993XX2 very similar to the key reference code, 99213, for each time segment. They also noted that respondents consistently rated the intensity and complexity of 993XX2 higher than 99213 in all areas of mental effort and judgment, technical skill/physical effort, and psychological stress. The advisors also noted the identical time elements (pre-, intra-, and post-service) of 993XX2 and 99213. The advisors agreed that 99213 was an appropriate key reference service, since a presenting problem of low or moderate severity (as described in 99213) is consistent with a telephone evaluation and management service of 11 to 20 minutes duration (as described in 993XX2). Accordingly, consistent with the survey data, the specialty societies agreed to recommend the survey median of 0.90 work RVUs for 993XX2, which is almost the same as the work RVUs assigned to the key reference service, 99213, in 2007.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario. (not applicable)

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) This service was not previously reported.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty (See attached table.) How often?

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 16762210
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty (See attached table.) Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,898,414 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty (See attached table.) Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

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Attestation Statement

As a RUC Advisor, I attest that the integrity of the RUC survey and summary of recommendation forms are based on accurate and complete data to the best of my knowledge. As a RUC Advisor, I acknowledge

that violations would be addressed by the executive committee (i.e., RUC Chair, AMA Representative and Alternate AMA Representative).

Lee Mills, MD
RUC Advisor, American Academy of Family Physicians

Scott Manaker, MD, PhD, FACP
RUC Advisor, American College of Physicians

David Hitzeman, DO
RUC Advisor, American Osteopathic Assocation

Steve Krug, MD
RUC Advisor, American Academy of Pediatrics

Eileen Moynihan, MD
RUC Advisor, American College of Rheumatology

Robert L. Vogelsang, MD
RUC Advisor, Society of Interventional Radiology

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:99443 Tracking Number O3 Specialty Society Recommended RVU: **0.92**
Global Period: XXX RUC Recommended RVU: **0.75**

CPT Descriptor: Telephone evaluation and management service provided by a physician to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An established patient with special needs calls to discuss onset of new and disturbing symptoms. During a 25 minute phone call, the physician reviews the history and review of systems, the description of symptoms, and current medications. She makes a recommendation to change the present medication regimen, provides reassurance, both of which are recorded in the patient's medical record, and requests follow-up in the office in one week or sooner if needed.

Percentage of Survey Respondents who found Vignette to be Typical: 75%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The physician reviews records and communicates with other professionals regarding the patient as appropriate.

Description of Intra-Service Work: The physician obtains a history and review of systems via phone, assesses the patients condition, makes a medical decision, and communictates that decision via phone to the patient.

Description of Post-Service Work: The physician documents the telephone call and oversees care plan. The physician also has discussion with family members or other health professionals associated with the delivery of care to this patient until the next E/M service is provided.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	02/2007					
Presenter(s):	Lee Mills, MD (AAFP), Charles Scott, MD (AAP), Robert Stomel, DO (AOA), Eileen Moynihan, MD (ACRh)					
Specialty(s):	AAFP, AAN, AAP, ACP, ACRh, AOA, SIR					
CPT Code:	99443					
Sample Size:	4351	**Resp N:** 496	**Response:** 11.3 %			
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	10.00	**35.00**	100.00	5000.00
Survey RVW:		0.32	0.92	**1.35**	1.60	5.60
Pre-Service Evaluation Time:				**5.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		6.00	15.00	**20.00**	25.00	60.00
Immediate Post Service-Time:	**10.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				

Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA
Check here ☒ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code: 99443		
		Specialty Recommended
Physician Work RVU:		**0.92**
Pre-Service Evaluation Time:		**1.0**
Pre-Service Positioning Time:		**0.0**
Pre-Service Scrub, Dress, Wait Time:		**0.0**
Intra-Service Time:		**25.00**
Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99214	XXX	1.42	**CMS Time File**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a detailed history; a detailed examination; medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
99214	XXX	55,174,565	1.42	**CMS Time File**

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a detailed history; a detailed examination; medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 99443**	**Key Reference CPT Code:** 99214	**Source of Time CMS Time File**
Median Pre-Service Time	1.00	5.00	
Median Intra-Service Time	25.00	25.00	
Median Immediate Post-service Time	10.00	10.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**36.00**	**40.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.85	3.94
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.85	3.97
Urgency of medical decision making	3.81	3.91
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.49	3.72
Physical effort required	2.98	3.31
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.74	3.92

Outcome depends on the skill and judgment of physician	3.92	3.97
Estimated risk of malpractice suit with poor outcome	3.69	3.67

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.15	3.26
Intra-Service intensity/complexity	3.94	3.95
Post-Service intensity/complexity	3.54	3.77

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The RUC advisors for the participating specialty societies met by conference call to review and discuss the survey results. All of the surveying organizations except the American College of Physicians (ACP) used a panel sample; ACP used a random sample. For 993XX3, the advisors noted that respondents rated the intensity and complexity of 993XX3 similar to and slightly less than that of the key reference code, 99214, for all areas and in each time segment. The advisors also noted the identical pre- and post-service time of 993XX3 and 99214, while intra-service and, therefore, total time, for 993XX3 was just 5 minutes less than 99214. The advisors agreed that 99214 was an appropriate key reference service, since a presenting problem of moderate to high severity (as described in 99214) is consistent with a telephone evaluation and management service of 21 to 30 minutes duration (as described in 993XX3). Accordingly, consistent with the survey data, the specialty societies agreed to recommend the survey median of 1.35 work RVUs for 993XX3, which is less than the current work RVUs assigned to the key reference code, 99214, reflecting the lower intensity and shorter time of the 993XX3.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario. (not applicable)

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) This service was not previously reported.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty (See attached table.) How often?

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 5215455
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty.

Specialty (See attached table.) Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 833,881 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty.

Specialty (See attached table.) Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

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Attestation Statement

As a RUC Advisor, I attest that the integrity of the RUC survey and summary of recommendation forms are based on accurate and complete data to the best of my knowledge. As a RUC Advisor, I acknowledge

that violations would be addressed by the executive committee (i.e., RUC Chair, AMA Representative and Alternate AMA Representative).

Lee Mills, MD
RUC Advisor, American Academy of Family Physicians

Scott Manaker, MD, PhD, FACP
RUC Advisor, American College of Physicians

David Hitzeman, DO
RUC Advisor, American Osteopathic Assocation

Steve Krug, MD
RUC Advisor, American Academy of Pediatrics

Eileen Moynihan, MD
RUC Advisor, American College of Rheumatology

Robert L. Vogelsang, MD
RUC Advisor, Society of Interventional Radiology

	A	B	C	D	E	F	G
1	**RUC Recommendation**			**99441**		**99442**	
2	**Meeting Date: February 2007**			**Code Descriptor: Non-Face-To-Face Physician Service: Telephone Services**		**Code Descriptor: Non-Face-To-Face Physician Service: Telephone Services**	
3	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
4	**GLOBAL PERIOD**			**XXX**	**XXX**	XXX	XXX
5	**TOTAL CLINICAL LABOR TIME**			**3.0**	**0.0**	**3.0**	**0.0**
6	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**0.0**	**0.0**	**0.0**	**0.0**
7	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			**0.0**	**0.0**	**0.0**	**0.0**
8	**TOTAL POST-SERV CLINICAL LABOR TIME**			**3.0**	**0.0**	**3.0**	**0.0**
9	**PRE-SERVICE**						
10	**Start: Following visit when decision for surgery or procedure made**						
11	Complete pre-service diagnostic & referral forms						
12	Coordinate pre-surgery services						
13	Schedule space and equipment in facility						
14	Provide pre-service education/obtain consent						
15	Follow-up phone calls & prescriptions						
16	Other Clinical Activity (please specify)	L037D	RN/LPN/MTA	**0**		**0**	
17	**End:When patient enters office/facility for surgery/procedure**						
18	**SERVICE PERIOD**						
19	**Start: When patient enters office/facility for surgery/procedure**						
20	**Pre-service services**						
21	Review charts						
22	Greet patient and provide gowning						
23	Obtain vital signs						
24	Provide pre-service education/obtain consent						
25	Prepare room, equipment, supplies						
26	Setup scope (non facility setting only)						
27	Prepare and position patient/ monitor patient/ set up IV						
28	Sedate/apply anesthesia						
29	**Intra-service**						
30	Assist physician in performing procedure						
31	**Post-Service**						
32	Monitor pt. following service/check tubes, monitors, drains						
33	Clean room/equipment by physician staff						
34	Clean Scope						
35	Clean Surgical Instrument Package						
36	Complete diagnostic forms, lab & X-ray requisitions						
37	Review/read X-ray, lab, and pathology reports						
38	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
39	Discharge day management 99238 --12 minutes 99239 --15 minutes						
40	Other Clinical Activity (please specify)						
41	**End: Patient leaves office**						
42	**POST-SERVICE Period**						
43	**Start: Patient leaves office/facility**						
44	Conduct phone calls/call in prescriptions	L037D	RN/LPN/MTA	**3**		**3**	
45	*Office visits:*						
46	*List Number and Level of Office Visits*						
47	99211 16 minutes		16				
48	99212 27 minutes		27				
49	99213 36 minutes		36				
50	99214 53 minutes		53				
51	99215 63 minutes		63				
52	Other						
53	*Total Office Visit Time*			**0**	**0**	**0**	**0**
54	Other Activity (please specify)						
55	**End: with last office visit before end of global period**						
56	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**				
57	NONE						
58							
59	**Equipment**	**CMS Code**					
60	NONE						

	A	B	C	H	I	J	K
1	**RUC Recommendation**			**99443**		**99444**	
2	**Meeting Date: February 2007**			**Code Descriptor: Non-Face-To-Face Physician Service: Telephone Services**		**Code Descriptor:Non-Face-To-Face Physician Servic: Online**	
3	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
4	**GLOBAL PERIOD**			**XXX**	**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**3.0**	**0.0**	**0.0**	**0.0**
6	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**0.0**	**0.0**	**0.0**	**0.0**
7	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			**0.0**	**0.0**	**0.0**	**0.0**
8	**TOTAL POST-SERV CLINICAL LABOR TIME**			**3.0**	**0.0**	**0.0**	**0.0**
9	**PRE-SERVICE**						
10	**Start: Following visit when decision for surgery or procedure made**						
11	Complete pre-service diagnostic & referral forms						
12	Coordinate pre-surgery services						
13	Schedule space and equipment in facility						
14	Provide pre-service education/obtain consent						
15	Follow-up phone calls & prescriptions						
16	Other Clinical Activity (please specify)	L037D	RN/LPN/MTA	**0**		**Carrier Priced**	
17	**End:When patient enters office/facility for surgery/procedure**						
18	**SERVICE PERIOD**						
19	**Start: When patient enters office/facility for surgery/procedure**						
20	**Pre-service services**						
21	Review charts						
22	Greet patient and provide gowning						
23	Obtain vital signs						
24	Provide pre-service education/obtain consent						
25	Prepare room, equipment, supplies						
26	Setup scope (non facility setting only)						
27	Prepare and position patient/ monitor patient/ set up IV						
28	Sedate/apply anesthesia						
29	**Intra-service**						
30	Assist physician in performing procedure						
31	**Post-Service**						
32	Monitor pt. following service/check tubes, monitors, drains						
33	Clean room/equipment by physician staff						
34	Clean Scope						
35	Clean Surgical Instrument Package						
36	Complete diagnostic forms, lab & X-ray requisitions						
37	Review/read X-ray, lab, and pathology reports						
38	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions						
39	Discharge day management 99238 --12 minutes 99239 --15 minutes						
40	Other Clinical Activity (please specify)						
41	**End: Patient leaves office**						
42	**POST-SERVICE Period**						
43	**Start: Patient leaves office/facility**						
44	Conduct phone calls/call in prescriptions	L037D	RN/LPN/MTA	**3**		**Carrier Priced**	
45	*Office visits:*						
46	*List Number and Level of Office Visits*						
47	99211 16 minutes		16				
48	99212 27 minutes		27				
49	99213 36 minutes		36				
50	99214 53 minutes		53				
51	99215 63 minutes		63				
52	Other						
53	*Total Office Visit Time*			**0**	**0**	**0**	**0**
54	Other Activity (please specify)						
55	**End: with last office visit before end of global period**						
56	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**				
57	NONE						
58							
59	**Equipment**	**CMS Code**					
60	NONE						

Health Care Professionals Advisory Committee
Summary of Recommendations

April 2007

Non Face-to-Face Qualified Healthcare Professional Services

The CPT Editorial Panel created four new codes describing Evaluation and Management services performed by a qualified healthcare professional via telephone or on-line. Typically, these calls involve the health care professional obtaining a history of the patient, assessing the patient's condition, making a medical decision and communicating that decision via the phone/e-mail to the patient. Over the last two decades, medicine has seen the rapid increase of medical information and communications technology. Combined with changing consumer and health plan expectations for enhanced access to care, a new focus on chronic disease management and continued pressure to reduce the codes of medical services, qualified healthcare professionals are providing more care to patients in a "non-face-to-face" manner. Additionally, these services describe work that is currently not captured in any other CPT codes.

The American Dietetic Association (ADA) and the American Physical Therapy Association (APTA), presented work relative value recommendations for the Non Face-to-Face Qualified Health Care Professional Services. The HCPAC reviewed the survey results and compared them to the Non Face-to Face Physician Services. After a detailed discussion, the HCPAC determined that the non-physician work was equivalent to the physician work for codes 98966-98968.

98966
First the HCPAC reviewed code 98966 *Telephone assessment and management service provided by a qualified non-physician health care professional to an established patient; 5-10 minutes of medical discussion.* The HCPAC determined that the survey median of 0.37 was too high compared to the physician code 99441 *Telephone assessment and management service provided by a physician to an established patient; 5-10 minutes of medical discussion* (work RVU recommendation = 0.25). The HCPAC chose to recommend the same time and work values at the code described to define physician work. The HCPAC agreed that 1 minute pre-service, 8 minutes intra-service and 4 minutes post-service time was appropriate for code 98966. **The HCPAC recommends a work RVU of 0.25 for 98966.**

98967
The HCPAC reviewed code 98967 *Telephone assessment and management service provided by a qualified non-physician health care professional to an established patient; 11-20 minutes of medical discussion.* The HCPAC determined that the survey median of 0.45 was similar compared to the physician code 99442 *Telephone assessment and management service provided by a physician to an established patient; 11-20 minutes of medical discussion* (work RVU recommendation = 0.50). The HCPAC chose to recommend the same time and work values at the code described

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to define physician work. The HCPAC agreed that 1 minute pre-service, 15 minutes intra-service and 5 minutes post-service time was appropriate for code 98967. **The HCPAC recommends a work RVU of 0.50 for 98967.**

98968
The HCPAC reviewed code *98968 Telephone assessment and management service provided by a qualified non-physician health care professional to an established patient; 21-30 minutes of medical discussion.* The HCPAC determined that the survey median of 0.50 was too low compared to the physician code 99443 *Telephone assessment and management service provided by a physician to an established patient; 21-30 minutes of medical discussion* (work RVU recommendation = 0.75). The HCPAC chose to recommend the same time and work values at the code described to define physician work. The HCPAC agreed that 1 minute pre-service, 25 minutes intra-service and 10 minutes post-service time was appropriate for code 98968. **The HCPAC recommends a work RVU of 0.75 for 98968.**

98969
Lastly, the HCPAC reviewed code 98969 *Online evaluation and management service provided by a qualified non-physician health care professional to an established patient.* The HCPAC concluded, that as the physician code 99444 *Online evaluation and management service provided by a physician to an established patient* (RUC recommendation = carrier-priced), the definition of work and health care professional time and complexity involved in this service was unclear, therefore making it difficult to recommend a specific work relative vale. **The HCPAC recommends that code 98969 be carrier-priced for CY 2008.**

Practice Expense
The PERC and HCPAC reviewed the direct practice expenses for 98966-98968 in February 2007 when these services were initially presented. The practice expense input recommendations are the same as those recommended for the physician non face-to-face services. **The HCPAC recommends 3 minutes post-service phone call by and RN/LPN/MTA for 98966-98968.**

New Technology and New Work
The HCPAC recommends that 98966-98968 be added to the new technology list to review changes in the valuation after experience in reporting these service has occurred (as the physician non face-to-face codes are also recommended to be added to the new technology list). Additionally, the HCPAC recommends that these services involve new work not currently compensated within the physician payment system.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Telephone services are non-face-to-face E/M services provided by a physician to a patient using the telephone. These codes are used to report episodes of care				

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
by the physician initiated by an established patient or guardian of an established patient. If the telephone service ends with a decision to see the patient within 24 hours or next available urgent visit appointment, the code is not reported; rather the encounter is considered part of the preservice work of the subsequent E/M service, procedure and visit. Likewise if the telephone call refers to an E/M service performed and reported by the physician within the previous seven days (either physician requested or unsolicited patient follow-up) or within the period of the previously completed procedure, then the service(s) are considered part of that previous E/M service or procedure. (Do not report 99441-99443 if reporting 99441-99444 performed in the previous seven days.)				
●99441	O1	Telephone evaluation and management service provided by a physician to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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	XXX	0.25 (RUC Recommendation)
●99442	O2	11-20 minutes of medical discussion	XXX	0.50 (RUC Recommendation)
●99443	O3	21-30 minutes of medical discussion (Do not report 99441-99443 when using 99339-99340, 99374-99380 for the same call(s)) (Do not report 99441-99443 for anticoagulation management when reporting 99363-99364)	XXX	0.75 (RUC Recommendation)
Online Medical Evaluation An online electronic medical evaluation is a non-face-to-face E/M service by a physician to a patient using Internet resources in response to a patient's online inquiry. Reportable services involve the physician's personal timely response to the patient's inquiry and must involve permanent storage (electronic or hard copy) of the encounter. This service is reported only once for the same episode of care during a secen day period, although multiple physicians could report their exchange with the same patient. If the online medical evaluation refers to an E/M service previously performed and reported by the physician within the previous seven days (either physician requested or unsolicited patient follow-up) or within the postoperative period of the previously completed procedure, then the service(s) are considered covered by the previous E/M service or procedure. A reportable service encompasses the sum of communication (eg, related telephone calls, prescription provision, laboratory orders) pertaining to the online patient encounter.				
●99444	O4	Online evaluation and management service provided by a physician to an established patient, guardian or health care provider not originating from a	XXX	Carrier Priced

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
		related E/M service provided within the previous 7 days, using the Internet or similar electronic communications network (Do not report 99444 when using 99339-99340, 99374-99380 for the same communication(s)) (Do not report 99444 for anticoagulation management when reporting 99363 to 99364)		(RUC Recommendation)
~~**Telephone Calls**~~				
D 99371		~~Telephone call by a physician to patient or for consultation or medical management or for coordinating medical management with other health care professionals (eg, nurses, therapists, social workers, nutritionists, physicians, pharmacists); simple or brief (eg, to report on tests and/or laboratory results, to clarify or alter previous instructions, to integrate new information from other health professionals into the medical treatment plan, or to adjust therapy)~~	XXX	N/A
D 99372		~~intermediate (eg, to provide advice to an established patient on a new problem, to initiate therapy that can be handled by telephone, to discuss test results in detail, to coordinate medical management of a new problem in an established patient, to discuss and evaluate new information and details, or to initiate new plan of care)~~	XXX	N/A
D 99373		~~complex or lengthy (eg, lengthy counseling session with anxious or distraught patient, detailed or prolonged discussion with family members regarding seriously ill patient, lengthy communication necessary to coordinate complex services of several different health professionals working on different aspects of the total patient care plan)~~ ~~(99371-99373 have been deleted. To report telephone evaluation and management services, see 99441-99443)~~	XXX	N/A
Medicine **Non-Face-to-Face Non-Physician Services**				

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
Telephone Services Telephone services are non-face-to-face assessment and management services provided by a qualified health care professional to a patient using the telephone. These codes are used to report episodes of care by the qualified health care professional initiated by an established patient or guardian of an established patient. If the telephone service ends with a decision to see the patient within 24 hours or the next available urgent visit appointment, the code is not reported; rather the encounter is considered part of the preservice work of the subsequent assessment and management service, procedure and visit. Likewise if the telephone call refers to a service performed and reported by the qualified health care professional within the previous seven days (either provider requested or unsolicited patient follow-up) or within the postoperative period of the previously completed procedure, then the service(s) are considered part of that previous service or procedure. (Do not report 98966-98969 if reporting 98966-98969 performed in the previous seven days.)				
●98966	O5	Telephone assessment and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous seven 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	XXX	0.25
●98967	O6	11-20 minutes of medical discussion	XXX	0.50
●98968	O7	21-30 minutes of medical discussion	XXX	0.75
Online Medical Evaluation An online electronic medical evaluation is a non-face-to-face assessment and management service by a qualified health care professional to a patient using Internet resources in response to a patient's online inquiry. Reportable services involve the provider's personal timely response to the patient's inquiry and must involve permanent storage (electronic or hard copy) of the encounter. This service is reported only once for the same episode of care during a seven day period, although multiple qualified healthcare professionals could report their exchange with the same patient. If the online medical evaluation refers to an assessment and management service previously performed and reported by the provider within the previous seven days (either provider requested or unsolicited patient follow-up) or within the postoperative period of the previously completed procedure, then the service(s) are considered covered by the previous assessment and management office service or procedure. A reportable service encompasses the sum of communication (eg, related telephone calls, prescription provision, laboratory orders) pertaining to the online patient encounter.				
●98969	O8	Online evaluation and management service provided by a qualified non-physician health care professional to an established patient, guardian or health care provider not originating from a related assessment and	XXX	Carrier Priced

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
		management service provided within the previous 7 days, using the Internet or similar electronic communications network (Do not report 98969 when using 99339-99340, 99374-99380 for the same communication(s)) (Do not report 98969 for anticoagulation management when reporting 99363 to 99364)		
Category III **Online Medical Evaluation** ~~An online medical evaluation is a type of Evaluation and Management (E/M) service provided by a physician or qualified health care professional to a patient using internet resources in response to the patient's online inquiry. Reportable services involve the physician's personal timely response to the patient's inquiry and must involve permanent storage (electronic or hard copy) of the encounter. This service should not be reported for patient contacts (eg, telephone calls) considered to be pre-service or post-service work for other E/M or non E/M services. A reportable service would encompass the sum of communication (eg, related telephone calls, prescription provision, laboratory orders) pertaining to the online patient encounter or problem(s)~~.				
D 0074T		~~Online evaluation and management service, per encounter, provided by a physician, using the Internet or similar electronic communications network, in response to a patient's request, established patient~~ (0074T has been deleted. To report, use 99444)		N/A
Evaluation and Management **Care Plan Oversight** *Care Plan Oversight Services are reported separately from codes for office/outpatient, hospital, home, nursing facility, or domiciliary*, or non-face-to-face *services. The complexity …* The work involved in providing very low intensity or infrequent supervision services is included in the pre- and post-encounter work for home, office/outpatient and nursing facility or domiciliary visit codes. (For care plan oversight services of patients in the home, domiciliary, or rest home (eg, assisted living facility) under the individual supervision of a physician, see 99339,99340)				

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
(Do not report 99374-99380 for time reported with 993X1- 993X4, 98966-98969) **Case Management Services** **Anticoagulant Management** *Anticoagulant services are intended ….* When reporting these services, the work of anticoagulant management may not be used as a basis for reporting an Evaluation and Management service or Care Plan Oversight time during the reporting period. Do not report these services with ~~*99371- 99373, 0074T*~~ 99444, 989XX1 – 989XX4 when telephone or on-line address anticoagulation with warfarin management. If a significant, separately identifiable E/M service is performed, report the appropriate E/M service code using modifier 25.				

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:98966 Tracking Number O5 Specialty Society Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.25**

CPT Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67 year old female with diabetes requested assistance in how to incorporate a new food product into her meal plan established 3 weeks ago with the Registered Dietitian (RD).

OR

A 40 year old male with a history of anterior cruciate ligament reconstruction of the left knee calls his physical therapist with a complaint of increased discomfort and edema around the knee after performing the home exercise program twice each day. The therapist asked the patient to summarize the home exercise program and a discrepancy was noted in the number of repetitions that the patient was performing and what had been recommended. The therapist reinforced the parameters of the recommended home exercise program, recommended the use of ice following the exercises and instructed the patient to keep their next scheduled therapy appointment. The telephone encounter lasted 10 minutes.

Percentage of Survey Respondents who found Vignette to be Typical: 98%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The qualified healthcare professional reviews the patient's phone inquiry, reviews the medical record and the previously prepared exercise program or nutrition plan and goals, and accesses resources to share and discuss with patient.

Description of Intra-Service Work: During the phone conversation, the RD reviews the product's serving size, carbohydrate content and the current meal plan with the patient. The RD counsels the patient on appropriate new product serving size, reinforced adherence to the meal plan, encouraged ongoing completion of food and blood glucose records and reminded patient of her next scheduled appointment.

OR
First, the therapist listened to the patient's complaints. The therapist then asked appropriate questions concerning the home exercise program and use of ice, use of medications, level of activity level during the day, use of a brace and use of an assistive device for gait. The therapist determined that the patient had not properly followed the home exercise instructions and was not applying ice following the home program. The therapist reviewed the home program, made the appropriate recommendations and instructed the patient to keep their next scheduled appointment.

Description of Post-Service Work: The qualified healthcare professional documents the patient interaction in the medical record, notifies the referring physician of the phone call with the patient, and directs staff to mail the summary of instructions provided and educational materials to patient.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	04/2007
Presenter(s):	Jane White, PhD, RD, FADA and Erik van Doorne, PT, DPT, COMT, Cert. MDT, FABS
Specialty(s):	American Dietetic Association and American Physical Therapy Association

CPT Code:	98966					
Sample Size:	88	**Resp N:**	81	**Response:** 92.0 %		
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	11.25	**25.00**	100.00	600.00
Survey RVW:		0.05	0.25	**0.37**	0.45	1.04
Pre-Service Evaluation Time:				**3.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		5.00	10.00	**10.00**	10.00	90.00
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**				
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**				
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**				
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☐ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code: 98966		
		Specialty Recommended
Physician Work RVU:		**0.37**
Pre-Service Evaluation Time:		**1.0**
Pre-Service Positioning Time:		**0.0**
Pre-Service Scrub, Dress, Wait Time:		**0.0**
Intra-Service Time:		**8.00**
Immediate Post Service-Time:	**4.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
97110	XXX	0.45	**RUC Time**

CPT Descriptor Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strenght and endurance, range of motion and flexibility

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
97110	XXX	27,865,000	0.45	**RUC Time**

CPT Descriptor 1

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source

CPT Descriptor .

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 23 **% of respondents:** 28.0 **%**

TIME ESTIMATES (Median)	CPT Code: 98966	Key Reference CPT Code: 97110	Source of Time RUC Time
Median Pre-Service Time	1.00	2.00	
Median Intra-Service Time	8.00	14.00	
Median Immediate Post-service Time	4.00	2.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**13.00**	**18.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.57	3.21
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.88	3.08
Urgency of medical decision making	3.45	2.96
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.40	3.63
Physical effort required	1.57	3.46
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.18	2.83
Outcome depends on the skill and judgment of physician	3.82	3.63
Estimated risk of malpractice suit with poor outcome	3.38	3.08

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	1.74	2.50
Intra-Service intensity/complexity	3.43	3.71
Post-Service intensity/complexity	2.20	2.71

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

ADA and APTA recommend the above RVU and Pre-, Intra-, and Post-service times even though both data sets had variability in the reported reference service codes. Based on the distinct services provided by both professionals, as described in the vignettes, and the professionals' experience completing the work survey, we anticipated differences in the reported reference service code.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Not previously reported

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)

If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty ADA How often? Commonly

Specialty APTA How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 875000
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Compiled frequency estimates from MDs, APTA and ADA.

Specialty ADA Frequency 775000 Percentage 88.57 %

Specialty APTA Frequency 100000 Percentage 11.42 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 462,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty ADA Frequency 362000 Percentage 78.35 %

Specialty APTA Frequency 100000 Percentage 21.64 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:98967 Tracking Number 06 Specialty Society Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.50**

CPT Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68 year old male with insulin dependent diabetes, called the Registered Dietitian (RD) with a complaint of several mid-morning low blood sugar readings following the implementation of his 30-minute, new exercise regimen.

OR
A 54 year old woman with a history of rheumatoid arthritis and metacarpalphalangeal arthroplasties of her dominant hand called her occupational therapist because of post-operative pain and difficulty with use of the dynamic outrigger orthotic during the day and positioning at night. The therapist reviewed the patient's understanding of the instructions that had been provided at the last office visit and made specific recommendations regarding number of repetitions of the exercises, elevation of the extremity to help reduce edema, recommendations for positioning during the night, and use of cold applications for temporary pain relief . The telephone encounted lasted 15 minutes.

Percentage of Survey Respondents who found Vignette to be Typical: 88%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The qualified healthcare professional reviews the patient's phone inquiry, reviews the medical record and the previously prepared exercise program or nutrition plan and goals, and accesses resources to share and discuss with patient.

Description of Intra-Service Work: The RD verifies the patient's understanding of his hypoglycemia management and reviewed the patient's self-reported glucose monitoring records. After discussion of the prescribed meal plan provided at the last office visit, the RD reviews the patient's understanding of his meal plan and pre-workout meal regimen, and reinforces concepts to avoid hypoglycemia with future exercise.
OR
The therapist listened to the patient's complaints. The therapist then asked appropriate questions concerning tolerance to the orthotic (e.g.wearing time, exercise in the outrigger, pressure points), elevation of the extremity during the day and night, medication use, home exercise program, and management of ADLs. Recommendations were made regarding the specific exercises that should be performed including number of repetitions and frequency, positioning of the limb during the day and at night, precautions regarding skin integrity and protection of the sutures, and use of ice to help control pain.

Description of Post-Service Work: The qualified healthcare professional documents the patient interaction in the medical record, notifies the referring physician of the phone call with the patient, and directs staff to mail the summary of instructions provided and educational materials to patient.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	04/2007
Presenter(s):	Jane White, PhD, RD, FADA and Erik van Doorne, PT, DPT, COMT, Cert. MDT, FABS
Specialty(s):	American Dietetic Association and American Physical Therapy Association

CPT Code:	98967					
Sample Size:	88	**Resp N:**	80	**Response:** 90.9 %		
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	5.00	**20.00**	50.00	500.00
Survey RVW:		0.10	0.36	**0.45**	0.65	1.21
Pre-Service Evaluation Time:				**3.5**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		5.00	15.00	**15.00**	20.00	90.00
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**				
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**				
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**				
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☐ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code: 98967	
	Specialty Recommended
Physician Work RVU:	**0.45**
Pre-Service Evaluation Time:	**1.0**
Pre-Service Positioning Time:	**0.0**
Pre-Service Scrub, Dress, Wait Time:	**0.0**
Intra-Service Time:	**15.00**
Immediate Post Service-Time:	**5.00**

Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
97002	XXX	0.60	**RUC Time**

CPT Descriptor Physical Therapy re-evaluation

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
97110	XXX	27,865,000	0.45	**RUC Time**

CPT Descriptor 1

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source

CPT Descriptor .

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 17 **% of respondents:** 20.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 98967**	**Key Reference CPT Code:** 97002	**Source of Time RUC Time**
Median Pre-Service Time	1.00	2.00	
Median Intra-Service Time	15.00	18.00	
Median Immediate Post-service Time	5.00	5.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**21.00**	**25.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3.74	3.76
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.12	3.41
Urgency of medical decision making	3.72	3.18

Technical Skill/Physical Effort (Mean)

Technical skill required	3.66	4.00
Physical effort required	1.84	3.35

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.74	3.24
Outcome depends on the skill and judgment of physician	3.92	3.82
Estimated risk of malpractice suit with poor outcome	3.59	3.24

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.04	2.29
Intra-Service intensity/complexity	3.88	4.12
Post-Service intensity/complexity	2.70	2.71

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

ADA and APTA recommend the above RVU and Pre-, Intra-, and Post-service times even though both data sets had variability in the reported reference service codes. Based on the distinct services provided by both professionals, as described in the vignettes, and the professionals' experience completing the work survey, we anticipated differences in the reported reference service code.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Not previously reported

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty ADA How often? Commonly

Specialty APTA How often? Commonly

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 567100
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Compiled frequency estimates from MDs, APTA and ADA.

Specialty ADA Frequency 467100 Percentage 82.36 %

Specialty APTA Frequency 100000 Percentage 17.63 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 359,500 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty ADA Frequency 259500 Percentage 72.18 %

Specialty APTA Frequency 100000 Percentage 27.81 %

Specialty Frequency 0 Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:98968 Tracking Number 07 Specialty Society Recommended RVU: **0.50**
Global Period: XXX RUC Recommended RVU: **0.75**

CPT Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65 year old female with congestive heart failure calls the Registered Dietitian (RD) based on concerns about lower extremity edema following consumption of foods served at a family reunion.

OR
The parent of an 15 year old male with a history of recent T10 spinal cord injury called the physical therapist regarding the recommended home exercise program, proper positioning and seating in the wheelchair, and a newly discovered area of skin irritation on the right buttock. The therapist inquired as to the current exercise program that was being followed including the frequency and intensity of the exercises, the length of time the patient was spending in the wheelchair, the extent of the patient's management of his transfers and mobility in the wheelchair as well as specific inquiries concerning the area of possible skin breakdown on the buttocks. The therapist reviewed and modified the home program, and made recommendations regarding the length of time continuously spent in the wheelchair and precautions to maintain skin integrity It was recommended that the patient return for follow-up within one week unless the skin irritation did not improve or worsened.

Percentage of Survey Respondents who found Vignette to be Typical: 72%

Is conscious sedation inherent to this procedure? No Percent of survey respondents who stated it is typical? 0%

Is conscious sedation inherent in your reference code? No

Description of Pre-Service Work: The qualified healthcare professional reviews the patient's phone inquiry, reviews the medical record and the previously prepared exercise program or nutrition plan and goals, and accesses resources to share and discuss with patient.

Description of Intra-Service Work: The RD reviews the patient's recent food intake and compared it to the prescribed meal pattern- paying particular attention to sodium and fluid consumption. The RD identifies high sodium foods that contributed to the patient's current symptoms, and counsels the patient on lower sodium alternatives. The RD counsels the patient on her daily fluid recommendations and encouraged the patient to measure her fluid consumption and body weight daily. The RD instructs the patient to call and report any weight fluctuation greater than 2-3 lbs/day. The RD recommends that the patient return for follow-up in 1-2 weeks unless rapid weight gain, increased shortness of breath, or other symptoms of worsening heart failure occurred in which case the patient is told to call her physician.

or
The therapist listened to the patient's complaints and parental concerns. The therapist then asked appropriate questions of the patient and parent concerning the time spent in the wheelchair in and out of the home environment, level of activity during the day while in the chair, description of the skin irritation on the buttocks, participation in the home exercise program and management of mobility, transfers in and out of the wheelchair and ADLs. The therapist made recommendations concerning transfer techniques in and out of the chair to reduce friction force on the buttocks, duration of sitting time in the wheelchair including recommendations to spend additional time each day lying prone so that the skin irritation could heal. Recommendations were also made concerning pressure relief strategies while in the chair and revisions to the home exercise program were suggested. The therapist recommended a follow-up visit within one week unless the skin irritation did not improve or worsened.

Description of Post-Service Work: The qualified healthcare professional documents the patient interaction in the medical record, notifies the referring physician of the phone call with the patient, and directs staff to mail the summary of instructions provided and educational materials to patient.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	04/2029					
Presenter(s):	Jane White, PhD, RD, FADA and Erik van Doorne, PT, DPT, COMT, Cert. MDT, FABS					
Specialty(s):	American Dietetic Association and American Physical Therapy Association					
CPT Code:	98968					
Sample Size:	86	**Resp N:** 78	**Response:** 90.6 %			
Sample Type:	Panel					
		Low	**25th pctl**	**Median***	**75th pctl**	**High**
Service Performance Rate		0.00	1.00	**10.00**	17.50	500.00
Survey RVW:		0.15	0.44	**0.50**	0.75	1.21
Pre-Service Evaluation Time:				**5.0**		
Pre-Service Positioning Time:				**0.0**		
Pre-Service Scrub, Dress, Wait Time:				**0.0**		
Intra-Service Time:		2.00	22.00	**25.00**	30.00	90.00
Immediate Post Service-Time:	**5.00**					
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**				
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**				
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**				
Discharge Day Mgmt:	**0.0**	99238x **0.00** 99239x **0.00**				
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**				
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**				

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

SPECIALTY SOCIETY RECOMMENDED DATA

Check here ☐ if the specialty society recommended data is the same as survey data (Median Base Unit Value and Time). Do not tab through the following table - proceed to the new technology/service box.

However, if your society's recommendation is different than the survey data, enter your recommendation in the following table, and tab through to the new technology/service box.

CPT Code:	98968	
		Specialty Recommended
Physician Work RVU:		**0.50**
Pre-Service Evaluation Time:		**1.0**
Pre-Service Positioning Time:		**0.0**
Pre-Service Scrub, Dress, Wait Time:		**0.0**
Intra-Service Time:		**25.00**
Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.0**	99291x **0.0** 99292x **0.0**
Other Hospital time/visit(s):	**0.0**	99231x **0.0** 99232x **0.0** 99233x **0.0**
Discharge Day Mgmt:	**0.0**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.0**	99211x **0.0** 12x **0.0** 13x **0.0** 14x **0.0** 15x **0.0**
Prolonged Services:	**0.0**	99354x **0.0** 55x **0.0** 56x **0.0** 57x **0.0**

** See below survey data table on first page.

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
97002	XXX	0.60	**RUC Time**

CPT Descriptor Physical therapy re-evaluation

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Most Recent Medicare Utilization	Work RVU	Time Source
97110	XXX	27,865,000	0.45	**RUC Time**

CPT Descriptor 1

MPC CPT Code 2	Global	Most Recent Medicare Utilization	Work RVU	Time Source

CPT Descriptor 2

Other Reference CPT Code	Global	Work RVU	Time Source

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 22 **% of respondents:** 28.2 **%**

TIME ESTIMATES (Median)

	CPT Code: 98968	Key Reference CPT Code: 97002	Source of Time
Median Pre-Service Time	1.00	2.00	
Median Intra-Service Time	25.00	18.00	
Median Immediate Post-service Time	10.00	5.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Total Time	**36.00**	**25.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3.91	3.64
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.53	3.55
Urgency of medical decision making	4.09	3.32

Technical Skill/Physical Effort (Mean)

Technical skill required	3.96	3.95
Physical effort required	1.87	3.27

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	4.21	3.23
Outcome depends on the skill and judgment of physician	4.19	4.05
Estimated risk of malpractice suit with poor outcome	3.98	3.36

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.11	2.32
Intra-Service intensity/complexity	4.09	4.18
Post-Service intensity/complexity	2.91	2.77

Additional Rationale

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

ADA and APTA recommend the above RVU and Pre-, Intra-, and Post-service times even though both data sets had variability in the reported reference service codes. Based on the distinct services provided by both professionals, as described in the vignettes, and the professionals' experience completing the work survey, we anticipated differences in the reported reference service code.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Not previously reported

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)

If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty ADA How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 383907
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty ADA Frequency 283907 Percentage 73.95 %

Specialty APTA Frequency 100000 Percentage 26.04 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 232,667 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty ADA Frequency 132667 Percentage 57.02 %

Specialty APTA Frequency 100000 Percentage 42.97 %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? Yes

If no, please select another crosswalk and provide a brief rationale.

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

CPT Code: 98966

Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

CPT Long Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:
The American Dietetic Association utilized an expert panel to discuss and prepare practice expense recommendations for the non-face-to-face codes, 98966-X4. The expert panel consisted of six registered dietitian practitioners from a variety of practice settings and geographical locations. The American Physical Therapy Association convened a group of five physical therapists familiar with the services described by the codes was consulted. Their consensus opinion was then coordinated with other societies who surveyed similar codes (993X1 - X4).

Both expert panels' data and description of the clinical staff's pre- and post-service activities were identical, so both group's data was merged.

Please describe the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

The clinical staff receives the call from the patient. Clinical staff requests the patient's medical record and collects the health care professional's documentation note from the patient's last appointment. Clinical staff discusses patient's phone inquiry with the health care professional. The decision is made to have the health care professional call the patient to discuss the problem.

Intra-Service Clinical Labor Activities:
NA

Post-Service Clinical Labor Activities:
The clinical staff collects materials discussed over the call from the health care professional and mails educational print materials and summary of exercise or nutrition plan to the patient and physician. The patient's chart is filed in the health care professional's office.

Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

CPT Long Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.

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Specialty Society Update Process
PERC Summary of Recommendation
XXX Global Period
Non Facility Direct Inputs

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Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:
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Intra-Service Clinical Labor Activities:
NA

Post-Service Clinical Labor Activities:
The clinical staff collects materials discussed over the call from the health care professional and mails educational print materials and summary of exercise or nutrition plan to the patient and physician. The patient's chart is filed in the health care professional's office.

	A	B	C	D	E	F	G	H	I	J	K
2	**HCPAC Recommendation**			**CPT Code: 98966**		**CPT Code: 98967**		**CPT Code: 98968**		**CPT Code:98969**	
3	**Meeting Date: April 2007**			**98966 CPT Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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**		**98967 CPT Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.**		**98968 CPT Descriptor: Telephone evaluation and management service provided by a qualified non-physician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven 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.**		**98969 CPT Descriptor: Online evaluation and management service provided by a qualified non-physician health care professional to an established patient, guardian or health care provider not originating from a related E/M service provided within the previous 7 days, using the Internet or similar electronic communications network.**	
4	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
5	**GLOBAL PERIOD**			**XXX**	**XXX**	XXX	XXX	**XXX**	**XXX**	**XXX**	**XXX**
6	**TOTAL CLINICAL LABOR TIME**			**6.0**	**0.0**	**3.0**	**0.0**	**3.0**	**0.0**	**0.0**	**0.0**
7	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
8	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
9	**TOTAL POST-SERV CLINICAL LABOR TIME**			**3.0**	**0.0**	**3.0**	**0.0**	**3.0**	**0.0**	**0.0**	**0.0**
10	**PRE-SERVICE**										
11	**Start: Following visit when decision for surgery or procedure made**										
12	Complete pre-service diagnostic & referral forms										
13	Coordinate pre-surgery services										
14	Schedule space and equipment in facility										
15	Provide pre-service education/obtain consent										
16	Follow-up phone calls & prescriptions										
17	Other Clinical Activity (please specify) receive and transcribe phone message, pull medical record and other materials for health care professional's review,	0.370	RN/LPN/MTA	**0**		**0**		**0**		**Carrier Priced**	
18	**End:When patient enters office/facility for surgery/procedure**										
19	**SERVICE PERIOD**										
20	**Start: When patient enters office/facility for surgery/procedure**										
21	**Pre-service services**										
22	Review charts										
23	Greet patient and provide gowning										
24	Obtain vital signs										
25	Provide pre-service education/obtain consent										
26	Prepare room, equipment, supplies										
27	Setup scope (non facility setting only)										
28	Prepare and position patient/ monitor patient/ set up IV										
29	Sedate/apply anesthesia										
30	**Intra-service**										
31	Assist physician in performing procedure										
32	**Post-Service**										

	A	B	C	D	E	F	G	H	I	J	K
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4	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
33	Monitor pt. following service/check tubes, monitors, drains										
34	Clean room/equipment by physician staff										
35	Clean Scope										
36	Clean Surgical Instrument Package										
37	Complete diagnostic forms, lab & X-ray requisitions										
38	Review/read X-ray, lab, and pathology reports										
39	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions										
40	Discharge day management 99238 --12 minutes 99239 --15 minutes										
41	Other Clinical Activity (please specify)										
42	**End: Patient leaves office**										
43	**POST-SERVICE Period**										
44	**Start: Patient leaves office/facility**										
45	Conduct phone calls/call in prescriptions; send materials to patient and physician; file chart		RN/LPN/MTA	**3**		**3**		**3**		**Carrier Priced**	
46	*Office visits:* Greet patient,escort to room; provide gowning; interval history & vital signs and chart; assemble previous test reports/results;assist physician during exam; assist with dressings, wound care, suture removal; prepare dx test, prescription forms; post service education, instruction, counseling; clean room/equip, check supplies; coordinate home or outpatient care										
47	*List Number and Level of Office Visits*										
48	99211 16 minutes		16								
49	99212 27 minutes		27								
50	99213 36 minutes		36								
51	99214 53 minutes		53								
52	99215 63 minutes		63								
53	Other										
54											
55	*Total Office Visit Time*			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
56	Other Activity (please specify)										
57	**End: with last office visit before end of global period**										

	A	B	C	D	E	F	G	H	I	J	K
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4	**LOCATION**	**CMS Code**	**Staff Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
58	**MEDICAL SUPPLIES**	**CMS Code**	**Unit**								
59											
60											
61											
62											
63											
64											
65											
66	**Equipment**	**CMS Code**	**Utilization Percentage**								
67											
68											
69											

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

MAY 29 2008

William L. Rich, III, M.D., F.A.C.S.
American Medical Association
515 North State Street
Chicago, IL 60610

Dear Dr. Rich:

The Centers for Medicare & Medicaid Services (CMS) appreciates the extraordinary efforts of the American Medical Association/Specialty Society RVS Update Committee (RUC) in determining the values for care management services furnished to beneficiaries under a new Medical Home Demonstration project. CMS applauds the conscientious manner in which the RUC approached this very important task and the professionalism that marks your recommendations.

We also appreciate the RUC's suggestions to look closely at clinical, as well as fiscal, endpoints in evaluating the overall value of medical home services. There will be many determinants of success with regard to medical home care and CMS recognizes the need to examine a variety of metrics in our evaluation. We will take your suggestions under advisement as we prepare to design the evaluation of the Medical Home Demonstration.

Once again may we express our sincere appreciation for the work of the RUC and its workgroup in supporting the Medical Home Demonstration project.

Sincerely,

Kerry Weems
Acting Administrator

AMA/Specialty Society RVS Update Committee
Medicare Medical Home Demonstration Project
April 25, 2008

Workgroup Members: David Hitzeman, DO (Chairman), Joel Brill, MD, Thomas Felger, MD, Meghan Gerety, MD, Charles Koopman, MD, Barbara Levy, MD, Leonard Lichtenfeld, MD, Chester Schmidt, Jr., MD, Richard Tuck, MD, John Wilson, MD, Robert Zwolak, MD, Alan Lazaroff, MD, (Ex Officio), William L. Rich, III, MD, (Ex Officio), and William Thorwarth, Jr., MD, (Ex Officio),

Introduction

The RUC Medical Home Workgroup was established at the February 2008 RUC Meeting following a request from the Centers for Medicare and Medicaid Services (CMS) based on a legislative mandate resulting from the Tax Relief and Health Care Act of 2006 (TRHCA). Section 204 of the TRHCA directs CMS to conduct a three-year demonstration project of the medical home concept of patient care. This demonstration is to occur in rural, urban, and underserved areas in up to eight states. The legislation describes the medical home as large or small medical practices where a physician provides comprehensive and coordinated patient centered medical care and acts as the "personal physician" to the patient. Based on this directive, CMS designed a three-tiered system of the medical homes based on the capabilities of the physician office serving as medical home. The differentiation of the tiers is based on capabilities of the physician office as determined by CMS and not based on the severity of patient illness. Further, the TRHCA specifically instructs CMS to set a care management fee using the RUC process. Therefore, CMS asked the RUC to recommend a valuation of a management fee by May 1, 2008. The TRHCA also mandates that this demonstration project be "cost neutral," in the sense that the costs of this project are to be offset by the overall savings it generates. This definition of "cost neutrality" is dissimilar to the ordinary meaning of budget neutrality within the payment policy lexicon. Rather, the cost neutrality of the demonstration project will not affect the payment or valuation of any service in the Medicare physician payment schedule and will result in no adjustment to conversion factor.

The Workgroup was charged with the task of researching and facilitating work relative value recommendations and direct practice expense recommendations for services defined in the Medicare Medical Home demonstration project to the RUC at the April 2008 RUC meeting. Given the brief time in which to develop a recommendation, the Workgroup began immediately by initiating an electronic discussion among its members and facilitating conference call meetings on a weekly basis. The Workgroup met 11 times between February 12 and April 21 by conference call. The Workgroup also met face-to-face on Wednesday April 23 immediately preceding the April 2008 RUC Meeting. Based on these discussions, the Workgroup developed the following recommendations for descriptors, physician work, direct practice expense inputs, and professional liability insurance crosswalks for the Medical Home demonstration project. To the extent practicable, the Workgroup utilized the standard RUC processes. However,

based on the information regarding eligibility of beneficiaries and practice requirements, some assumptions were made.

G-Code Descriptors

The Workgroup first worked to develop G code descriptors for each of the three tiers of the Medical Home based on the minimum requirements for inclusions within each tier as provided by Mathematica. Initially, CMS indicated an interest in developing two levels of coding and payment within each of the three tiers based on the complexity and/or number of chronic conditions of eligible beneficiaries. The Workgroup determined that any distinction between complexity of patients and the ability of a practice to designate a beneficiary into one of the categories would be arbitrary. The number of chronic conditions is not a strong indicator for complexity or difficulty of coordinating care. A patient with one chronic condition may require greater intensity of coordination than a patient with several chronic conditions. Therefore, the Workgroup decided, and Medicare representatives agreed, that a single code per tier describing the work for the typical patient would be most appropriate.

To develop the G codes, the Workgroup turned to the Mathematica proposals for the description of a Tier 3 (the most comprehensive) medical home. After reviewing the list of criteria for a Tier 3 medical home, the Workgroup transposed the requirements into a description of the service provided on a monthly basis. The Workgroup repeated this process for each of the tiers. As CMS made changes to the requirements of each tier of the medical home, the Workgroup appropriately revised the G code descriptors. The proposed descriptors represent the most up-to-date CMS-required components for each tier of the medical home. A Tier 1 Medical Home (entry level) requires ten of the designated core capabilities. A Tier 2 Medical Home (typical) requires sixteen of the designated core capabilities. A Tier 3 Medical Home (optimal) requires eighteen of the designated requirements and three of an additional ten requirements. (See "Table 2. Proposed Method for Tiering Medical Home Qualification"). The CMS demonstration is likely to use a modified version of the NCQA Physician Practice Connection - Patient-Centered Medical Home instrument to determine practice eligibility and tier assignment. **The RUC recommends the attached G Code descriptors for the Tier 1, Tier 2 and Tier 3 Medical Home to CMS for the Medicare Medical Home demonstration project.**

The RUC understands that eligible physicians will be designated into a tier level based on CMS recognition of their office capabilities. These capabilities will be monitored by CMS. Practices may and are encouraged to qualify for a higher tier level during the demonstration, but only upon approval by CMS.

Average Panel Size

The Workgroup next addressed the issue of average panel size per primary care physician in order to assist in the development of work and direct practice expense input recommendations. The Workgroup looked to several sources to define total panel size for a primary care physician, Medicare beneficiary portion of that panel, and the portion

of Medicare beneficiaries that would be eligible for the participation in the demonstration project.

- Mathematica provided the Workgroup with a rough estimate of the number of Medicare beneficiaries per primary care physician. They obtained these estimates using 2004-2006 Medicare claims data and the 2000-2002 Community Tracking Study Physician Survey. Mathematica indicated that there are roughly 257 unique Medicare beneficiaries seen by a typical individual primary care physician (family practice, general internal medicine, or general practice) in one year. Mathematica went on to state that a physician typically will not see all patients within a panel in any given twelve months, resulting in a potentially larger total Medicare panel size. They estimate this to be as much as 30% higher, bringing total Medicare panel size 335. CMS has indicated that it will rely on beneficiary eligibility criteria for the demonstration project that will expand inclusion to 86% of all beneficiaries based on the Hwang criteria. Based on this assumption, the panel size of eligible beneficiaries per primary care physician will be between 221 and 284. Based on all Mathematica assumptions and CMS-stated patient eligibility criteria, a panel size of 250 is a reasonable estimate.
- Staff requested information from the Medical Group Management Association (MGMA) on average total panel size per primary care physician. The MGMA does not benchmark "panel size," primarily because there are many variables that can skew these figures. However, the organization does track one related metric from the "Cost Survey Report" – that of "Patients per Physician," from the data table titled: "Staffing, RVUs, Patients, Procedures and Square Footage." That table reports data for unique patients seen in the previous year. Based on this the "Cost Survey for Single-specialty Practices: 2007 Report Based on 2006 Data," for Family Practice, the average number of patients per FTE physician is 2,362. U.S. Census data indicate that 12% of the population are 65 years of age or older. The number of family medicine patients would therefore be approximately 283. If 86% were eligible for the demonstration (per CMS current criteria), 245 patients per family physician would be eligible. The review of MGMA data, census data, and CMS assumptions again concludes that 250 is a reasonable estimate for eligible patients per physician.
- Lastly, the Workgroup looked to current "medical homes" as a source of information on total panel size and Medicare panel size. Specifically, the Geisinger Health System, very generously shared a wealth of its data with the Workgroup. In January 2007, Geisinger implemented an intensive medical home project in two practice sites. The description of this project resembles a Tier 3 Medical Home. In these two initial sites, the Geisinger representatives indicated that there were 250 Medicare "medical home" patients per physician.

Reviewing all available data and assumptions, the RUC developed recommendations assuming that each physician may have approximately 250 Medicare patients who will be eligible and who will agree to participate in the practice's medical home.

Physician Work

Tier 3 Medical Home

The Workgroup estimates that for the "very sick" patients, the physician will typically spend 15 minutes per patient per month. This estimate is based on two other estimates. One is that the physician will spend approximately 12.5 minutes per patient per month in interaction with the case manager and the rest of the clinical staff team; this estimate is derived from the PACE data previously discussed by the Workgroup.

The 12.5 minutes includes the following coordination of care activities described by Total Longterm Care, a PACE program provider in Denver, CO:

- Intake and Assessment: This occurs twice weekly. 1-2 new participants and 15 reassessments are reviewed at each meeting. (Complete reassessments are done every six months). Each meeting lasts about 2.5 hours.
- Morning meeting: this occurs every morning. About 10-15 patients are discussed. Issues for the day are reviewed, including interim progress reports and care planning and follow-up. Duration about 45 minutes daily.
- Nursing home review meeting. This occurs weekly. The program uses nursing homes (and sends in its own staff to augment the NH services) for short term "medical respite" as an alternative to avoid or shorten hospital stays. The meeting lasts about 30-60 minutes, during which the progress and transition plans for about 10 patients are reviewed and developed.
- End-of-life nurse meeting. The physician meets weekly for about thirty minutes with a nurse whose focus is end-of-life care. This typically involves perhaps 4 patients.
- Ad-hoc family meetings occur irregularly, typically involve multiple staff members including the physician, and generally last more than 30 minutes.

The remaining 2.5 minutes per patient per month is estimated to be the time the physician will spend in other medical home responsibilities not included within the PACE program, such as review of registry information, or other daily interactions with the health care team.

For the blend of other "sick" patients, it is estimated that the physician will spend only 10 minutes per patient per month. This recognizes that these patients will require less physician interaction with the case manager and other members of the clinical staff team and is similar to the reduction in clinical staff time associated with "sick" and "very sick" patients (discussed within practice expense section).

The Workgroup also assumed, based on data from the Wolff study[i] (see page 9-10 for discussion), that the typical patient in the demonstration project will have seven evaluation and management (E/M) visits per year. The Workgroup concluded that 2.8 of these visits will be at the level of 99214 and 4.2 will be at the level of 99213. This assumption is based on the 2007 Medicare utilization data that show a total utilization of

99213 and 99214 with a relationship between them of roughly 1.5 : 1. Extrapolated to the seven E/M visits, this correlates to 4.2 : 2.8. Finally, half of the post-service physician time associated with each of these visits will otherwise duplicate the physician time related to the proposed care management code and, thus, should be deducted from the physician time per patient per month otherwise attributable to the proposed codes. The post-service physician time for 99214 is 10 minutes, and for 99213, it is 5 minutes.

2007 Medicare Utilization Data			
Code	**Family Medicine**	**Internal Medicine**	**Total**
99213	21,382,656	26,581,566	103,587,751
99214	13,467,111	18,564,247	65,129,891

The physician time per patient per month before accounting for the overlap with existing E/M services is 11.25 minutes, which is calculated as a weighted average of the time spent with each patient cohort as follows: (15 minutes x 0.25) + (10 minutes x 0.75) = 11.25 minutes. The overlap with existing E/M services is calculated as 2.1 minutes per patient per month as follows: ((10 minutes x 2.8 99214 visits) + (5 minutes x 4.2 99213 visits)) / 2 = 24.5 minutes per patient per year; 24.5 minutes / 12 months = 2.04 minutes per patient per month. The unduplicated physician time per patient per month is calculated as follows: 11.25 minutes – 2.04 minutes = 9.21 minutes per patient per month.

The RUC recommends an intra-service time per patient per month of 9.2 minutes for a Tier 3 Medical Home.

The Workgroup used a modified building block methodology to develop a recommendation for physician work. Relying on the same ration of 99213 to 99214 visits for this population of patients, the Workgroup agreed that a similar intensity of medical home services was appropriate. The Workgroup instead used a total intensity of the time by calculating the total work per unit of total time. For 99213, the total work per unit of time is equal to 0.92 work RVUs divided by 23 total minutes, resulting in 0.040 work RVUs per minute. For 99214, the total work per unit of time is equal to 1.42 work RVUs divided by 40 total minutes, resulting in 0.0355 work RVUs per minute. The Workgroup then applied the same 4.2 : 2.8 ratio it used to develop physician time overlap from associated E/M work. Thus, 0.040 was multiplied by 4.2 and 0.0355 was multiplied by 2.8 and the sum was divided by 7. This resulted in a weighted work RVU per minute of 0.0382. The Workgroup then multiplied 0.0382 by 9.2 minutes to come to a work RVU recommendation of 0.35144.

The Workgroup noted that 99339, *Individual physician supervision of a patient (patient not present) in home, domiciliary or rest home; 15-29 minutes*, with a work RVU of 1.25 is an appropriate reference service, comparing the 40 minutes of total time with the 9.2 minutes of time in the Tier 3 Medical Home, resulting in a comparable work RVU of .31.

The RUC recommends a work RVU per patient per month of 0.35 for a Tier 3 Medical Home.

Tier 2 Medical Home

The Workgroup estimates that for the "very sick" patients, the physician will spend 12.5 minutes per patient per month. This estimate assumes that, at lower tiers, the physician will spend less time per patient per month consistent with the decreased capability of the practice as a medical home. This estimate is also consistent with assumptions made with respect to clinical staff time (i.e., staff will spend less time per patient per month at lower tiers of the medical home).

For the blend of other "sick" patients, it is estimated that the physician will spend only 9 minutes per patient per month. This recognizes that these patients will require less physician interaction with the case manager and other members of the clinical staff team and is similar to the reduction in clinical staff time associated with "sick" and "very sick" patients (discussed within practice expense section).

The Workgroup also assumed, based on data from the Wolff study[i] (see page 9-10 for discussion), that the typical patient in the demonstration project will have seven evaluation and management (E/M) visits per year. The Workgroup concluded that 2.8 of these visits will be at the level of 99214 and 4.2 will be at the level of 99213. This assumption is based on the 2007 Medicare utilization data that show a total utilization of 99213 and 99214 with a relationship between them of roughly 1.5 : 1. Extrapolated to the seven E/M visits, this correlates to 4.2 : 2.8. Finally, half of the post-service physician time associated with each of these visits will otherwise duplicate the physician time related to the proposed care management code and, thus, should be deducted from the physician time per patient per month otherwise attributable to the proposed codes. The post-service physician time for 99214 is 10 minutes, and for 99213, it is 5 minutes.

2007 Medicare Utilization Data			
Code	**Family Medicine**	**Internal Medicine**	**Total**
99213	21,382,656	26,581,566	103,587,751
99214	13,467,111	18,564,247	65,129,891

The physician time per patient per month before accounting for the overlap with existing E/M services is 9.875 minutes, which is calculated as a weighted average of the time spent with each patient cohort as follows: (12.5 minutes x 0.25) + (9 minutes x 0.75) = 9.875 minutes. The overlap with existing E/M services is calculated as 2.1 minutes per patient per month as follows: ((10 minutes x 2.8 99214 visits) + (5 minutes x 4.2 99213 visits)) / 2 = 24.5 minutes per patient per year; 24.5 minutes / 12 months = 2.04 minutes per patient per month. The unduplicated physician time per patient per month is calculated as follows: 9.875 minutes – 2.04 minutes = 7.835 minutes per patient per month.

The RUC recommends an intra-service time per patient per month of 7.8 minutes for a Tier 2 Medical Home.

The Workgroup used a modified building block methodology to develop a recommendation for physician work. Relying on the same ration of 99213 to 99214 visits for this population of patients, the Workgroup agreed that a similar intensity of medical home services was appropriate. The Workgroup instead used a total intensity of the time by calculating the total work per unit of total time. For 99213, the total work per unit of time is equal to 0.92 work RVUs divided by 23 total minutes, resulting in 0.040 work RVUs per minute. For 99214, the total work per unit of time is equal to 1.42 work RVUs divided by 40 total minutes, resulting in 0.0355 work RVUs per minute. The Workgroup then applied the same 4.2 : 2.8 ratio it used to develop physician time overlap from associated E/M work. Thus, 0.040 was multiplied by 4.2 and 0.0355 was multiplied by 2.8 and the sum was divided by 7. This resulted in a weighted work RVU per minute of 0.0382. The Workgroup then multiplied 0.0382 by 7.8 minutes to come to a work RVU recommendation of 0.29796.

The Workgroup noted that 99339, *Individual physician supervision of a patient (patient not present) in home, domiciliary or rest home; 15-29 minutes*, with a work RVU of 1.25 is an appropriate reference service, comparing the 40 minutes of total time with the 7.8 minutes of time in the Tier 2 Medical Home, resulting in a comparable work RVU of .31.

The RUC recommends a work RVU per patient per month of 0.30 for a Tier 2 Medical Home.

Tier 1 Medical Home

The Workgroup estimates that for the "very sick" patients, the physician will spend 10 minutes per patient per month. This estimate again assumes that, at lower tiers, the physician will spend less time per patient per month consistent with the decreased capability of the practice as a medical home. This estimate is also consistent with assumptions made with respect to clinical staff time (i.e., staff will spend less time per patient per month at lower tiers of the medical home).

For the blend of other "sick" patients, it is estimated that the physician will spend only 8 minutes per patient per month. This recognizes that these patients will require less physician interaction with the case manager and other members of the clinical staff team and is similar to the reduction in clinical staff time associated with "sick" and "very sick" patients (discussed within practice expense section).

The Workgroup also assumed, based on data from the Wolff study[i] (see page 9-10 for discussion), that the typical patient in the demonstration project will have seven evaluation and management (E/M) visits per year. The Workgroup concluded that 2.8 of these visits will be at the level of 99214 and 4.2 will be at the level of 99213. This assumption is based on the 2007 Medicare utilization data that show a total utilization of 99213 and 99214 with a relationship between them of roughly 1.5 : 1. Extrapolated to the seven E/M visits, this correlates to 4.2 : 2.8. Finally, half of the post-service physician time associated with each of these visits will otherwise duplicate the physician time related to the proposed care management code and, thus, should be deducted from

the physician time per patient per month otherwise attributable to the proposed codes. The post-service physician time for 99214 is 10 minutes, and for 99213, it is 5 minutes.

2007 Medicare Utilization Data			
Code	**Family Medicine**	**Internal Medicine**	**Total**
99213	21,382,656	26,581,566	103,587,751
99214	13,467,111	18,564,247	65,129,891

The physician time per patient per month before accounting for the overlap with existing E/M services is minutes, which is calculated as a weighted average of the time spent with each patient cohort as follows: (10 minutes x 0.25) + (8 minutes x 0.75) = 8.5 minutes. The overlap with existing E/M services is calculated as 2.1 minutes per patient per month as follows: ((10 minutes x 2.8 99214 visits) + (5 minutes x 4.2 99213 visits)) / 2 = 24.5 minutes per patient per year; 24.5 minutes / 12 months = 2.04 minutes per patient per month. The unduplicated physician time per patient per month is calculated as follows: 8.5 minutes – 2.04 minutes = 6.46 minutes per patient per month.

The RUC recommends an intra-service time per patient per month of 6.5 minutes for a Tier 1 Medical Home.

The Workgroup used a modified building block methodology to develop a recommendation for physician work. Relying on the same ratio of 99213 to 99214 visits for this population of patients, the Workgroup agreed that a similar intensity of medical home services was appropriate. The Workgroup instead used a total intensity of the time by calculating the total work per unit of total time. For 99213, the total work per unit of time is equal to 0.92 work RVUs divided by 23 total minutes, resulting in 0.040 work RVUs per minute. For 99214, the total work per unit of time is equal to 1.42 work RVUs divided by 40 total minutes, resulting in 0.0355 work RVUs per minute. The Workgroup then applied the same 4.2 : 2.8 ratio it used to develop physician time overlap from associated E/M work. Thus, 0.040 was multiplied by 4.2 and 0.0355 was multiplied by 2.8 and the sum was divided by 7. This resulted in a weighted work RVU per minute of 0.0382. The Workgroup then multiplied 0.0382 by 6.5 minutes to come to a work RVU recommendation of 0.2483.

It was noted that the work RVU for 99441, *Telephone evaluation and management service provided by a physician; 5-10 minutes*, is 0.25, which appeared to the Workgroup to be an appropriate floor for the medical home physician work.

The RUC recommends a work RVU per patient per month of 0.25 for a Tier 1 Medical Home.

Summary

In sum, the following times and work RVUs are proposed for each tier:

Tier	Physician Time	Work RVUs
1	6.5 minutes	0.25
2	7.8 minutes	0.30
3	9.2 minutes	0.35

Direct Practice Expense Inputs

Clinical Staff Type

Based on the G-Code descriptors, the workgroup agreed that the minimum competency for clinical staff should be no less than a registered nurse or licensed practical nurse and recommends using the blended Medicare clinical staff type of registered nurse/licensed practical nurse (RN/LPN). The clinical staff type is consistent across all tiers and the blended staff type is recommended in each of the three medical home tiers. Although Geinsinger reported that only RNs would be hired, the Workgroup understood that many practiced may not be able to hire RNs. Concurrently, the Workgroup recognized that in some states, medical assistants (MAs) may not be licensed to perform many of the activities inherent in the medical home service. As such, the Workgroup agreed that a RN/LPN blend is appropriate. **The RUC recommend to CMS that it use a clinical staff type of RN/LPN for the practice expense inputs for the Tier 1, Tier 2 and Tier 3 Medical Homes.**

Clinical Staff Time

The Workgroup arrived at a typical amount of staff time by employing both top-down and bottom-up approaches. After an extensive review of medical home and care management literature and discussions with practitioners in the medical home clinical settings, the Workgroup found that the mode for caseload per nurse in a Tier 3 setting is 125, Tier 2 setting is 150, and Tier 1 setting is 200.

The workgroup next arrived at a similar number by dividing patient complexity into two groups, "sick" and "sicker." Rather than split the medical home G codes into two categories as originally recommended, the workgroup noted that patients will move in and out of the two groups regularly and to assign an individual patient to a group is not realistic. However, risk-adjusting the groups under the assumption that at any given time only 25% of an eligible patient mix require extensive care management ("sicker") and the remaining 75% require less extensive care management ("sick") is a more accurate and efficient way to allot clinical staff time. Further, the workgroup assumed that the typical medical home patient in all three tiers will have 7 evaluation and management (E/M) visits per year, based on the Wolff study[i] and the Partnership for Solutions report[ii], which relies on the Agency for Healthcare Research and Quality (AHRQ) Medical Expenditure Panel Survey of 2001 summarized below:

Number of Conditions	E/M Visits per Year	% of Medicare population	Visits x Medicare %	Weighted Average
Medicare Pts. with 1 condition	3.5	0.173	0.210976	0.738415
Medicare Pts. with 2 conditions	5.7	0.218	0.265854	1.515366
Medicare Pts. with 3 conditions	7.9	0.188	0.229268	1.81122
Medicare Pts. with 4 or more conditions	9.4	0.241	0.293902	2.762683
Average # of Medicare Visits		0.82		**6.827683**

The workgroup then reduced the clinical staff time by 3 minutes per patient in each of the three tiers to account for overlap of one phone call per month due to the E/M services provided. Each E/M (7 annually) requires 2 nurse follow-up phone calls per the implemented practice expense input data, leading to approximately 14 calls per year. The Workgroup agreed that these phone calls should not be duplicated and removed one from each month. (14/12 = approximately 1 call or 3 minutes per month.) The clinical staff time based on this methodology for each of the three tiers is included in the attached spreadsheet.

	Pts per RN/LPN	**Time spent per Bene min/mo**	**Sum min/month**
Tier 3			
Sick Patients (75%)	94	60	5625
Very Sick Pts (25%)	31	236	4775
	125	83	10400
Remove 3 minute call		**80**	
Tier 2			
Sick Patients (75%)	112.5	40	4500
Very Sick Pts (25%)	37.5	157	5900
	150	69	10400
Remove 3 minute call		**66**	
Tier 1			
Sick Patients (75%)	150	30	4500
Very Sick Pts (25%)	50	118	5900
	200	52	10400
Remove 3 minute call		**49**	

The RUC recommend to CMS that it use clinical staff time of 80 minutes per patient per month for a Tier 3 medical home, 66 minutes per patient per month for a Tier 2

medical home, and 49 minutes per patient per month for a Tier 1 medical home. The RUC acknowledges that these recommendations are estimates based on information that was available to the Workgroup regarding patient eligibility and nurse case manager caseload. These data may be highly variable by practice. The RUC strongly urges CMS to monitor the actual resource costs during the demonstration project. At a minimum, the RUC recommends that CMS survey participating practices regarding their nurse case manager caseload.

Medical Supplies

Over the course of a complete year, the workgroup agreed that the typical medical home patient will receive three patient education brochures. Divided over twelve months, the total number of booklets per month is 0.25. **The RUC recommend to CMS 0.25 of a patient education booklet as a practice expense input for the Tier 1, Tier 2 and Tier 3 Medical Homes.**

Medical Equipment

The legislation mandating the Medical Home Demonstration Project calls for use of an electronic medical records system. The Tier 3 medical home G-Code includes implementation and use of an EMR system and the workgroup discussed at length the type and capabilities of such a system. Based on these discussions, review of literature, and preliminary findings of the ongoing physician practice information survey, and a detailed invoice, the workgroup has developed a recommendation for the necessary elements of an appropriate EMR system. The system should include the following elements, listed below. For several of these components, CMS currently maintains a pricing input. For those line items that are not included within the CMS list of equipment, a price from the attached invoice has been included.

The RUC recommend to CMS that the Tier 3 Medical Home include direct practice expense inputs for an Electronic Medical Records system consistent with the system element descriptions below.

EMR System Elements for a Tier 3 Medical Home
Software: Comprehensive electronic health record software system that includes the following:

a. Disease Management
b. Point of care evidence-based decision support
c. Electronic prescribing
d. Laboratory test result tracking
e. Automatic problem lists
f. Referral History
g. Diagnostic Imaging Storage
h. Statistical Analysis
i. Patient Registries
j. Medication lists

k. Reporting
l. Patient Education Materials
m. Workflow coordination
n. Secure Electronic Communication with patients

Hardware: Using a server model, the electronic health record would require:

a. One server
b. One desktop computer with monitor
c. Router
d. Firewall
e. Cable/DSL Modem

Other practice expenses related to the electronic health record include:

a. Maintenance/service contract for hardware, software, internal network, and Internet connections (i.e., system support)
b. Training services
c. Data backup and recovery services
d. Interfaces to practice management system, laboratory, etc.
e. Data conversion/migration from existing systems
f. Licensing of commercial databases (e.g., First Data Bank, Multum, CPT)

EMR System Costs for a Tier 3 Medical Home

Element	CMS Code	Time[1]	Life	Price
Software; license	(new)	60 minutes RN/LPN + 4 minutes physician	3 years[2]	$7,995 (per provider)[3]
Software; updates, upgrades, and support	(new)	60 minutes RN/LPN + 4 minutes physician	3 years[2]	$3,198[3]
Computer, server	ED022	60 minutes RN/LPN + 4 minutes physician	5 years[4]	- [4]
Computer, desktop, with monitor	ED021	60 minutes RN/LPN + 4 minutes physician	5 years[4]	- [4]
System support (hardware, network, Internet connection)	(new)	60 minutes RN/LPN + 4 minutes physician	5 years[5]	$1,253[6]
Interfaces	(new)	60 minutes RN/LPN + 4 minutes physician	3 years[7]	$550[3]

Notes

1. Time is assumed equal to seventy-five percent of clinical staff time plus slightly less than half of the estimated physician time, since the EHR is an integral part of care management in the Tier 3 medical home and will be in use whenever the RN/LPN or physician is providing care management for the patient.
2. Based on IRS amortization rules for computer software (see instructions Line 16 on IRS Form 4562 online at http://www.irs.gov/pub/irs-pdf/i4562.pdf)
3. Based on proposal for e-MDs provided by the Oklahoma QIO, attached. E-MDs is one of three systems expected to be capable of meeting the needs of a Tier 3 medical home; the other two are eClinicalWorks and NextGen. An invoice for eClinicalWorks is pending.
4. See CMS equipment list
5. Corresponding to lifetime of hardware
6. Assumed to be 5% of hardware costs
7. Corresponding to lifetime of software

The RUC recommend to CMS the above line items for implementation and use of electronic medical records system within the PE inputs for the Tier 3 medical home. Invoices are attached.

The Workgroup agreed that the Tier 2 Medical Home includes a desktop computer and patient registry software. The medical home practice capabilities required by CMS cannot be implemented by a physician office without the use of a separate dedicated desktop top computer with monitor. Further, the management of a panel of medical home patients at the Tier 2 level of sophistication requires, at the least, the use of a software system to track patient status.

The RUC recommend to CMS that the Tier 2 Medical Home include one ED021 Desk top computer with monitor and patient registry software. For the registry software, the RUC agrees that this software should allow the directing of multiple disease states and allow for the creation of reports to better track patients. DocSite is an example of such a registry. The pricing information for DocSite is available at: http://www.docsite.com/help/pricing.

The Tier 1 medical home contains no medical equipment.

PLI Crosswalk

The Workgroup discussed the professional liability insurance (PLI) crosswalk methodology used by CMS noting that CMS relies on a service within the family or somewhat comparable with a similar work RVU. **The RUC recommends that a suitable service with a similar work RVU is either 92025, *Computerized corneal topography, unilateral or bilateral, with interpretation and report*, which has a work RVU of 0.35 and a PLI RVU of 0.02 or 99441, *Telephone evaluation and management service provided by a physician; 5-10 minutes*, which has a work RVU of 0.25 and a PLI RVU of 0.02.**

References

[i] Wolff, JL, Starfield, B, Anderson, G. Prevalence, Expenditures, and Complications of Multiple Chronic Conditions in the Elderly. Arch. Intern. Med. 2002; 162:2269-2276.

[ii] Agency for Healthcare Research and Quality. *Medical Expenditure Panel Survey*. 2001. Cited by Anderson G, Herbert R, Zeffiro T, and Johnson N, for the Partnership for Solutions. *Chronic Conditions: Making the case for ongoing care.* September 2004 Update. Available at: http://www.partnershipforsolutions.org/DMS/files/ chronicbook2004.pdf. Accessed January 23, 2008.

Attachments

G Code Tier 1 Descriptors
G Code Tier 2 Descriptors
G Code Tier 3 Descriptors
CMS Method for Tiering Medical Home (Table 2)
Mathematica Eligibility Information
Mathematica Panel Size Information
MGMA Panel Size Information
Geisinger Report
EMR Description Tier 3
EMR Quote Tier 3
EMR Quote2 Tier 3

AMA
AMERICAN
MEDICAL
ASSOCIATION

April 29, 2008

Kerry N. Weems
Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Resources
Hubert H. Humphrey Building
200 Independence Ave., S.W.
Washington, DC 20201

Dear Mr. Weems,

On behalf of the American Medical Association/Specialty Society RVS Update Committee (RUC), I am pleased to submit work relative value recommendations and direct practice expense inputs specifically for the Medicare Medical Home Demonstration project to the Centers for Medicare and Medicaid Services (CMS).

The RUC's recommendations are enclosed, along with several supporting documents regarding patient eligibility and physician panel size which served as the basis for the physician work and clinical staff time determinations. The attachments also include two price quotes regarding an electronic medical records system for use in the development of medical equipment inputs for the Tier 3 medical home. In addition to the recommended work relative values and direct practice expense inputs, the RUC is submitting its recommended language for the HCPCS G Code descriptors to be used for reporting the three tiers of medical homes. It is the opinion of the RUC that these recommendations are reasonable in light of the information provided by the Agency and its contractor, Mathematica Policy Research.

At the outset of this request, the RUC engaged in an effort to acquire data from CMS regarding the specific eligibility criteria for Medicare beneficiaries who would be eligible to participate in this demonstration project. Initially, the RUC was given a range of 65-86% of all Medicare beneficiaries. Data regarding the average number of Medicare beneficiaries in a typical primary care physician's practice was not readily available. While this made the process of developing recommendations somewhat more challenging, the RUC was able to use several sources to extrapolate an estimate of 250 enrolled patients per primary care physician within this demonstration. The RUC's recommendations are based on these assumptions. These recommendations may be different in the event that CMS changes the eligibility criteria for the demonstration project or the requirements of a medical home.

In addition to changes in eligibility, medical home care coordination, and/or practice capabilities, changes in the actual participation by Medicare beneficiaries or significant differences in practice costs may have an impact on the recommended valuation of these

services. To address these concerns, the RUC recommends that CMS actively monitor the practice inputs of the medical home demonstration on an ongoing basis to verify the recommendations of the RUC. The RUC also recommends that CMS monitor the number of participating Medicare beneficiaries per physician.

Any significant deviation from the RUC's estimated panel size of 250 enrolled beneficiaries per physician may impact the valuation of the medical home services. With this in mind, the RUC also encourages the Agency to track data that may be used by the RUC or CMS in potential future valuation of medical home services, including but not limited to actual staff type, clinical staff time, physician staff time, medical equipment, and medical supplies. The RUC encourages CMS to utilize the RUC Medical Home Workgroup to provide assistance in the development of an evaluation design.

The RUC strongly encourages the Agency to collect clinical as well as fiscal endpoints to measure the success of this demonstration project. As discussed at the onset of this project, CMS has made it clear that success will be at least partly determined by the cost savings generated. With a large panel size as CMS has proposed, the distribution of patients is likely to be bi-modal based on severity of patient illness. For those that are "sicker," cost savings may well be the primary indicator for success. However, in the larger, "less sick" distribution of patients, the cost savings may not be immediately apparent in a three-year demonstration project. These two populations have markedly different needs; while they each will benefit within a medical home, the outcomes and specific benefits may be vastly different. The RUC requests that CMS consider expanding metrics for success to include increases in preventative services such as number of mammograms, colorectal cancer screening, hemoglobin A1C, and others. Similar to any research project or a clinical trial, it is imperative that CMS define success criteria and clarify primary and secondary endpoints before the demonstration begins.

The RUC appreciates the opportunity to participate in the development of these recommendations and looks forward to a successful demonstration project.

Sincerely,

William L. Rich, III, MD, FACS

Cc: Tim Love
James Coan
Jeff Rich, MD
Edith Hambrick, MD
Ken Simon, MD
Whitney May
RUC Participants

G Code for Medical Home Demonstration (Tier 1)

This code is to be used for Medicare Fee For Service patients enrolled in Medicare's Medical Home Demonstration Project. Appropriate E/M codes may be also submitted as they occur.

GXXXX1:

Short Description: Coordination of care across all of a patient's healthcare needs, provided in a Tier 1 medical home, per month,

Long Description: Direct physician supervision and management of the comprehensive and coordinated health care of a patient having one or more chronic conditions or prolonged illnesses as included on the CMS eligible disease list. These services are separate from and in addition to those provided as part of E/M services that may occur during the service period. Coordination of care across all of a patient's healthcare needs and responsibilities will occur whether or not an E/M service is provided and reported during the service period. Services include all of the following as necessary within a calendar month:

- Obtains mutual agreement on role of medical home between physician and patient
- Ongoing support, oversight, and guidance by a physician-led health care team
- Integrated coherent planning for ongoing medical care including communication and coordination with other physicians and healthcare professionals furnishing care
- Regular physician development and/or revision of documented care plans, including integration of new information and/or adjustment of medical therapy
- Approval and tracking of medication changes initiated by pharmacy benefit plans
- Medication reconciliation
- Reviews all medications including prescriptions, over the counter medications, and herbal therapies/supplements.
- Use of integrated care plan to plan and guide patient care.
- Review of reports of patient status from other physicians or health care professionals
- Review results of laboratory and other studies
- Seven day per week, 24-hour access to phone triage
- Communication with the patient, family, and caregivers for purposes of assessment or care decisions
- Use of health assessment to characterize patient needs and risks
- Identify age, gender and medical condition appropriate preventive medicine services.
- Organizes and trains staff in roles for coordination of care across all of a patient's healthcare needs. (including staff feedback).

The following services should not be reported in the same month as this reported service for the medical home demonstration.

Anticoagulant Management (CPT Codes 99363 and 99364)
Medical Team Conference (CPT Codes 99366-99368)
Care Plan Oversight (99339-99340, 99374-99380)
Counseling Services (99401-99420)
Telephone Services (99441-99443; 98966-98968)
On-Line Medical Evaluation (99444; 98969)
Education and Training for Patient Self-Management (98960-98962; 99078)
Review of Data/Preparation of Special Reports (99080, 99090, 99091)
Medication Therapy Management Services (99605-99607)

G Code for Medical Home Demonstration (Tier 2)

This code is to be used for Medicare Fee For Service patients enrolled in Medicare's Medical Home Demonstration Project. Appropriate E/M codes may be also submitted as they occur.

GXXXX2:

Short Description: Coordination of care across all of a patient's healthcare needs, provided in a Tier 2 medical home, per month,

Long Description: Direct physician supervision and management of the comprehensive and coordinated health care of a patient having one or more chronic conditions or prolonged illnesses as included on the CMS eligible disease list. These services are separate from and in addition to those provided as part of E/M services that may occur during the service period. Coordination of care across all of a patient's healthcare needs and responsibilities will occur whether or not an E/M service is provided and reported during the service period. Services include all of the following as necessary within a calendar month:

- Obtains mutual agreement on role of medical home between physician and patient
- Ongoing support, oversight, and guidance by a physician-led health care team
- Integrated coherent planning for ongoing medical care including communication and coordination with other physicians and healthcare professionals furnishing care
- Regular physician development and/or revision of documented care plans, including integration of new information and/or adjustment of medical therapy
- Approval and tracking of medication changes initiated by pharmacy benefit plans
- Medication reconciliation
- Reviews all medications including prescriptions, over the counter medications, and herbal therapies/supplements
- Review of reports of patient status from other physicians or health care professionals
- Review results of laboratory and other studies
- Documented use of evidence-based medicine and clinical decision support tools to facilitate diagnostic test tracking, pre-visit planning, and after-visit/test follow-up
- Seven day per week, 24-hour access to phone triage
- Communication (including telephone calls, secure web sites, etc.) with the patient, family, and caregivers for purposes of assessment or care decisions
- Use of patient self-management plan (including end-of-life planning, home monitoring)
- Patient, family, and caregiver education and support

- Use of health assessment to characterize patient needs and risks
- Monitoring, arranging, and evaluating appropriate and/or evidence informed preventive services
- Organizes and trains staff in roles for coordination of care across all of a patient's healthcare needs (including staff feedback)

The following services should not be reported in the same month as this reported service for the medical home demonstration.

Anticoagulant Management (CPT Codes 99363 and 99364)
Medical Team Conference (CPT Codes 99366-99368)
Care Plan Oversight (99339-99340, 99374-99380)
Counseling Services (99401-99420)
Telephone Services (99441-99443; 98966-98968)
On-Line Medical Evaluation (99444; 98969)
Education and Training for Patient Self-Management (98960-98962; 99078)
Review of Data/Preparation of Special Reports (99080, 99090, 99091)
Medication Therapy Management Services (99605-99607)

G Code for Medical Home Demonstration (Tier 3)

This code is to be used for Medicare Fee For Service patients enrolled in Medicare's Medical Home Demonstration Project. Appropriate E/M codes may be also submitted as they occur.

GXXXX3:

Short Description: Coordination of care across all of a patient's healthcare needs, provided in a Tier 3 medical home, per month,

Long Description: Direct physician supervision and management of the comprehensive and coordinated health care of a patient having one or more chronic conditions or prolonged illnesses as included on the CMS eligible disease list. These services are separate from and in addition to those provided as part of E/M services that may occur during the service. Coordination of care across all of a patient's healthcare needs and responsibilities will occur whether or not an E/M service is provided and reported during the service period. Services include all of the following as necessary within a calendar month:

- Obtains mutual agreement on role of medical home between physician and patient
- Ongoing support, oversight, and guidance by a physician-led health care team
- Integrated coherent planning for ongoing medical care including communication and coordination with other physicians and healthcare professionals furnishing care
- Regular physician development and/or revision of documented care plans, including integration of new information and/or adjustment of medical therapy
- Coordinates care and follow-up for patients who receive care in inpatient and outpatient facilities.
- Approval and tracking of medication changes initiated by health plans or pharmacy benefit plans
- Medication reconciliation to avoid interactions or duplications. Reviews all medications including prescriptions, over the counter medications, and herbal therapies/supplements
- Review of reports of patient status from other physicians or health care professionals
- Review results of laboratory and other studies
- Staff monitoring to ensure use of evidence-based medicine and clinical decision support tools to facilitate diagnostic test tracking, pre-visit planning, and after-visit/test follow-up
- Seven day per week, 24-hour access to phone triage
- Communication (including telephone calls, secure web sites, etc.) with the patient, family, and caregivers for purposes of assessment or care decisions

- Use of patient self-management plan (including end-of-life planning, home monitoring)
- Patient, family, and caregiver education and support
- Use of health assessment to characterize patient needs and risks
- Use of health information technologies, such as patient registries, to monitor and track patient health status or generate point of care clinical reminders
- Use of secure systems that provide for patient access to personal health information
- Use of secure electronic communication between the patient and the healthcare team
- Use of an electronic health record
- Use of an electronic prescribing system
- Measuring performance regarding clinical quality and patient experience and taking action to improve care and processes
- Monitoring, arranging, and evaluating appropriate evidence based and/or evidence informed preventive service
- Organizes and trains staff in roles for coordination of care across all of a patient's healthcare needs (including staff feedback)

The following services should not be reported in the same month as this reported service for the medical home demonstration.

Anticoagulant Management (CPT Codes 99363 and 99364)
Medical Team Conference (CPT Codes 99366-99368)
Care Plan Oversight (99339-99340, 99374-99380)
Counseling Services (99401-99420)
Telephone Services (99441-99443; 98966-98968)
On-Line Medical Evaluation (99444; 98969)
Education and Training for Patient Self-Management (98960-98962; 99078)
Review of Data/Preparation of Special Reports (99080, 99090, 99091)
Medication Therapy Management Services (99605-99607)

Table 2. Proposed Method for Tiering Medical Home Qualification 3-25-08

Tier 1: Entry Level	Tier II: Typical	Tier III: Optimal	
All 10 of the Following	**All 16 of the Following Requirements (16 Core)**	**All 18 of the Following Requirements**	**Three of the 10 Additional Requirements**
Continuity			
Obtains mutual agreement on role of medical home between physician and patient	Obtains mutual agreement on role of medical home between physician and patient	Obtains mutual agreement on role of medical home between physician and patient	Uses scheduling process to promote continuity with clinician
Clinical Information Systems			
Uses data to identify and track medical home patients	Uses data to identify and track medical home patients	Uses data to identify and track medical home patients via an EMR	Uses electronic prescribing tools to reduce medication errors, promote use of generics, and assist in medication management Use of secure electronic communication between the patient and the healthcare team Use of secure systems that provide for patient access to personal health information
Delivery System Redesign			
Implements processes to promote access and communication Organizes and trains staff in roles for care management (incl. staff feedback) Organizes clinical data for individual patients (problem lists, medication lists, risk factors, structured progress notes) Uses health assessment to characterize patient needs and risks Uses integrated care plan to plan and guide patient care	Implements processes to promote access and communication Measures implementation of access and communication processes Organizes and trains staff in roles for care management (incl. staff feedback) Organizes clinical data for individual patients (problem lists, medication lists, risk factors, structured progress notes) Provides pre-visit planning and after-visit follow-up for medical home patients Uses health assessment to characterize patient needs and risks Uses integrated care plan to plan and guide patient care	Implements processes to promote access and communication Measures implementation of access and communication processes Organizes and trains staff in roles for care management (incl. staff feedback) Organizes clinical data for individual patients (problem lists, medication lists, risk factors, structured progress notes) Provides pre-visit planning and after-visit follow-up for medical home patients Uses health assessment to characterize patient needs and risks Uses integrated care plan to plan and guide patient care	Measures performance on clinical quality and patient experiences Reports to physicians on performance Uses data to set goals and take action to improve performance

Tier 1: Entry Level	Tier II: Typical	Tier III: Optimal	
All 10 of the Following	**All 16 of the Following Requirements (16 Core)**	**All 18 of the Following Requirements**	**Three of the 10 Additional Requirements**
Decision Support			
	Adopts evidence-based clinical practice guidelines on preventive and chronic care	Adopts evidence-based clinical practice guidelines on preventive and chronic care	Uses searchable electronic data to generate lists of patients and remind patients and clinicians of services needed Implements system to generate reminders (papers based or electronic) about preventive services at the point of care Implements system to generate reminders (paper based or electronic) about chronic care needs at the point of care
Patient/Family Engagement			
	Documents patient self-management plan (including end-of-life planning, home monitoring) Provides patient education and support Encourages family involvement	Documents patient self-management plan (including end-of-life planning, home monitoring Provides patient education and support Encourages family involvement	
Coordination			
Tracks tests and provides follow-up Tracks referrals including referral plan and patient report on self referrals Reviews all medications a patient is taking including prescriptions, over the counter medications and herbal therapies/supplements	Tracks tests and provides follow-up Tracks referrals including referral plan and patient report on self referrals Reviews all medications a patient is taking including prescriptions, over the counter medications and herbal therapies/supplements	Tracks tests and provides follow-up Tracks referrals including referral plan and patient report on self referrals Reviews all medications a patient is taking including prescriptions, over the counter medications and herbal therapies/supplements Coordinates care and follow-up for patients who receive care in inpatient and outpatient facilities Uses medication reconciliation post discharge to avoid interactions or duplications	

From: Mai Pham [mailto:MPham@hschange.org]
Sent: Thursday, April 17, 2008 1:57 PM
To: Deborah Peikes; Myles Maxfield; Coan, James F. (CMS/ORDI); Sherry Smith
Subject: FW: # of benes

just fyi --
for a different project, we checked the average number of Medicare benes treated by CTS PCPs in the year 2005 with new claims data. Updated numbers are higher than in 2000. The avg is 300 (compared to 257 prior). I am cc'ing Sherry Smith at the RUC in case this update is useful in fee setting for the medical home demo.

thanks,
Mai

-----Original Message-----
From: Saiontz-Martinez, Cynthia [mailto:CMartinez@s-3.com]
Sent: Thursday, April 17, 2008 2:02 PM
To: Mai Pham
Subject: RE: # of benes

Hi Mai, this is a proc univariate of the number of bene's for the 2,284 PCPs.

Larger 2005 100% Physician Supplier File
Who Age 65 Years or Older as of 01/01/2005, NonESRD/Disablity
CTS PCP (w/ TAXID) - All Visits
Excluding physicians seeing GT 900 pts
Descriptive stats on number of bene's per PCP
Using CTS definition for PCP

The UNIVARIATE Procedure
Variable: BENE_CNT (Number of Benes, all visits)

Weight: PHNATLWT (PH4:CV:Weight, Natl.Est. full sample)

Weighted Moments

N	2284	Sum Weights	100898.667
Mean	300.364474	Sum Observations	30306374.9
Std Deviation	2476.88904	Variance	6134979.33
Skewness	13.6231258	Kurtosis	306.237459
Uncorrected SS	2.31091E10	Corrected SS	1.40062E10
Coeff Variation	824.627831	Std Error Mean	7.7976518

Weighted Basic Statistical Measures

Location		Variability	
Mean	300.3645	Std Deviation	2477
Median	223.0000	Variance	6134979
Mode	1.0000	Range	9498
		Interquartile Range	293.00000

Weighted Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------
Student's t	t 38.51986	Pr > |t|	<.0001

Weighted Quantiles

Quantile	Estimate
100% Max	9499
99%	1290
95%	786
90%	617
75% Q3	395
50% Median	223
25% Q1	102
10%	36
5%	11
1%	1
0% Min	1

Extreme Observations

----Lowest----		----Highest---	
Value	Obs	Value	Obs
1	2150	1865	1823
1	2076	2026	619
1	2048	3099	33
1	2041	4299	698
1	2017	9499	135

Larger 2005 100% Physician Supplier File
Who Age 65 Years or Older as of 01/01/2005, NonESRD/Disablity
CTS PCP (w/ TAXID) - All Visits
Excluding physicians seeing GT 900 pts
Contents

The CONTENTS Procedure

Data Set Name	T9081.PCP_BENE_COUNT_05	Observations	2284
Member Type	DATA	Variables	5
Engine	V9	Indexes	0
Created	Wednesday, April 09, 2008 04:01:18 PM	Observation Length	33
Last Modified	Wednesday, April 09, 2008 04:01:18 PM	Deleted Observations	0
Protection		Compressed	CHAR
Data Set Type		Reuse Space	NO
Label		Point to Observations	YES
Data Representation	WINDOWS_32	Sorted	NO
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	4096
Number of Data Set Pages	24
Number of Data Set Repairs	0
File Name	\\hsc5\e_hsc5\hsc1\t9081\data\pcp_bene_count_05.sas7bdat
Release Created	9.0101M3
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Format	Informat	Label
3	BENE_CNT	Num	8			Number of Benes, all visits
4	PCP	Num	3			PH4:CV:Questionnaire def of PCP
5	PHNATLWT	Num	8			PH4:CV:Weight, Natl.Est. full sample
2	PHYSID	Num	8	BEST12.	12.	Physician ID
1	PRF_UPIN	Char	6			Carrier Line Performing UPIN Number

MATHEMATICA
Policy Research, Inc.

MEMORANDUM

P.O. Box 2393
Princeton, NJ 08543-2393
Telephone (609) 799-3535
Fax (609) 799-0005
www.mathematica-mpr.com

TO: Jim Coan, Project Officer

FROM: Hoangmai Pham, Deborah Peikes, Myles Maxfield

DATE: 2/21/2008
6245

SUBJECT: Prevalence estimates for medical home design

This memo responds to your request for estimates of the number of patients in a physician's panel likely to be eligible for the Medical Home Demonstration, and the number of eligible physicians. In summary, we estimate that a typical non-pediatrician primary care physician will have between 100-150 FFS Medicare patients who are eligible for the demonstration, and that approximately 102,000 primary care physicians see FFS Medicare patients in a given year. We cannot directly estimate the number of eligible physician practices, but suggest several other potential sources for these data.

A. Number of Eligible Beneficiaries Per Physician

We do not yet know which conditions CMS will include for patient eligibility criteria for the demonstration. Spike Duzer at CMS estimates that 44 percent of FFS Medicare beneficiaries have one or more of 9 conditions among those listed in the Chronic Condition Warehouse (colorectal cancer, breast cancer, chronic kidney disease, COPD, diabetes, heart failure, hip fracture, ischemic heart disease, and stroke). These beneficiaries accounted for 85% of total Medicare expenditures in 2005. We believe they were identified as eligible in 2003 and 2004, but have not confirmed that with Spike.

We examined data from the 2000-2001 Community Tracking Study Physician Survey for a representative sample of non-Federal, non-pediatrician primary care physicians who completed training and were active in patient care at least 20 hours per week, and found that they billed for encounters with an average of 257 unique FFS beneficiaries in one year. However, we expect that their total FFS Medicare panel will be larger (not all patients get seen in the same year), by as much as 30%. We thus made the following calculations based on both the (a) 257 and (b) 335 patients/PCP figures.

Applying Spike Duzer's estimate of 44% above, we estimate that the typical primary care physician will have approximately 100-150 (113-147) FFS Medicare patients eligible for the demonstration. Of course, these figures should be interpreted as lower bounds, and will shift upward with the number of chronic conditions that CMS includes in its patient eligibility criteria.

The attached table provides another indication of the prevalence rates for specific chronic conditions is the attached table, but this table does not take into account that beneficiaries often have more than one condition. We hope to have more information on prevalence of specific conditions within the next two weeks.

B. Number of Eligible Physicians

Based on the 2004-2005 Community Tracking Study Physician Survey, we estimate that there are 113,013 primary care physicians in the U.S., of whom approximately 90% see at least one FFS Medicare patient in a given year, implying that roughly 101,700 primary care physicians may be eligible for the demonstration.

Estimates of the number of physicians in particular primary care specialties follow. We suggest that the RUC ask specialty societies for estimates of the number of physicians in non-primary care specialties who participate in Medicare.

Specialty	Total number of physicians	Number of physicians with Medicare patients
General internal medicine	45,427	40,884
General practice	4,646	4,181
Family practice	60,277	54,249
Geriatrics	2,390	2,151
Internal medicine/pediatrics combined specialty	1,718	1,546

We are not aware of a readily accessible source of data on the number of physician practices participating in Medicare. The Medical Group Management Association may be able to suggest some. It may also be possible to derive these estimates from the National Plan and Provider Enumeration System, based on the number of organizational National Provider Identification (NPIs) numbers that are associated with physician NPIs.

CMS Chronic Condition Data Warehouse (CCW) Medicare 5% Sample*

MEDICARE BENEFICIARY COUNTS† FOR CHRONIC CONDITIONS FOR 1999 THROUGH 2005

CHRONIC CONDITION▲	1999 (n=2,054,514)	2000 (n=2,079,437)	2001 (n=2,100,845)	2002 (n=2,126,692)	2003 (n=2,158,600)	2004 (n=2,190,475)	2005 (n=2,232,52
Acute Myocardial Infarction	18,061	18,223	18,781	19,234	19,308	18,409	17,8
Alzheimer's Disease	▲	▲	66,178	72,168	77,617	83,216	87,5
Alzheimer's Disease, Related Disorders, or Senile Dementia	▲	▲	158,102	166,805	173,688	180,646	186,2
Atrial Fibrillation	94,735	100,511	107,289	113,726	119,009	123,776	128,1
Cancer, Colorectal	15,790	16,097	16,417	16,788	16,818	16,950	16,8
Cancer, Endometrial	2,281	2,252	2,275	2,383	2,433	2,427	2,5
Cancer, Female Breast	26,216	26,686	27,985	29,226	29,857	30,677	31,5
Cancer, Lung	13,611	13,888	14,419	15,209	15,502	15,970	16,3
Cancer, Prostate	40,370	41,912	44,598	46,826	47,936	48,507	48,6
Cataract	374,399	370,176	380,512	392,414	393,413	393,807	390,0
Chronic Kidney Disease	▲	93,030	104,036	116,948	130,053	143,861	155,2
Chronic Obstructive Pulmonary Disease	153,004	154,915	163,681	172,558	178,919	184,300	190,9
Depression	137,598	148,025	162,191	178,298	190,934	199,281	205,9
Diabetes	▲	315,826	339,133	366,092	390,098	413,817	439,8
Glaucoma	131,043	133,253	141,855	152,709	160,800	167,817	171,6
Heart Failure	▲	286,868	293,504	300,895	306,758	310,825	314,1

Hip/Pelvic Fracture	13,732	13,579	13,802	13,510	13,863	13,948	13,8
Ischemic Heart Disease	▲	501,059	516,675	536,577	552,194	565,383	575,0
Osteoporosis	135,367	149,572	166,796	181,320	190,402	197,150	203,5
Rheumatoid Arthritis / Osteoarthritis	▲	280,776	295,574	312,444	329,371	343,583	350,9
Stroke / Transient Ischemic Attack	77,345	79,579	81,811	82,444	81,916	80,805	78,9

Footnotes

* Includes random 5% sample of Medicare beneficiaries who were eligible for or enrolled in Medicare on or after January 1, YYYY.
† Beneficiaries may be counted in more than one chronic condition category.
▲ Chronic conditions have a 1 to 3 year look-back time period (reference period). Since the data included in the CCW begins in 1999, beneficiaries cannot meet any chronic condition algorithm that has a 2 or 3 year look-back until 2000 or 2001 (respectively). Please refer to the CCW Condition Categories for more information.
NOTE: These counts consider fee-for-service administrative claims criteria only. The beneficiaries included in these counts may have any combination of Medicare coverage, including full or partial fee-for-service and/or HMO coverage. The application of coverage restrictions/criteria *will* impact the size of these samples.

Hi Sherry,

Happy to chat about this and our data. A few points to clarify (I'm cc'ing Jim Coan, Bill Rich, and Myles Maxfield, to close the loop):

1. Please interpret the 257 number as the median number of unique Medicare beneficiaries seen by a typical **individual PCP** (FP/GIM/GP) in **ONE** year. As a physician won't see all of his/her patients in any given 12 months, their total Medicare panel may be larger, by as much as 30% (bringing it to 335). It is possible for us to run numbers for their total Medicare panel over 3 years (for more recent years 2004-06), but not sure if we would need programming support.

2. The typical practice will have several fold this number of beneficiaries, but you can pick the multiplier based on assumptions about the number of docs per practice.

3. The 100-150 number was our early estimate of how many of the 257-335 patients would be eligible for the demo based on prevalence counts for **only 8 chronic conditions**. We therefore strongly suspect that the number of eligibles per PCP will actually be much closer (or higher) than the 200 range, as more conditions are added to the eligibility list.

4. The numbers are from the Community Tracking Study Physician Survey, linked to Medicare claims data for years 2000-2002 for the beneficiaries those physicians treated. We just got the 2004-2006 claims data in hand, and have linked that to our 2005 survey respondents.

Please let me know if helpful to discuss further.

thanks,
Mai

Hoangmai Pham, MD, MPH
Senior Health Researcher
Center for Studying Health System Change
600 Maryland Ave., SW, Suite 550
Washington, DC 20024
202-554-7571; fax: 202-484-9258
mpham@hschange.org

From: Devon Broderick [dbroderick@mgma.com]
Sent: Friday, February 15, 2008 11:51 AM
To: David Barrett
Subject: benchmark data for panel size

Hi, David. This is an excerpt of the message sent to the original member who inquired about panel size. Please review it and, if you have any questions, feel free to contact the Information Center at infocenter@mgma.com.

Thanks,

Devon

MGMA's Survey Reports do not benchmark "panel size" benchmarks, primarily because there are many variables that can affect these figures.

Having said that, you may want have in mind one related metric from the "Cost Survey Report" -- that of "Patients per Physician," from the data table titled: "Staffing, RVUs, Patients, Procedures and Square Footage." That table reports data for unique patients seen in the previous year.

For example, of those respondents to the "Cost Survey for Single-specialty Practices: 2007 Report Based on 2006 Data," for Family Practice, the average number of patients per FTE physician is 2.362; the median is 2,115. The table containing this patient data appears in the survey for each specialty reported.

In addition, the articles listed below provide guidance on how to determine Panel Size. Specifically, from the article reference below, titled: "Panel Size" by Dr. Mark Murray, et.al, (Family Practice Management, Nov 2007), this formula is provided:

"Panel size × visits per patient per year (demand) = visits per provider per day × number of days worked per year (supply).

For example, if a physician provides 20 visits per day, 220 days per year, and his or her patient population averages two visits per patient per year, the ideal panel size would be 2,200."

The article (shown below) provides background context and explanation for the formula.

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These article citations come from the EBSCO Health Business Database, available as a benefit of MGMA membership. The links will take you to article descriptions with the option to download a full-text PDF or HTML version of the article.

PANEL SIZE. By: Murray, Mark; Davies, Mike; Baoshan, Barbara.
Family Practice Management
~~~~~~~~~~

Nov2007, Vol. 14 Issue 10, p29-32, 4p; (AN 27745524) Persistent link to this record:
http://search.ebscohost.com/login.aspx?direct=true&db=nhh&AN=27745524&site=ehost-live

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PANEL SIZE How Many Patients Can One Doctor Manage?
By: Murray, Mark; Davies, Mike; Baoshan, Barbara.
Family Practice Management
Apr2007, Vol. 14 Issue 4, p44-51, 8p; (AN 24908473) Persistent link to this record:
http://search.ebscohost.com/login.aspx?direct=true&db=nhh&AN=24908473&site=ehost-live

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Performance Metrics for Advanced Access.
By: Gupta, Diwakar; Potthoff, Sandra; Blowers, Donald; Corlett, John.
Journal of Healthcare Management
Jul/Aug2006, Vol. 51 Issue 4, p246-258, 13p; (AN 21816928) Persistent link to this record:
http://search.ebscohost.com/login.aspx?direct=true&db=heh&AN=21816928&site=ehost-live

~~~~~~~~~~
I hope these data and articles will be of help. Please let me know if I can assist further.

Thank you!

Marti Cox, MLIS
Information Center
Medical Group Management Association
104 Inverness Terrace East
Englewood, CO 80112
toll-free (877)275-6462, ext. 1887
www.mgma.com

Please take a couple minutes to complete this short questionnaire regarding the Medical Group Management Association (MGMA) Information Center e-mail service.
Your input is greatly appreciated to help medical group practice professionals excel in their activities.
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Click on the link below to begin.
http://www.mgma.com/surveypro/content/06SatisfactionQuestions_1.htm

If you have questions about this questionnaire, please call toll-free 877.275.6462, ext. 1887 or e-mail infocenter@mgma.com.

>>> <L.Logel@FMHospital.com> 1/15/2008 12:39 PM >>>
Hi

Recently we developed and implemented a full hospitalist program so our

providers no longer complete hospital rounds. Based on the fact that they are now in the office more hours and not in the hospital I'm wondering

what MGMA data is for best practice panel size for primary care.

Thank you in advance for your help.

Leslie Logel, CMPE
Director of Operations
Department of Primary Care
Frisbie Memorial Hospital
335-8812

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RUC Medical Home Workgroup / Geisinger Health System Conference Call

Members of the RUC Medical Home Workgroup met with representatives of the Geisinger Health System on Thursday, April 3, 2008 via conference call to better understand the Geisinger role in the ongoing Medicare Physician Group Practice Demonstration Project and to ascertain any information that would be useful to the Workgroup's ongoing discussion.

Doctors David Hitzeman, Leonard Lichtenfeld, Thomas Felger, and William Rich participated. The Geisinger participants included Doctors Steve Pierdon, Beverly Blaisure, Duane Davis and Janet Tomcavage. Doctor James Blankenship facilitated the meeting and listened in as an observer.

Doctors Rich and Hitzeman summarized the RUC's role in the Medicare Medical Home Demonstration project. The representatives from Geisinger explained their role in current Medicare demonstration projects, however most of the discussion focused on a specific medical home project currently running in two Geisinger practices.

Electronic Health Records and IT Infrastructure

Geisinger fully implemented electronic health records (HER) in 2001. This highly sophisticated system uses EpicCare as a foundation, enhanced with homegrown software and programming. It was acknowledged that the Geisinger model could not be used to predict EHR costs for the typical medical home as their IT costs include all lines of business, including their insurance component. The entire HER system cost $80 million, or $114,000 per individual physician. Geisinger has nearly 700 physicians in their system, of which 200 are primary care focused. Geisinger's ongoing IT budget is 4% of the system's annual revenue. The Geisinger representatives encouraged the Workgroup members to consider other sources to determine the appropriate EHR cost estimate.

Medicare Patient Panel Size

Statistics included on Geisinger's website, www.geisinger.org/about/stats.html, indicate that the system serves more than 2 million patients throughout Pennsylvania, with 210,000 enrolled in the Geisinger health plan. Other relevant statistics:

Clinical Staff Breakdown in 2007

- Physicians/scientists: 679
- Residents/fellows: 257
- Registered nurses: 1,949
- Licensed practical nurses: 316

It is estimated that the 200 Geisinger primary care physicians serve a total of 350,000 patients, which translates to 1,750 patients per physician. Medicare patients represent

25% of this estimated panel size or 440 patients. This varies from the overall Geisinger physician panel sizes. The Geisinger representatives quoted that that their overall average load of patient to physicians is 2,500, of which 700-800 are Medicare.

The RUC participants inquired about whether the system has risk-adjusted data, dependent upon the number of chronic condition or other risk criteria. Geisinger does risk adjust by the number of chronic conditions and also use a 1-5 risk rating, with the highest risk at rated at 5. Approximately 15-20% require intensive case management, as at least 15% of patients are rated at a 5.

Patient Caseload per Nurse Case Manager

In addition to the sophisticated EMR system, Geisinger has utilized a number of medical home concepts across their entire patient population for some time. Patient registries; use of best practices/evidence-based medicine for chronic care and preventive medicine; and patient reminders are already a component of the system.

In January 2007, an intensive medical home project was initiated in two practice sites. The description of this project resembles the Tier 3 medical home. Approximately 3,000 Medicare patients are served by these two practice sites. The program has recently been expanded to 20,000 patients in eleven practice sites.

In these two initial sites, the Geisinger representatives indicated that there were 250 Medicare "medical home" patients per physician. This is lower than the overall Geisinger Medicare patient to primary care physician estimate of 440 described above.

In these two initial practices, four Registered Nurse (RN) case managers were hired to exclusively coordinate the care for the patients. It is estimated that each case manager was able to coordinate the care of 125 high risk patients. LPNs are also involved in this medical home model, as individuals integrating the care coordination input into the practice.

Physician Involvement

The physicians in these two practices attend at least one hour to ninety minute team meeting per month to discuss the sickest patients. In addition, the physicians spend, on average, three hours per week in non face-to-face patient care coordination activities.

2011 CMS Direct PE Inputs Medical Supplies Listing				
Category	**CMS Code**	**Description**	**Unit of Measure**	**Purchase Price**
Accessory, Procedure	SD253	atherectomy device (Spectronetics laser or Fox Hollow)	kit	4,979.67
Kit, Pack, Tray	SA099	Kit, probe, cryoablation, prostate (Galil-Endocare)	kit	4,700.00
Accessory, Procedure	SD254	covered stent (VIABAHN, Gore)	item	3,768.00
Accessory, Procedure	SD238	stent, GORE VIATORR TIPS Endoprosthesis	item	3,450.00
Kit, Pack, Tray	SA100	kit, probe, radiofrequency, Xli-enhanced RF probe	kit	2,695.00
Kit, Pack, Tray	SA106	kit, sinus surgery, balloon (maxillary, frontal, or sphenoid)	kit	2,599.86
Kit, Pack, Tray	SA087	tray, RTS applicator (MammoSite)	item	2,550.00
Accessory, Procedure	SD266	stent, self expanding 2-5 mm XPERT (Abbott)	item	2,495.00
Lab	SL209	array kit, GenoSensor	item	2,121.00
Accessory, Procedure	SD109	probe, radiofrequency, 3 array (StarBurstSDE)	item	1,995.00
Accessory, Procedure	SD221	catheter, CVA, system, tunneled w-port, dual (LifeSite)	item	1,750.00
Kit, Pack, Tray	SA103	stent, vascular, deployment system, Cordis SMART	item	1,645.00
Kit, Pack, Tray	SA103	stent, vascular, deployment system, Cordis SMART	kit	1,645.00
Accessory, Procedure	SD232	probe, cryoablation (Visica ICE 30 or 40)	item	1,589.00
Kit, Pack, Tray	SA092	kit, gene, MLL fusion	kit	1,395.00
Accessory, Procedure	SD222	catheter, intradiscal (spineCATH)	item	1,380.00
Accessory, Procedure	SD256	Embolic Protection Device Spider FX (EV3, documentation availa	item	1,365.00
Accessory, Procedure	SD186	plasma LDL adsorption column (Liposorber)	item	1,300.00
Kit, Pack, Tray	SA107	kit, sinus surgery, balloon (maxillary)	kit	1,295.00
Accessory, Procedure	SD215	probe, endometrial cryoablation (Her Option)	item	1,250.00
Kit, Pack, Tray	SA075	kit, hysteroscopic tubal implant for sterilization	kit	1,245.00
Accessory, Procedure	SD233	probe, cryoablation, renal	item	1,175.00
Accessory, Procedure	SD240	strut, replacement, dynamic external fixation	item	1,151.00
Accessory, Procedure	SD185	plasma antibody adsorption column (Prosorba)	item	1,150.00
Kit, Pack, Tray	SA036	kit, transurethral microwave thermotherapy	kit	1,149.00
Accessory, Procedure	SD177	hysteroscope, ablation device	item	1,146.00
Accessory, Procedure	SD245	Renessa probe	item	1,095.00
Kit, Pack, Tray	SA037	kit, transurethral needle ablation (TUNA)	kit	1,050.00

SELECTED STATISTICS ON HIGH PRICED HCPCS
DEVELOPED FROM THE 1ST 6 MONTHS OF PROCESSED
2011 INCURRED CLAIMS FOR SAME DAY, SAME BENE, SAME PROVIDER

**HEADER "PCT" IS THE NUMBER OF SAME DAY OCCURENCES FOR THIS HCPC.
**E.G. HCPC 19105 OCCURRED ONLY 1 TIME 100% OF THE TIME FOR SD/SB/SP
**E.G. HCPC 19296 OCCURRED ONLY 1 TIME 98.6% OF THE TIME FOR SD/SB/SP

OBS	HCPCMOD	PCT1	PCT2	PCT3	PCT4	PCT5	PCT6	AVERAGE	MAXIMUM	MEDIAN	MODE
1	19105	100.0	0.0	0.0	0.0	0.0	0.0	1.00000	1	1	1
2	19296	98.6	1.3	0.1	0.0	0.0	0.0	1.01461	3	1	1
3	20697	76.3	21.1	2.6	0.0	0.0	0.0	1.26316	3	1	1
4	20982	94.3	3.8	1.9	0.0	0.0	0.0	1.09434	4	1	1
5	31295	85.7	14.2	0.1	0.0	0.0	0.0	1.14555	4	1	1
6	31296	85.2	14.3	0.2	0.2	0.0	0.0	1.15523	4	1	1
7	31297	87.9	12.1	0.0	0.0	0.0	0.0	1.12052	2	1	1
8	32998	98.8	1.2	0.0	0.0	0.0	0.0	1.01223	2	1	1
9	36515	100.0	0.0	0.0	0.0	0.0	0.0	1.00000	1	1	1
10	36516	100.0	0.0	0.0	0.0	0.0	0.0	1.00000	1	1	1
11	36566	99.5	0.5	0.0	0.0	0.0	0.0	1.00503	2	1	1
12	37183	99.3	0.7	0.0	0.0	0.0	0.0	1.00669	2	1	1
13	37205	96.8	3.1	0.1	0.0	0.0	0.0	1.03220	3	1	1
14	37206	84.9	12.0	1.9	0.6	0.1	0.5	1.20677	8	1	1
15	37221	86.8	12.9	0.1	0.2	0.0	0.0	1.13791	4	1	1
16	37223	91.2	7.8	0.9	0.0	0.0	0.0	1.09996	6	1	1
17	37225	98.1	1.8	0.0	0.0	0.0	0.0	1.01971	4	1	1
18	37226	97.8	2.1	0.0	0.0	0.0	0.0	1.02323	4	1	1
19	37227	98.2	1.7	0.1	0.0	0.0	0.0	1.01887	3	1	1
20	37228	97.6	2.3	0.1	0.0	0.0	0.0	1.02650	5	1	1
21	37229	97.6	2.4	0.0	0.0	0.0	0.0	1.02454	4	1	1
22	37230	98.4	1.6	0.0	0.0	0.0	0.0	1.01606	2	1	1
23	37231	98.5	1.5	0.0	0.0	0.0	0.0	1.01486	2	1	1
24	37234	91.9	7.4	0.7	0.0	0.0	0.0	1.08784	3	1	1
25	37235	93.2	6.8	0.0	0.0	0.0	0.0	1.06818	2	1	1
26	41530	98.5	1.5	0.0	0.0	0.0	0.0	1.01455	2	1	1
27	47382	98.7	1.2	0.1	0.0	0.0	0.0	1.01469	3	1	1
28	50592	98.3	1.7	0.0	0.0	0.0	0.0	1.01716	2	1	1
29	50593	98.7	1.3	0.0	0.0	0.0	0.0	1.01269	2	1	1
30	53850	99.5	0.5	0.0	0.0	0.0	0.0	1.00503	2	1	1
31	53860	100.0	0.0	0.0	0.0	0.0	0.0	1.00000	1	1	1
32	55873	99.6	0.4	0.0	0.0	0.0	0.0	1.00416	2	1	1
33	58356	96.2	1.9	1.9	0.0	0.0	0.0	1.05660	3	1	1
34	58563	99.8	0.2	0.0	0.0	0.0	0.0	1.00243	2	1	1
35	58565	98.8	1.2	0.0	0.0	0.0	0.0	1.01176	2	1	1
36	88385	98.6	1.4	0.0	0.0	0.0	0.0	1.01366	2	1	1
37	88385TC	100.0	0.0	0.0	0.0	0.0	0.0	1.00000	1	1	1
38	8838526	99.6	0.4	0.0	0.0	0.0	0.0	1.00391	2	1	1
39	88386	85.8	12.5	1.7	0.0	0.0	0.0	1.15886	3	1	1
40	88386TC	100.0	0.0	0.0	0.0	0.0	0.0	1.00000	1	1	1
41	8838626	94.7	2.6	2.6	0.0	0.0	0.0	1.07895	3	1	1

CMS 2011 Claims Data (1st six months) for Balloon Sinuplasty Codes

Code	billed in more than one unit	billed in more than 2 units
31295	57%	24%
31296	54%	21%
31297	74%	48%

TOTALS BY HCPCS

PROCMOD	ALOWSRV	ALOWCHRG
31295	841	883910.1
31296	942	1659795
31297	343	479937.3
TOTAL	2126	3023642

SAME BENE/ SAME PROVIDER/ SAME DAY COMBOS

OBS	COMBO						COUNT	PERCENT
1	31295	31296					216	35.9401
2	31295	31296	31297				126	20.9651
3	31296	31296					53	8.8186
4	31296	31297					46	7.6539
5	31295	31295					40	6.6556
6	31295	31297					35	5.8236
7	31295	31295	31296	31296			27	4.4925
8	31296	31296	31297	31297			11	1.8303
9	31295	31295	31296	31296	31297	31297	9	1.4975
10	31295	31295	31296				7	1.1647
11	31297	31297					7	1.1647
12	31295	31295	31296	31296	31297		5	0.8319
13	31295	31296	31296				5	0.8319
14	31295	31295	31297				4	0.6656
15	31295	31295	31296	31297	31297		3	0.4992
16	31295	31295	31297	31297			3	0.4992
17	31296	31297	31297				2	0.3328
18	31295	31296	31296	31297	31297		1	0.1664
19	31295	31297	31297				1	0.1664

AMA/Specialty Society RVS Update Committee Summary of Recommendations
CMS Request: PE Review

September 2011

Kyphoplasty

In the July 19, 2011 *Proposed Rule* for the 2012 Medicare Physician Payment Schedule, CMS indicated that the agency received comments to establish non-facility practice expense inputs for CPT codes 22523, 22524 and 22525 kyphoplasty services. As such, CMS requested that the RUC make recommendations for the practice expense inputs for these services.

The Practice Expense Subcommittee updated the equipment for the Moderate Sedation package, specifically related to EQ212 *pulse oxymetry recording software (prolonged monitoring)* and EQ269 *blood pressure monitor, ambulatory, w-battery charger.* These two equipment items will be removed from the Moderate Sedation package as CMS indicated that EQ011 *ECG, 3-channel (with SpO2, NIBP, temp, resp)* already incorporates the functionality of these two equipment items. **The Practice Expense Subcommittee reviewed the direct practice expense inputs recommended by the specialty and removed EQ211 pulse oximeter w-printer and replaced EQ010 *ECG, 3-channel* with EQ011 to align with the revised moderate sedation equipment guidelines. The RUC recommends the modified direct practice expense inputs attached**.

CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
22523		Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); thoracic	010	9.26 (No Change - Practice Expense Recommendations Only)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

22524		Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); lumbar	010	8.86 (No Change - Practice Expense Recommendations Only)
22525		Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); each additional thoracic or lumbar vertebral body (List separately in addition to code for primary procedure) (Do not report 22525 in conjunction with 20225 when performed at the same level as 22523-22525) (Use 22525 in conjunction with 22523, 22524) (For radiological supervision and interpretation, see 72291, 72292)	ZZZ	4.47 (No Change - Practice Expense Recommendations Only)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

	A	B	C	D	E	F	G	H	I	J	K
1				22520		22523		22524		22525	
2	**Meeting Date: Sept 2011** **Specialty: Interventional Radiology and Radiology**	**CMS**	**Staff**	**Percutaneous vertebroplaty, one vertebral body, unilateral or bilateral injection; thoracic** ***Approved Feb 2009***		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); thoracic*		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); lumbar*		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); each*	
3	**LOCATION**	**Code**	**Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
4	**GLOBAL PERIOD**										
5	**TOTAL CLINICAL LABOR TIME**			**240**	**72**	**279**	**72**	**270**	**72**	**120**	**0**
6	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**21**	**30**	**21**	**30**	**21**	**30**	**0**	**0**
7	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			**180**	**6**	**219**	**6**	**210**	**6**	**120**	**0**
8		*L037D*	*RN/LPN/MTA*	*83*		*43*		*42*		*10*	
9		*L051A*	*RN*	*97*		*75*		*72*		*40*	
10		*L041B*	*Rad Tech*			*102*		*96*		*70*	
11	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**39**	**36**	**39**	**36**	**39**	**36**	**0**	**0**
12	**PRE-SERVICE**										
13	**Start: Following visit when decision for surgery or procedure made**										
14	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**5**	**5**	5	5	5	5		
15	Coordinate pre-surgery services	L037D	RN/LPN/MTA	**3**	**10**	3	10	3	10		
16	Schedule space and equipment in facility	L037D	RN/LPN/MTA	**3**	**5**	3	5	3	5		
17	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**7**	**7**	7	7	7	7		
18	Follow-up phone calls & prescriptions	L037D	RN/LPN/MTA	**3**	**3**	3	3	3	3		
19	Other Clinical Activity (please specify)										
20	**End: When patient enters office/facility for surgery/procedure**										
21	**SERVICE PERIOD**										
22	**Start: When patient enters office/facility for surgery/procedure: Services Prior to Procedure**										
23	Greet patient, provide gowning, ensure appropriate medical records are available	L037D	RN/LPN/MTA	**5**		3		3			
24	Obtain vital signs	L037D	RN/LPN/MTA	**5**		5		5			
25	Provide pre-service education/obtain consent										
26	Prepare room, equipment, supplies	L037D	RN/LPN/MTA	**5**		5		5		0	
27	Setup scope (non facility setting only)										
28	Prepare and position patient/ monitor patient/ set up IV	L037D	RN/LPN/MTA	**3**		3		3			
29	Sedate/apply anesthesia	L051A	RN	**2**		2		2			
30	**Intra-service**										
31	Assist physician in performing procedure	L037D	RN/LPN/MTA	**53**							
32	Assist physician in performing procedure	L041B	Rad Tech			58		55		40	
33	Assist physician in performing procedure	L051A	RN	**80**		58		55		40	
34	Assisting with flouroscopy/image acquisition (75%)	L041B	Rad Tech			44		41		30	
35	Circulating throughout procedure (25%)	L037D	RN/LPN/MTA			15		14		10	
36	**Post-Service**										
37	Monitor pt. following service/check tubes, monitors, drains	L051A	RN	**15**		15		15			

	A	B	C	D	E	F	G	H	I	J	K
1				22520		22523		22524		22525	
2	**Meeting Date: Sept 2011** **Specialty: Interventional Radiology and Radiology**	**CMS**	**Staff**	**Percutaneous vertebroplaty, one vertebral body, unilateral or bilateral injection; thoracic** ***Approved Feb 2009***		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); thoracic*		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); lumbar*		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); each*	
3	**LOCATION**	**Code**	**Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
38	Clean room/equipment by physician staff	L037D	RN/LPN/MTA	**3**		3		3			
39	Clean Scope										
40	Clean Surgical Instrument Package										
41	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**2**		2		2			
42	Review/read X-ray, lab, and pathology reports	L037D	RN/LPN/MTA	**2**		2		2			
43	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions	L037D	RN/LPN/MTA	**5**		5		5			
44	Discharge day management				**6**		6		6		
45	Other Clinical Activity (please specify)										
46	**End: Patient leaves office**										
47	**POST-SERVICE Period**										
48	**Start: Patient leaves office/facility**										
49	Conduct phone calls/call in prescriptions	L037D	RN/LPN/MTA	**3**		3		3			
50	*Office visits:*										
51	*List Number and Level of Office Visits*			**pre**		**post**		**post**		**post**	
52	99211 16 minutes		16								
53	99212 27 minutes		27								
54	99213 36 minutes		36	**1**	**1**	1	1	1	1		
55	99214 53 minutes		53								
56	99215 63 minutes		63								
57	99238 12 minutes		12								
58	*Total Office Visit Time*	L037D	RN/LPN/MTA	**36**	**36**	**36**	**36**	**36**	**36**	**0**	**0**
59	Other Activity (please specify)										
60	**End: with last office visit before end of global period**				**0**		0		0		0
61	**MEDICAL SUPPLIES**		**Unit**								
62	pack, minimum multi-specialty visit	SA048		**2**	**1**	2	1	2	1		
63	pack, post-op incision care (suture and staple)	SA053				1	1		1		
64	pack, conscious sedation	SA044		**1**		1		1			
65	scalpel with blade, surgical	SF033		**1**		1		1			
66	cap, surgical	SB001		**3**		3		3			
67	drape, sterile, c-arm, flouro	SB008		**1**		1		1			
68	drape, sterile, for mayo stand	SB012		**1**		1		1			
69	Gloves (sterile)	SB024		**2**		2		2			
70	Sterile surgical gown	SB028		**2**		2		2			
71	Surgical mask	SB034		**3**		3		3			
72	needle, 18-26g, 1.5-3.5in, spinal	SC028		**1**		1		1			
73	needle, 18-27g	SC029		**1**		1		1			
74	bone biopsy device (NEW - Documentation Attached)					1		1			
75	kit, vertebroplasty (LP2, CD)	SA039		**1.5**							
76	kit, kyphoplasty (NEW - Documentation Attached)					1		1			
77	kit, kyphoplasty Additional Level (NEW - Documentation Attached)									1	

	A	B	C	D	E	F	G	H	I	J	K
1				22520		22523		22524		22525	
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3	**LOCATION**	**Code**	**Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
78	bone cement w/mixer (NEW - Documentation Attached)					1		1			
79	bone cement (full dose pack uou) (Osteobond, Simplex)	SH020		**1**							
80	barium sulfate, sterile (Biotrace)	SH015		**1**							
81	pack, drapes, laparotomy (chest-abdomen)	SA046		**1**		1		1			
82	skin marking pen, sterile	SK075		**1**		1		1			
83	DuraPrep surgical soln (26ml)	SJ017		**1**		1		1			
84	lidocaine 1%-2% inj (Xylocaine)	SH047		**20**		20		20			
85	gauze, sterile 4x4 (10 pack)	SG056		**1**		1		1			
86	steri-strip	SG074		**1**		1		1			
87	**Equipment**										
88	room, radiographic-flouro	EL014		**83**		71		68		40	
89	instrument pack, medium	EQ138		**83**		71		68		40	
90	table, power	EF031		**36**	**36**	36	36	36	36		
91	light, exam	EQ168				36	36	36	36		
92	Stretcher	EF018		**60**		0		0			
93	x-ray view box, 4 panel	ER067		**10**		10		10			
94	iv infusion pump	EQ032		**142**		120		117			
95	ECG, 3-channel (with SpO2, NIBP, temp, resp)	EQ011		**142**		120		117			

	A	B	C	D	E	F	G	H	I	J	K
1				22520		22523		22524		22525	
2	**Meeting Date: Sept 2011** **Specialty: Interventional Radiology and Radiology**	**CMS**	**Staff**	**Percutaneous vertebroplaty, one vertebral body, unilateral or bilateral injection; thoracic** ***Approved Feb 2009***		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); thoracic*		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); lumbar*		*Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (eg, kyphoplasty); each*	
3	**LOCATION**	**Code**	**Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
4	**GLOBAL PERIOD**										
5	**TOTAL CLINICAL LABOR TIME**			**240**	**72**	**279**	**72**	**270**	**72**	**122**	**0**
6	**TOTAL PRE-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**21**	**30**	**21**	**30**	**21**	**30**	**0**	**0**
7	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			**180**	**6**	**219**	**6**	**210**	**6**	**122**	**0**
8		*L037D*	*RN/LPN/MTA*	*83*		*43*		*42*			
9		*L051A*	*RN*	*97*		*75*		*72*			
10		*L041B*	*Rad Tech*			*102*		*96*		*122*	
11	**TOTAL POST-SERV CLINICAL LABOR TIME**	L037D	RN/LPN/MTA	**39**	**36**	**39**	**36**	**39**	**36**	**0**	**0**
12	**PRE-SERVICE**										
13	**Start: Following visit when decision for surgery or procedure made**										
14	Complete pre-service diagnostic & referral forms	L037D	RN/LPN/MTA	**5**	**5**	5	5	5	5		
15	Coordinate pre-surgery services	L037D	RN/LPN/MTA	**3**	**10**	3	10	3	10		
16	Schedule space and equipment in facility	L037D	RN/LPN/MTA	**3**	**5**	3	5	3	5		
17	Provide pre-service education/obtain consent	L037D	RN/LPN/MTA	**7**	**7**	7	7	7	7		
18	Follow-up phone calls & prescriptions	L037D	RN/LPN/MTA	**3**	**3**	3	3	3	3		
19	Other Clinical Activity (please specify)										
20	**End: When patient enters office/facility for surgery/procedure**										
21	**SERVICE PERIOD**										
22	**Start: When patient enters office/facility for surgery/procedure: Services Prior to Procedure**										
23	Greet patient, provide gowning, ensure appropriate medical records are available	L037D	RN/LPN/MTA	**5**		3		3			
24	Obtain vital signs	L037D	RN/LPN/MTA	**5**		5		5			
25	Provide pre-service education/obtain consent										
26	Prepare room, equipment, supplies	L037D	RN/LPN/MTA	**5**		5		5		2	
27	Setup scope (non facility setting only)										
28	Prepare and position patient/ monitor patient/ set up IV	L037D	RN/LPN/MTA	**3**		3		3			
29	Sedate/apply anesthesia	L051A	RN	**2**		2		2			
30	**Intra-service**										
31	Assist physician in performing procedure	L037D	RN/LPN/MTA	**53**							
32	Assist physician in performing procedure	L041B	Rad Tech			58		55		40	
33	Assist physician in performing procedure	L051A	RN	**80**		58		55		40	
34	Assisting with flouroscopy/image acquisition (75%)	L041B	Rad Tech			44		41		30	
35	Circulating throughout procedure (25%)	L037D	RN/LPN/MTA			15		14		10	
36	**Post-Service**										
37	Monitor pt. following service/check tubes, monitors, drains	L051A	RN	**15**		15		15			

	A	B	C	D	E	F	G	H	I	J	K
1				22520		22523		22524		22525	
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3	**LOCATION**	**Code**	**Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
38	Clean room/equipment by physician staff	L037D	RN/LPN/MTA	**3**		3		3			
39	Clean Scope										
40	Clean Surgical Instrument Package										
41	Complete diagnostic forms, lab & X-ray requisitions	L037D	RN/LPN/MTA	**2**		2		2			
42	Review/read X-ray, lab, and pathology reports	L037D	RN/LPN/MTA	**2**		2		2			
43	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions	L037D	RN/LPN/MTA	**5**		5		5			
44	Discharge day management				**6**		6		6		
45	Other Clinical Activity (please specify)										
46	**End: Patient leaves office**										
47	**POST-SERVICE Period**										
48	**Start: Patient leaves office/facility**										
49	Conduct phone calls/call in prescriptions	L037D	RN/LPN/MTA	**3**		3		3			
50	*Office visits:*										
51	*List Number and Level of Office Visits*			**pre**		**post**		**post**		**post**	
52	99211 16 minutes		16								
53	99212 27 minutes		27								
54	99213 36 minutes		36	**1**	**1**	1	1	1	1		
55	99214 53 minutes		53								
56	99215 63 minutes		63								
57	99238 12 minutes		12								
58	*Total Office Visit Time*	L037D	RN/LPN/MTA	**36**	**36**	**36**	**36**	**36**	**36**	**0**	**0**
59	Other Activity (please specify)										
60	**End: with last office visit before end of global period**				**0**		0		0		0
61	**MEDICAL SUPPLIES**		**Unit**								
62	pack, minimum multi-specialty visit	SA048		**2**	**1**	2	1	2	1		
63	pack, post-op incision care (suture and staple)	SA053					1		1		
64	pack, conscious sedation	SA044		**1**		1		1			
65	scalpel with blade, surgical	SF033		**1**		1		1			
66	cap, surgical	SB001		**3**		3		3			
67	drape, sterile, c-arm, flouro	SB008		**1**		1		1			
68	drape, sterile, for mayo stand	SB012		**1**		1		1			
69	Gloves (sterile)	SB024		**2**		2		2			
70	Sterile surgical gown	SB028		**2**		2		2			
71	Surgical mask	SB034		**3**		3		3			
72	needle, 18-26g, 1.5-3.5in, spinal	SC028		**1**		1		1			
73	needle, 18-27g	SC029		**1**		1		1			
74	bone biopsy device (NEW - Documentation Attached)					1		1			
75	kit, vertebroplasty (LP2, CD)	SA039		**1.5**							
76	kit, kyphoplasty (NEW - Documentation Attached)					1		1			
77	kit, kyphoplasty Additional Level (NEW - Documentation Attached)									1	

	A	B	C	D	E	F	G	H	I	J	K
1				22520		22523		22524		22525	
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3	**LOCATION**	**Code**	**Type**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**	**Non Facility**	**Facility**
78	bone cement w/mixer (NEW - Documentation Attached)					1		1			
79	bone cement (full dose pack uou) (Osteobond, Simplex)	SH020		**1**							
80	barium sulfate, sterile (Biotrace)	SH015		**1**							
81	pack, drapes, laparotomy (chest-abdomen)	SA046		**1**		1		1			
82	skin marking pen, sterile	SK075		**1**		1		1			
83	DuraPrep surgical soln (26ml)	SJ017		**1**		1		1			
84	lidocaine 1%-2% inj (Xylocaine)	SH047		**20**		20		20			
85	gauze, sterile 4x4 (10 pack)	SG056		**1**		1		1			
86	steri-strip	SG074		**1**		1		1			
87	**Equipment**										
88	room, radiographic-flouro	EL014		**83**		71		68		42	
89	instrument pack, medium	EQ138		**83**		71		68		42	
90	table, power	EF031		**36**	**36**	36	36	36	36		
91	light, exam	EQ168				36	36	36	36		
92	Stretcher	EF018		**60**		60		60			
93	x-ray view box, 4 panel	ER067		**10**		10		10			
94	iv infusion pump	EQ032		**142**		131		128			
95	ECG, 3-channel (with SpO2, NIBP, temp, resp)	EQ011		**142**		131		128			

AMA/Specialty Society RVS Update Committee Summary of Recommendations

September 2011

Molecular Pathology-Tier 1

The CPT Editorial Panel has developed a new coding structure to describe molecular pathology services, based on the efforts and recommendations of the Molecular Pathology Coding Workgroup convened beginning in October 2009. In October 2010 and February 2011, the Panel accepted 92 Tier 1 codes, which are a list of gene-specific and genomic analysis CPT codes for high-volume molecular pathology services. These services were previously reported with a series of "stacking codes." The RUC understands that payment for these services is currently based on a mixture of payment methodologies, including the physician fee schedule and the clinical lab fee schedule. CMS requested that the RUC review data provided by the College of American Pathologists to provide the agency with more information, as a policy is developed to determine which payment schedule is appropriate for these services. In April 2011, the RUC recommended physician work and time values for 18 Tier I codes. In September 2011, the specialty presented data on the remaining 52 services. At this time, the specialty indicated that interpretation is not typically performed by a physician for the remaining Tier I codes.

81225 CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81225 was 13 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that although the time associated with the key reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is slightly more than the surveyed code, 81225 is a more complex and intense service perform. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.37, the survey's 25th percentile, for CPT code 81225**.

81245 FLT3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene analysis, internal tandem duplication (ITD) variants (ie, exons 14, 15)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81245 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires

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more time than the surveyed code.. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.37, the survey's 25th percentile, for CPT code 81245**.

81350 UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, irinotecan metabolism), gene analysis, common variants (eg, *28, *36, *37)

The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81350 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time than the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physicianwork and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.37, the survey's 25th percentile, for CPT code 81350**.

81227 CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)

The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81227 was 14 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that although the time associated with the key reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is slightly more than the surveyed code, 81227 is a more complex and intense service to perform. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.38, the survey's 25th percentile, for CPT code 81227**.

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81355 VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variants (eg, -1639/3673)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81355 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that although the time associated with the key reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is slightly more than the surveyed code, 81355 is a more complex and intense service to perform. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.38, the survey's 25th percentile, for CPT code 81355**.

81310 NPM1 (nucleophosmin) (eg, acute myeloid leukemia) gene analysis, exon 12 variants
The RUC reviewed the survey data as presented by the specialty society which indicated that the 75th percentile for time for 81310 was 19 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time than the surveyed code.. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.39, the survey's 25th percentile, for CPT code 81310**.

81331 SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81331 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time than the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended

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at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.39, the survey's 25th percentile, for CPT code 81331**.

81265 Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81265 was 17 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with the key reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is exactly the same as the surveyed code, however, 81265 overall is a more complex and intense service to perform. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.40, the survey's 25th percentile, for CPT code 81265**.

81266 Comparative analysis using Short Tandem Repeat (STR) markers; each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81266 was 15 minutes. The RUC agreed that this time accurately reflects the amount of physician time required to perform the service. The RUC agreed with the specialty that although the time associated with the key reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is slightly more than the surveyed code, 81266 is overall a more intense procedure to perform. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.41, the survey's 25th percentile, for CPT code 81266**.

81267 Chimerism (engraftment) analysis, post transplantation specimen (eg, hematopoietic stem cell), includes comparison to previously performed baseline analyses; without cell selection
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81267 was 18 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires

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more time than the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires less physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.45, the survey's 25th percentile, for CPT code 81267**.

81268 Chimerism (engraftment) analysis, post-transplantation specimen (eg, hematopoietic stem cell), includes comparison to previously performed baseline analyses; with cell selection (eg, CD3, CD33), each cell type
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81268 was 20 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires similar time to perform compared to the surveyed code, 81268. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires less work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.51, the survey's 25th percentile, for CPT code 81268**.

81226 CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81226 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time to perform compared to the surveyed code, 81226. The specialty society also explained, and the RUC agreed, that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.43, the survey's 25th percentile, for CPT code 81226**.

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81301 Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81301 was 20 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires similar physician time and intensity to perform compared to the surveyed code, 81301. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires less work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.50, the survey's 25th percentile, for CPT code 81301**.

81261 IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81261 was 21 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires similar physician time and intensity to perform compared to the surveyed code, 81261. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires less work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.52, the survey's 25th percentile, for CPT code 81261**.

81342 TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81342 was 25 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires less physician time and intensity to perform compared to the surveyed code, 81342. The specialty society also explained that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time **Based on these comparisons, the**

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RUC recommends a work RVU of 0.57, the survey's 25th percentile, for CPT code 81342.

81264 IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81264 was 22 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that although the key reference code 88182 *Flow cytometry, cell cycle or DNA analysis* (total time = 20 minutes, work RVU = 0.77) requires less time compared to the surveyed code, 81264, the reference code is overall a more intense service to perform. The RUC also compared this service to 88172 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for diagnosis, first evaluation episode, each site*, (Intra-time=20 minutes, Work RVU=0.60) which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.58, the survey's 25th percentile, for CPT code 81264**.

81262 IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, Southern blot)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81262 was 20 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that although the key reference code 88182 *Flow cytometry, cell cycle or DNA analysis* (total time = 20 minutes, work RVU = 0.77) requires similar time compared to the surveyed code, 81262, the reference code is overall a more intense service to perform. The RUC also compared this service to 88172 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for diagnosis, first evaluation episode, each site*, (Intra-time=20 minutes, Work RVU=0.60) which requires similar physician work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.61, the survey's 25th percentile, for CPT code 81262**.

81210 BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81210 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time and intensity to perform compared to the surveyed code, 81210. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar physician work and time to perform. The

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specialty society also explained that this service keeps rank order with Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons),* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.37, the survey's 25th percentile, for CPT code 81210**.

81263 IGH@ (Immunoglobulin heavy chain locus) (eg, leukemia and lymphoma, B-cell), variable region somatic mutation analysis
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81263 was 23 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires less work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons),* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.52, the survey's 25th percentile, for CPT code 81263**.

81332 SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1) (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *S and *Z)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81332 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) is more than the surveyed code. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar work and time to perform. The specialty society also explained that this service keeps rank order with Tier 2 code 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat*), which the RUC recommended at this meeting 0.40 work RVUs for 15 minutes of intra-service time. **Based on these comparisons, the RUC recommends a work RVU of 0.40, the survey's 25th percentile, for CPT code 81332**.

81257 HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis, for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and Constant Spring)
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time. The RUC agreed that 20 minutes accurately

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reflects the amount of time required to perform the service. The RUC also agreed with the specialty that the time associated with the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) is similar compared to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.50 for CPT code 81257**.

81340 TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81340 was 25 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared the surveyed code to 88172 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for diagnosis, first evaluation episode, each site* (Intra-service time=20minutes, Work RVU=0.60) and noted that the surveyed code required more time to perform than the reference code. The specialty society also explained that this service keeps rank order with Tier 2 code 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon,* which the RUC recommended at this meeting 0.50 work RVUs for 20 minutes of intra-service time **Based on these comparisons, the RUC recommends a work RVU of 0.63, the survey's 25th percentile, for CPT code 81340.**

81293 MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires much less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.52 for CPT code 81293**.

81296 MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
The specialty society explained that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work

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RVU=0.38), which requires much less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.52 for CPT code 81296**.

81299 MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which is less complex and requires less physician work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.52 for CPT code 81299**.

81303 MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variant
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. However, the surveyed code requires less intensity to perform than the reference code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which is less complex and requires less physician work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.52 for CPT code 81303**.

81304 MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; duplication/deletion variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which is less complex and requires less physician work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.52 for CPT code 81304**.

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81318 PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* which the RUC recommended at this meeting 0.52 work RVUs for 28 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which is less complex and requires less physician work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.52 for CPT code 81318.**

81300 MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81404 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* which the RUC recommended at this meeting 0.65 work RVUs for 30 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (intra-time=20 minutes, work RVU=0.52), which requires less work and time to perform. The RUC also compared this code to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.65 for CPT code 81300.**

81302 MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; full sequence analysis
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81404 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* which the RUC recommended at this meeting 0.65 work RVUs for 30 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (intra-time=20 minutes, work RVU=0.52), which requires less work and time to perform. The RUC also compared this code to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.65 for CPT code 81302.**

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81294 MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81405 *Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)* which the RUC recommended at this meeting 0.80 work RVUs for 30 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (intra-time=20 minutes, work RVU=0.52), which requires less work and time to perform. The RUC also compared this code to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.80 for CPT code 81294.**

81297 MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81405 *Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)* which the RUC recommended at this meeting 0.80 work RVUs for 30 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (intra-time=20 minutes, work RVU=0.52), which requires less work and time to perform. The RUC also compared this code to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.80 for CPT code 81297.**

81298 MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81405 *Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)* which the RUC recommended at this meeting 0.80 work RVUs for 30 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (intra-time=20 minutes, work RVU=0.52), which requires less work and time to perform. The RUC also compared this code to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.80 for CPT code 81298.**

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81319 PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81405 *Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)* which the RUC recommended at this meeting 0.80 work RVUs for 30 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC also compared this service to 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (intra-time=20 minutes, work RVU=0.52), which requires less work and time to perform. The RUC also compared this code to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.80 for CPT code 81319.**

81292 MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81406 *Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia,* which the RUC recommended at this meeting 1.40 work RVUs for 60 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared this code to 96204 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires more work and time to perform. The RUC also compared the surveyed code to 88325 *Consultation, comprehensive, with review of records and specimens, with report on referred material* (Intra-service time=80minutes, work RVU=2.50) and acknowledged that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 1.40 for CPT code 81292.**

81295 MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81406 *Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia,* which the RUC recommended at this meeting 1.40 work RVUs for 60 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared this code to 96204 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires more work and time to perform. The RUC also compared the surveyed code to 88325 *Consultation, comprehensive, with review of records and specimens, with report on referred material* (Intra-service time=80minutes, work RVU=2.50) and acknowledged that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 1.40 for CPT code 81295.**

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81317 PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to Tier 2 code 81406 *Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia,* which the RUC recommended at this meeting 1.40 work RVUs for 60 minutes of intra-service time. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared this code to 96204 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Intra-time=40 minutes, work RVU=0.94) and noted that the surveyed code requires more work and time to perform. The RUC also compared the surveyed code to 88325 *Consultation, comprehensive, with review of records and specimens, with report on referred material* (Intra-service time=80minutes, work RVU=2.50) and acknowledged that the surveyed code requires less work and time to perform. **Based on these comparisons, the RUC recommends a work RVU of 1.40 for CPT code 81317.**

81341 TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using direct probe methodology (eg, Southern blot)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81341 was 19 minutes. The RUC agreed that this time accurately reflects the amount of physician time required to perform the service. The specialty society explained, and the RUC agreed, that the work RVU for this service could be best derived from crosswalking it directly to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (work RVU=0.45) The RUC agreed that this work RVU accurately reflected the amount of effort required to perform the service. The RUC compared this code to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (Intra-Service time=15 minutes, work RVU=0.38) and noted that the surveyed code requires more time and work to perform than the reference code. Further, the RUC compared the surveyed code to 95251 *Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; interpretation and report* (Intra-Service time=30 minutes, Work RVU=0.85) and noted that the surveyed code requires less work and time compared to this reference code. **Based on these comparisons, the RUC recommends 0.45 Work RVUs for 81341.**

81370 HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81370 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 88172 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for diagnosis, first evaluation episode, each site* (total time = 20 minutes, work RVU = 0.60) is more than the surveyed code. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which although

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requires similar time to perform is overall a less complex and intense service to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.54, the survey's 25th percentile, for CPT code 81370**.

81371 HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, and -DRB1/3/4/5 (eg, verification typing)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81371 was 30 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time=20 minutes, work RVU=0.52) is less than the surveyed code and that the reference code requires less intensity to perform. Further, the RUC also compared this service to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (intra-time=40 minutes, work RVU=0.94), which requires more work and time to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.60, the survey's 25th percentile, for CPT code 81371**.

81372 HLA Class I typing, low resolution (eg, antigen equivalents); complete (ie, HLA-A, -B, and -C)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81372 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 88172 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for diagnosis, first evaluation episode, each site* (total time=20 minutes, work RVU=0.60) is more than the surveyed code and that the reference code requires more intensity to perform. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which although it requires similar time to perform, it is a less complex and intense service to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.52, the survey's 25th percentile, for CPT code 81372**.

81373 HLA Class I typing, low resolution (eg, antigen equivalents); one locus (eg, HLA-A, -B, or -C), each
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81373 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is similar compared to the surveyed code and that the reference code requires similar intensity to perform compared to this reference code. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which also requires similar time and intensity to perform compared to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.37, the survey's 25th percentile, for CPT code 81373**.

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81374 HLA Class I typing, low resolution (eg, antigen equivalents); one antigen equivalent (eg, B*27), each
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81374 was 13 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 86320 *Immunoelectrophoresis; serum* (total time = 17 minutes, work RVU = 0.37) is slightly more compared to the surveyed code and that the reference code requires slightly more intensity to perform compared to this reference code. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which also requires slightly more time to perform compared to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.34, the survey's 25th percentile, for CPT code 81374**.

81375 HLA Class II typing, low resolution (eg, antigen equivalents); HLA-DRB1/3/4/5 and -DQB1
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81375 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 88182 *Flow cytometry, cell cycle or DNA analysis* (total time = 20 minutes, work RVU = 0.77) is more than the surveyed code and that the reference code requires more intensity to perform. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which although it requires similar time to perform the reference code is a less complex and intense service to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.60, the survey's 25th percentile, for CPT code 81375**.

81376 HLA Class II typing, low resolution (eg, antigen equivalents); one locus (eg, HLA-DRB1/3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81376 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 88182 *Flow cytometry, cell cycle or DNA analysis* (total time = 20 minutes, work RVU = 0.77) is more than the surveyed code.. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which although it requires similar time to perform the reference code is less complex and intense service to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.50, the survey's 25th percentile, for CPT code 81376**.

81377 HLA Class II typing, low resolution (eg, antigen equivalents); one antigen equivalent, each
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81377 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC agreed with the specialty that the time associated with reference code 88172 *Cytopathology, evaluation of fine needle aspirate; immediate cytohistologic study to determine adequacy for*

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diagnosis, first evaluation episode, each site (total time = 20 minutes, work RVU = 0.60) is more than the surveyed code. Further, the RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which although requires similar time to perform it is a less intense service to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.43, the survey's 25th percentile, for CPT code 81377**.

81378 HLA Class I and II typing, high resolution (ie, alleles or allele groups), HLA-A, -B, -C, and -DRB1
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81378 was 20 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The specialty society recommended and the RUC agreed that the best way to develop a work RVU for this service was to directly crosswalk it to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (work RVU=0.45). The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires similar time compared to the surveyed code, 81378. However, this reference code is a slightly more intense procedure to perform in comparison to the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar time to perform however, the surveyed code is more complex and intense to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.45 for CPT code 81378**.

81379 HLA Class I typing, high resolution (ie, alleles or allele groups); complete (ie, HLA-A, -B, and -C)
The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81379 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The specialty society recommended and the RUC agreed that the best way to develop a work RVU for this service was to directly crosswalk it to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (work RVU=0.45). The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time compared to the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar time to perform however, the surveyed code is more complex and intense to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.45 for CPT code 81379**.

81380 HLA Class I typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-A, -B, or -C), each

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The RUC reviewed the survey data as presented by the specialty society which indicated that the median physician time for 81380 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The specialty society recommended and the RUC agreed that the best way to develop a work RVU for this service was to directly crosswalk it to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (work RVU=0.45). The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time compared to the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar time to perform however, the surveyed code requires more intensity to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.45 for CPT code 81380**.

81381 HLA Class I typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, B*57:01P), each
The specialty society recommended and the RUC agreed that the best way to evaluate this service was to directly crosswalk it to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (Intra-service=12minutes, work RVU=0.45) as these services require the same time and intensity to perform. The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time compared to the surveyed code, 81381 and this reference code is a slightly more intense procedure to perform in comparison to the surveyed code. **Based on these comparisons, the RUC recommends a work RVU of 0.45 for CPT code 81381**.

81382 HLA Class II typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-DRB1, -DRB3,-DRB4, -DRB5, -DQB1, -DQA1, -DPB1, or -DPA1), each
The RUC reviewed the survey data as presented by the specialty society which indicated that the median physician time for 81382 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The specialty society recommended and the RUC agreed that the best way to develop a work RVU for this service was to directly crosswalk it to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (work RVU=0.45). The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time compared to the surveyed code, 81382 and this reference code is a slightly more intense procedure to perform in comparison to the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar time to perform however, the surveyed code is requires more complex and intense to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.45 for CPT code 81382**.

81383 HLA Class II typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, HLA-DQB1*06:02P), each

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The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81383 was 15 minutes. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The specialty society recommended and the RUC agreed that the best way to develop a work RVU for this service was to directly crosswalk it to 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node)* (work RVU=0.45). The RUC agreed with the specialty that the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (total time = 20 minutes, work RVU = 0.52) requires more time compared to the surveyed code, 81383 and this reference code is a slightly more intense procedure to perform in comparison to the surveyed code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), which requires similar time to perform however, the surveyed code is more complex and intense to perform. **Based on these comparisons, the RUC recommends a work RVU of 0.45 for CPT code 81383**.

Practice Expense

The specialty provided data based on assumed batch sizes and modified these batch size estimates to ensure maximum efficiency for today's practice. However the RUC agreed that the batch sizes should be re-examined when greater experience is available for these services. Further, The specialty society explained that the majority of these services are being crosswalked with minor differences to the practice expense inputs associated with the molecular pathology services that were approved at the April 2011 RUC Meeting. The remainder of the Molecular Pathology services, specifically, the HLA services, had new practice expense inputs. The PE Subcommittee reviewed all the recommended practice expense inputs over a conference call and during the PE Subcommittee meeting and made minor changes mostly pertaining to duplication in supplies and equipment, which were all subsequently approved by the RUC.

Work Neutrality

Reviewing the Medicare utilization data for 83912 *Molecular diagnostics; interpretation and report* (work RVU = 0.37) and the specialty's estimate of utilization of these individual services, the RUC understands that these recommendations will be work neutral to the family.

New Technology

The entire set of molecular pathology codes should be re-reviewed after claims data are available and there is experience with the new coding system. The physician time, work, and practice expense inputs should all be reviewed again in the future as these estimates are based on a good faith effort using available information in 2011.

Flagging in the RUC Database

The RUC recommends that all of the molecular pathology services with less than 30 survey responses should be flagged in the RUC database so that they are not used to validate the proposed work associated with any CPT codes under RUC review.

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation

Pathology and Laboratory

Molecular Pathology

Tier 1 Molecular Pathology Procedures

Molecular pathology procedures are medical laboratory procedures involving the analyses of nucleic acid to detect variants in genes that may be indicative of germline (eg, constitutional disorders) or somatic (eg, neoplasia) conditions, or to test for histocompatibility antigens (eg, HLA). Code selection is typically based on the specific gene(s) that is being analyzed. Genes are described using Human Genome Organization (HUGO) approved gene names and are italicized in the code descriptors. Gene names were taken from tables of the HUGO Gene Nomenclature Committee (HGNC) at the time the CPT codes were developed. For the most part, Human Genome Variation Society (HGVS) recommendations were followed for the names of specific molecular variants. The familiar name is used for some variants because defined criteria were not in place when the variant was first described or because HGVS recommendations were changed over time (eg, intronic variants, processed proteins). When the gene name is represented by an abbreviation, the abbreviation is listed first, followed by the full gene name italicized in parentheses (eg, "F5 *[coagulation Factor V]*"), except for the HLA series of codes. Proteins or diseases commonly associated with the genes are listed as examples in the code descriptors. The examples do not represent all conditions in which testing of the gene may be indicated.

Codes that describe tests to assess for the presence of gene variants (see definitions) use common gene variant names. Typically, all of the listed variants would be tested. However, these lists are not exclusive. If other variants are also tested in the analysis, they would be included in the procedure and not reported separately. Full gene sequencing should not be reported using codes that assess for the presence of gene variants unless specifically stated in the code descriptor. The molecular pathology codes include all analytical services performed in the test (eg, cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection). Any procedures required prior to cell lysis (eg, microdissection, codes 88380 and 88381) should be reported separately.

The molecular pathology codes include all analytical services performed in the test (eg, cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection). Any procedures required prior to cell lysis (eg, microdissection, codes 88380 and 88381) should be reported separately.

The results of the procedure may require interpretation by a physician. When only the interpretation and report are performed, modifier 26 may be appended to the specific molecular pathology code.

All analyses are qualitative unless otherwise noted.

For microbial identification, see 87149-87153 and 87470-87801, and 87900-87904. For in situ hybridization analyses, see 88271-88275 and 88365-88368.

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
Molecular pathology procedures that are not specified in 81200-81350 should be reported using the appropriate methodology codes in the 83890-83914 and 88384-88386 series.					
●81200		ASPA (aspartoacylase) (eg, Canavan disease) gene analysis; common variants (eg, E285A, Y231X)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81205		BCKDHB (branched-chain keto acid dehydrogenase E1, beta polypeptide) (eg, Maple syrup urine disease) gene analysis; common variants (eg, R183P, G278S, E422X)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81206	M1	BCR/ABL1 (t[9;22]) (eg, chronic myelogenous leukemia) translocation analysis; major breakpoint, qualitative or quantitative	XXX	N/A	0.37 (RUC Recommended Value from April 2011 Meeting)
●81207	M2	minor breakpoint, qualitative or quantitative	XXX	N/A	0.15 (RUC Recommended Value from April 2011 Meeting)
●81208	M3	other breakpoint, qualitative or quantitative	XXX	N/A	0.46 (RUC Recommended Value from April 2011 Meeting)
●81209		BLM (Bloom syndrome, RecQ helicase-like) (eg, Bloom syndrome) gene analysis; (eg, 2281del6ins7)	XXX	N/A	Not Typically Performed by Physicians at this Time

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
●81210	Z1	BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant	XXX	N/A	0.37
●81211		BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and common duplication/deletion variants in BRCA1 (ie, exon 13 del 3.835kb, exon 13 dup 6kb, exon 14-20 del 26kb, exon 22 del 510bp, exon 8-9 del 7.1kb)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81212		185delAG, 5385insC, 6174delT variants	XXX	N/A	Not Typically Performed by Physicians at this Time
●81213		uncommon duplication/deletion variants	XXX	N/A	Not Typically Performed by Physicians at this Time
●81214		BRCA1 (breast cancer 1) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and common duplication/deletion variants (ie, exon 13 del 3.835kb, exon 13 dup 6kb, exon 14-20 del 26kb, exon 22 del 510bp, exon 8-9 del 7.1kb) (When performing BRCA1 full sequence analysis with BRCA2 full sequence analysis use 81211)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81215		known familial variant	XXX	N/A	Not Typically Performed by Physicians at this Time
●81216		BRCA2 (breast cancer 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis	XXX	N/A	Not Typically Performed by

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
		(When performing BRCA2 full sequence analysis with BRCA1 full sequence analysis use 81211)			Physicians at this Time
•81217		known familial variant	XXX	N/A	Not Typically Performed by Physicians at this Time
•81220	M4	CFTR (cystic fibrosis transmembrane conductance regulator) (eg, cystic fibrosis) gene analysis; common variants (eg, ACMG/ACOG guidelines) (When Intron 8 poly-T analysis is performed in conjunction with CXXX1 in a R117H positive patient, do not report CXXX5)	XXX	N/A	0.15 (RUC Recommended Value from April 2011 Meeting)
•81221	M5	known familial variants	XXX	N/A	0.40 (RUC Recommended Value from April 2011 Meeting)
•81222	M6	duplication/deletion variants	XXX	N/A	0.22 (RUC Recommended Value from April 2011 Meeting)
•81223	M7	full gene sequence	XXX	N/A	0.40 (RUC Recommended

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
					Value from April 2011 Meeting)
●81224	M8	intron 8 poly-T analysis (eg, male infertility)	XXX	N/A	0.15 (RUC Recommended Value from April 2011 Meeting)
●81225	Z2	CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)	XXX	N/A	0.37
●81226	Z3	CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)	XXX	N/A	0.43
●81227	Z4	CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)	XXX	N/A	0.38
●81228		Cytogenomic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number variants (eg, Bacterial Artificial Chromosome [BAC] or oligo-based comparative genomic hybridization [CGH] microarray analysis)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81229		interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants for chromosomal abnormalities (Do not report 81228 in conjunction with 81229)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81240	M9	F2 (prothrombin, coagulation factor II) (eg, hereditary hypercoagulability) gene analysis; 20210G>A variant	XXX	N/A	0.13 (RUC Recommended Value from April 2011

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
					Meeting)
•81241	M10	F5 (coagulation Factor V) (eg, hereditary hypercoagulability) gene analysis; Leiden variant	XXX	N/A	0.13 (RUC Recommended Value from April 2011 Meeting)
•81242		FANCC (Fanconi anemia, complementation group C) (eg, Fanconi anemia, type C) gene analysis; common variant (eg, IVS4+4A>T)	XXX	N/A	Not Typically Performed by Physicians at this Time
•81243	M11	FMR1 (Fragile X mental retardation 1) (eg, fragile X mental retardation) gene analysis; evaluation to detect abnormal (eg, expanded) alleles (For evaluation to detect and characterize abnormal alleles, see 81243, 81244) (For evaluation to detect and characterize abnormal alleles using a single assay [eg, PCR], use 81243)	XXX	N/A	0.37 (RUC Recommended Value from April 2011 Meeting)
•81244	M12	characterization of alleles (eg, expanded size and methylation status)	XXX	N/A	0.51 (RUC Recommended Value from April 2011 Meeting)
•81245	Z6	FLT3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene analysis, internal tandem duplication (ITD) variants (ie, exons 14, 15)	XXX	N/A	0.37

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
●81250		G6PC (glucose-6-phosphatase, catalytic subunit) (eg, Glycogen storage disease, Type 1a, von Gierke disease) gene analysis; common variants (eg, R83C, Q347X)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81251		GBA (glucosidase, beta, acid) (eg, Gaucher disease) gene analysis; common variants (eg, N370S, 84GG, L444P, IVS2+1G>A)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81255		HEXA (hexosaminidase A (alpha polypeptide) (eg, Tay-Sachs disease) gene analysis; common variants (eg, 1278insTATC, 1421+1G>C, G269S)	XXX	N/A	Not Typically Performed by Physicians at this Time
●81256	M13	HFE (hemochromatosis) (eg, hereditary hemochromatosis) gene analysis; common variants (eg, C282Y, H63D)	XXX	N/A	0.13 (RUC Recommended Value from April 2011 Meeting)
•81257	Z7	HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis, for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and Constant Spring)	XXX	N/A	0.50
●81260		IKBKAP (inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein) (eg, familial dysautonomia) gene analysis; common variants (eg, 2507+6T>C, R696P)	XXX	N/A	Not Typically Performed by Physicians at this Time
• 81261	Z8	IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)	XXX	N/A	0.52
•81262	Z9	direct probe methodology (eg, Southern blot)	XXX	N/A	0.61

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
●81263	Z10	IGH@ (Immunoglobulin heavy chain locus) (eg, leukemia and lymphoma, B-cell), variable region somatic mutation analysis	XXX	N/A	0.52
●81264	Z11	IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s) (For immunoglobulin lambda gene [IGL@] rearrangement or immunoglobulin kappa deleting element, [IGKDEL] analysis, report the appropriate methodology code[s] in the 83890-83914 series)	XXX	N/A	0.58
●81265	Z12	Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells)	XXX	N/A	0.40
+●81266	Z13	each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) (List separately in addition to code for primary procedure) (Use 81266 in conjunction with 81265)	ZZZ	N/A	0.41
●81267	Z14	Chimerism (engraftment) analysis, post ~~hematopoietic stem cell~~ transplantation specimen (eg, hematopoietic stem cell), includes comparison to previously performed baseline analyses; without cell selection	XXX	N/A	0.45
●81268	Z15	with cell selection (eg, CD3, CD33), each cell type (If comparative ~~baseline~~ STR analysis of recipient [using buccal swab or other germline tissue sample] and donor are performed after hematopoietic stem cell transplantation, report IXXX6-	XXX	N/A	0.51

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
		IXXX7 in conjunction with IXXX8-IXXX9 for chimerism testing)			
●81270	M14	JAK2 (Janus kinase 2) (eg, myeloproliferative disorder) gene analysis; V617F variant	XXX	N/A	0.15 (RUC Recommended Value from April 2011 Meeting)
●81275	M15	KRAS (v-Ki-ras2 Kirsten rat sarcoma viral oncogene) (eg, carcinoma) gene analysis; variants in codons 12 and 13	XXX	N/A	0.50 (RUC Recommended Value from April 2011 Meeting)
•81280		Long QT syndrome gene analyses (eg, KCNQ1, KCNH2, SCN5A, KCNE1, KCNE2, KCNJ2, CACNA1C, CAV3, SCN4B, AKAP, SNTA1, and ANK2); full sequence analysis	XXX	N/A	Not Typically Performed by Physicians at this Time
•81281		known familial sequence variant	XXX	N/A	Not Typically Performed by Physicians at this Time
•81282		duplication/deletion variants	XXX	N/A	Not Typically Performed by Physicians at this Time
●81290		MCOLN1 (mucolipin 1) (eg, Mucolipidosis, type IV) gene analysis; common variants (eg, IVS3-2A>G, del6.4kb)	XXX	N/A	Not Typically Performed by Physicians at this Time

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
●81291	M16	MTHFR (5,10-methylenetetrahydrofolate reductase) (eg, hereditary hypercoagulability) gene analysis; common variants (eg, 677T, 1298C)	XXX	N/A	0.15 (RUC Recommended Value from April 2011 Meeting)
●81292	Z16	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	XXX	N/A	1.40
●81293	Z17	known familial variants	XXX	N/A	0.52
●81294	Z18	duplication/deletion variants	XXX	N/A	0.80
●81295	Z19	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	XXX	N/A	1.40
●81296	Z20	known familial variants	XXX	N/A	0.52
●81297	Z21	duplication/deletion variants	XXX	N/A	0.80
●81298	Z22	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	XXX	N/A	0.80
●81299	Z23	known familial variants	XXX	N/A	0.52
●81300	Z24	duplication/deletion variants	XXX	N/A	0.65
●81301	Z25	Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed	XXX	N/A	0.50
●81302	Z26	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; full sequence analysis	XXX	N/A	0.65

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
• 81303	Z27	known familial variant	XXX	N/A	0.52
•81304	Z28	duplication/deletion variants	XXX	N/A	0.52
•81310	Z29	NPM1 (nucleophosmin) (eg, acute myeloid leukemia) gene analysis, exon 12 variants	XXX	N/A	0.39
•81315	M17	PML/RARalpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor alpha ~~PML-RARA regulated adaptor molecule 1~~) (eg, promyelocytic leukemia) translocation analysis; common breakpoints (eg, intron 3 and intron 6), qualitative or quantitative	XXX	N/A	0.37 (RUC Recommended Value from April 2011 Meeting)
•81316	M18	single breakpoint (eg, intron 3, intron 6 or exon 6), qualitative or quantitative (For intron 3 and intron 6 [including exon 6 if performed] analysis, use 81315) (If both intron 6 and exon 6 are analyzed, without intron 3, use one unit of 81316)	XXX	N/A	0.22 (RUC Recommended Value from April 2011 Meeting)
•81317	Z30	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	XXX	N/A	1.40
•81318	Z31	known familial variants	XXX	N/A	0.52
•81319	Z32	duplication/deletion variants	XXX	N/A	0.80
•81330		SMPD1(sphingomyelin phosphodiesterase 1, acid lysosomal) (eg, Niemann-Pick disease, Type A) gene analysis; common variants (eg, R496L, L302P, fsP330)	XXX	N/A	Not Typically Performed by Physicians at this Time
•81331	Z33	SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome	XXX	N/A	0.39

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
		and/or Angelman syndrome), methylation analysis			
●81332	Z34	SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1) (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *S and *Z)	XXX	N/A	0.40
●81340	Z35	TRB@~~TCB@~~ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	XXX	N/A	0.63
●81341	Z36	using direct probe methodology (eg, Southern blot)	XXX	N/A	0.45
●81342	Z37	TRG@ ~~TCG@~~ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s) (For T cell antigen alpha [TRA@ ~~TCA@~~] gene rearrangement analysis, report the appropriate methodology code(s) in the 83890-83914 series) (For T cell antigen delta [TCD@] gene rearrangement analysis, report 81341)	XXX	N/A	0.57
●81350	Z38	UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, irinotecan metabolism), gene analysis, common variants (eg, *28, *36, *37)	XXX	N/A	0.37

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
●81355	Z5	VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variants (eg, -1639/3673)	XXX	N/A	0.38
Human Leukocyte Antigen (HLA) typing is performed to assess compatibility of recipients and potential donors as a part of solid organ and hematopoietic stem cell pretransplant testing. HLA testing is also performed to identify HLA alleles and allele groups (antigen equivalents) associated with specific diseases and individualized responses to drug therapy (eg, HLA-B*27 and ankylosing spondylitis and HLA-B*57:01 and abacavir hypersensitivity), as well as other clinical uses. One or more HLA genes may be tested in specific clinical situations (eg, HLA-DQB1 for narcolepsy and HLA-A, -B, -C, -DRB1 and -DQB1 for kidney transplantation). Each HLA gene typically has multiple variant alleles or allele~~s~~ groups that can be identified by typing. For HLA result reporting, a low resolution HLA type is denoted by a two digit HLA name (eg, A*02) and intermediate resolution typing by a string of alleles or an NMDP (National Marrow Donor Program) code (eg, B*14:01/07N/08/12/14, B*39CKGN). Both low and intermediate resolution~~,~~ ~~both of which~~ are considered low resolution for code assignment. ~~and h~~High resolution typing resolves the common well defined (CWD) alleles and is usually denoted by ~~a greater~~at least 4 ~~number of~~ digits (eg, A*02:02, *03:01:01:01, A*26:01:01G, and C*03:04P), however, high resolution typing may include some ambiguities for rare alleles, which may be reported as a string of alleles or an NMDP code. If additional testing is required to resolve ambiguous allele combinations for high resolution typing, ~~it~~ this is included in the base HLA typing codes below. The gene names have been italicized similar to the other molecular pathology codes.					
●81370	Z39	HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1	XXX	N/A	0.54
●81371	Z40	HLA-A, -B, and -DRB1/3/4/5 (eg, verification typing)	XXX	N/A	0.60
●81372	Z41	HLA Class I typing, low resolution (eg, antigen equivalents); complete (ie, HLA-A, -B, and -C) (When performing both Class I and II low resolution HLA typing for HLA-A,-B,-C, -DRB1/3/4/5, and -DQB1, use 81370)	XXX	N/A	0.52
●81373	Z42	one locus (eg, HLA-A, -B, or -C), each (When performing a complete Class I [HLA-A,-B, and -C] low resolution HLA typing, use 81372) (When the presence or absence of a single antigen equivalent is reported using low resolution testing, use 81374)	XXX	N/A	0.37

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
•81374	Z43	one antigen equivalent (eg, B*27), each (When testing for presence or absence of more than 2 antigen equivalents at a locus, use HLXX4 for each locus tested)	XXX	N/A	0.34
•81375	Z44	HLA Class II typing, low resolution (eg, antigen equivalents); HLA-DRB1/3/4/5 and -DQB1 (When performing both Class I and II low resolution HLA typing for HLA-A,-B,-C, -DRB1/3/4/5, and –DQB1, use 81370)	XXX	N/A	0.60
•81376	Z45	one locus (eg, HLA-DRB1/3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each (When low resolution typing is performed for HLA-DRB1/3/4/5 and -DQB1, use HLXX6) (For low resolution typing, HLA-DRB1/3/4/5 should be treated as a single locus)	XXX	N/A	0.50
•81377	Z46	one antigen equivalent, each (When testing for presence or absence of more than 2 antigen equivalents at a locus, use 81379 for each locus)	XXX	N/A	0.43
•81378	Z47	HLA Class I and II typing, high resolution (ie, alleles or allele groups), HLA-A, -B, -C, and -DRB1	XXX	N/A	0.45
•81379	Z48	HLA Class I typing, high resolution (ie, alleles or allele groups); complete (ie, HLA-A, -B, and -C)	XXX	N/A	0.45
•81380	Z49	one locus (eg, HLA-A, -B, or -C), each	XXX	N/A	0.45

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
		(When a complete Class I high resolution typing for HLA-A,-B, and -C is performed, use 81379) (When the presence or absence of a single allele or allele group is reported using high resolution testing, use 81381)			
●81381	Z50	one allele or allele group (eg, B*57:01P), each (When testing for the presence or absence of more than 2 alleles or allele groups at a locus, use 81380 for each locus)	XXX	N/A	0.45
●81382	Z51	HLA Class II typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-DRB1, -DRB3,-DRB4, -DRB5, -DQB1, -DQA1, -DPB1, or -DPA1), each (When only the presence or absence of a single allele or allele group is reported using high resolution testing, use 81383)	XXX	N/A	0.45
●81383	Z52	one allele or allele group (eg, HLA-DQB1*06:02P), each (When testing for the presence or absence of more than 2 alleles or allele groups at a locus, use 81382 for each locus)	XXX	N/A	0.45
83912		Molecular diagnostics; interpretation and report	XXX	N/A	0.37 (No Change)
E 86822		HLA typing; lymphocyte culture, primed (PLC) (For HLA typing by molecular pathology techniques, see 81370-8138383890-83914 ~~with appropriate genetic testing~~	XXX	Paid on the Clinical Lab Fee Schedule	Paid on Clinical Lab Fee Schedule

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Source of Current Work RVU*	Work RVU Recommendation
		~~modifiers 4A-4G~~)			

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Molecular Pathology-Tier 1
TAB 5 - HLA Codes

CPT	Track	Resp	Long Descriptor	RVU Recommendation Original	RVU Recommendation Post Pre-Facilitation	Total Time	IWPUT	Rationale	
81370	Z39	30	HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1	0.54	0.54	15	0.036	Greater than 10 SNPs	81402
81371	Z40	15	HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, and -DRB1/3/4/5 (eg, verification typing)	0.77	0.60	30	0.026	Greater than 10 SNPs	81402
81372	Z41	15	HLA Class I typing, low resolution (eg, antigen equivalents); complete (ie, HLA-A, -B, and -C)	0.52	0.52	15	0.035	Greater than 10 SNPs	81402
81373	Z42	15	HLA Class I typing, low resolution (eg, antigen equivalents); one locus (eg, HLA-A, B, or -C), each	0.37	0.37	15	0.025	Greater than 10 SNPs	81402
81374	Z43	10	HLA Class I typing, low resolution (eg, antigen equivalents); one antigen equivalent (eg, B*27), each	0.34	0.34	13	0.026	2-10 SNPs	81402
81375	Z44	11	HLA Class II typing, low resolution (eg, antigen equivalents); HLA-DRB1/3/4/5 and -DQB1	0.60	0.60	15	0.040	Greater than 10 SNPs	81402
81376	Z45	12	HLA Class II typing, low resolution (eg, antigen equivalents); one locus (eg, HLA-DRB1/3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each	0.62	0.50	15	0.033	Greater than 10 SNPs	81402
81377	Z46	9	HLA Class II typing, low resolution (eg, antigen equivalents); one antigen equivalent, each	0.43	0.43	15	0.029	Greater than 10 SNPs	
81378	Z47	17	HLA Class I and II typing, high resolution (ie, alleles or allele groups), HLA-A, -B, -C, and -DRB1	0.45	0.45	20	0.023	16 exons	
81379	Z48	9	HLA Class I typing, high resolution (ie, alleles or allele groups); complete (ie, HLA-A, -B, and -C)	0.45	0.45	15	0.030		
81380	Z49	9	HLA Class I typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-A, -B, or -C), each	0.45	0.45	15	0.030		
81381	Z50	11	HLA Class I typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, B*57:01P), each	0.45	0.45	12	0.038		
81382	Z51	10	HLA Class II typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-DRB1, -DRB3, -DRB4, -DRB5, -DQB1, -DQA1, -DPB1, or -DPA1), each	0.45	0.45	15	0.030		
81383	Z52	11	HLA Class II typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, HLA-DQB1*06:02P), each	0.45	0.45	15	0.030	Greater than 10 SNPs crosswalked below 25th percentile based on time	81402

Molecular Pathology-Tier 1
TAB 5 - Codes Valued by Survey - Validation by Crosswalk

CPT	Track	Resp	Long Descriptor	RVU Recommendation Original	RVU Recommendation Post Pre-Facilitation	Total Time	IWPUT	Rationale
81401	**Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)CCND1/ IGH (BCL1/ IGH, t[(11;14]d) (eg,**							
81225	Z2	16	CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)	0.37	0.37	13	0.028	PCR of 2 to 10 varients
81245	Z6	44	FLT3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene analysis, internal tandem duplication (ITD) variants (ie, exons 14, 15)	0.37	0.37	15	0.025	1 Somatic Varient
81350	Z38	10	UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, irinotecan metabolism), gene analysis, common variants (eg, *28, *36, *37)	0.37	0.37	15	0.025	2-10 varients
81227	Z4	12	CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)	0.38	0.38	14	0.027	PCR with 2 to 10 varients
81355	Z5	12	VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variants (eg, -1639/3673)	0.38	0.38	15	0.025	PCR with 2 to 10 varients
81310	Z29	26	NPM1 (nucleophosmin) (eg, acute myeloid leukemia) gene analysis, exon 12 variants	0.39	0.39	19	0.021	One somatic varient, non sequencing
81331	Z33	11	SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis	0.39	0.39	15	0.026	Detection of a methylated variant
81265	Z12	37	Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample]	0.40	0.40	17	0.024	Detection of a dynamic mutation disorder/triplet repeat
81266	Z13	12	Comparative analysis using Short Tandem Repeat (STR) markers; each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) (List separately in addition	0.41	0.41	15	0.027	Detection of a dynamic mutation disorder/triplet repeat
81267	Z14	27	Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; without cell selection	0.52	0.45	18	0.025	Detection of a dynamic mutation disorder/triplet repeat
81268	Z15	23	Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; with cell selection (eg, CD3, CD33), each cell type (If comparative STR analysis of recipient [using	0.75	0.51	20	0.026	Detection of a dynamic mutation disorder/triplet repeat

Molecular Pathology-Tier 1
TAB 5 - Codes Valued by Survey - Validation by Crosswalk

CPT	Track	Resp	Long Descriptor	RVU Recommendation Original	RVU Recommendation Post Pre-Facilitation	Total Time	IWPUT	Rationale
81402	**Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon**							
81226	Z3	8	CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)	0.43	0.43	15	0.029	PCR greater than 10 varients
81301	Z25	41	Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed	0.50	0.50	20	0.025	Dynamic mutation disorder, two specimens
81261	Z8	58	IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas) gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)	0.52	0.52	21	0.025	Immunoglobulin and T cell receptor gene rearrangements
81342	Z37	50	TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	0.57	0.57	25	0.023	T-cell gene rearrangement
81264	Z11	23	IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	0.75	0.58	22	0.026	Immunoglobulin and T cell receptor gene rearrangements
81262	Z9	13	IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas) gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, Southern blot)	0.61	0.61	20	0.031	Immunoglobulin and T cell receptor gene rearrangements
81403	**Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)**							
81210	Z1	66	BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant	0.37	0.37	15	0.025	one exon sequencing
81263	Z10	10	IGH@ (Immunoglobulin heavy chain locus) (eg, leukemia and lymphoma) variable region somatic mutation analysis	0.74	0.52	23	0.023	Analysis of single exon by DNA sequence analysis

Molecular Pathology-Tier 1
TAB 5 - Codes Crosswalked Value to Tier 2

CPT	Track	Resp	Long Descriptor	RVU Recommendation Original	RVU Recommendation Post Pre-Facilitation	Total Time	IWPUT	Rationale
81401	**Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)CCND1/ IGH (BCL1/ IGH, t[(11;14]d) (eg,**							
81332	Z34	3	SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1) (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *S and *Z)	0.40	0.40	15	0.027	2-10 SNPs
81402	**Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon**							
81257	Z7	5	HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart's hydrops fetalis syndrome, HbH disease), gene analysis; for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and	0.50	0.50	20	0.025	Duplication/deletion varients
81340	Z35	28	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	0.63	0.63	25	0.025	T-cell gene rearrangements
81403	**Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)**							
81293	Z17	4	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	0.52	0.52	28	0.019	Single exon
81296	Z20	3	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	0.52	0.52	28	0.019	Sequencing single exon
81299	Z23	2	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	0.52	0.52	28	0.019	Sequencing single exon
81303	Z27	1	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variant	0.52	0.52	28	0.019	Single exon by sequence analysis
81304	Z28	1	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; duplication/deletion variants	0.52	0.52	28	0.019	Duplication/deletion variants of 2-5 exons
81318	Z31	1	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	0.52	0.52	28	0.019	Single exon sequencing

Molecular Pathology-Tier 1
TAB 5 - Codes Crosswalked Value to Tier 2

CPT	Track	Resp	Long Descriptor	RVU Recommendation Original	RVU Recommendation Post Pre-Facilitation	Total Time	IWPUT	Rationale
81404	**Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)**							
81300	Z24	3	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants	0.65	0.65	30	0.022	Duplication/deletion variants of 6-10 exons
81302	Z26	4	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; full sequence analysis	0.65	0.65	30	0.022	2-5 exons by sequence analysis
81405	**Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)**							
81294	Z18	3	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants	0.80	0.80	30	0.027	Sequencing 6-10 exons
81297	Z21	3	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non- polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants	0.80	0.80	30	0.027	Duplication/deletion variants of 11-25 exons
81298	Z22	3	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	0.80	0.80	30	0.027	Sequencing 6-10 exons
81319	Z32	1	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants	0.80	0.80	30	0.027	Duplication/deletion variants of 11-25 exons
81406	**Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)**							
81292	Z16	4	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	1.40	1.40	60	0.023	11 to 25 exons
81295	Z19	2	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	1.40	1.40	60	0.023	Duplication/deletion variants
81317	Z30	1	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	1.40	1.40	60	0.023	11-25 exons DNA sequencing
88388	**Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)**							
81341	Z36	8	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using direct probe methodology (eg, Southern blot)	0.45	0.45	19	0.024	T-cell gene rearrangement

Molecular Pathology-Tier 2
TAB 6

						Survey RVW					Total	Survey Intra-Service Time				
Source	**CPT**	**Track**	**Resp**	**Long Descriptor**	**IWPUT**	**Low**	**25th**	**Median**	**75th**	**High**	**Time**	**Low**	**25th**	**Median**	**75th**	**High**
REF	86320			Immunoelectrophoresis; serum	0.019			0.37			20			20		
SVY	81400	AA1	94	Molecular pathology procedure, Level 1 (eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis)	0.037	0.13	0.32	0.37	0.52	1.83	10	3	7	10	20	30
REC	81400	AA1			0.032			0.32			10			10		
REF	88291			Cytogenetics and molecular cytogenetics, interpretation and report	0.026			0.52			20			20		
SVY	81401	AA2	59	Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)CCND1/ IGH (BCL1/ IGH, t[(11;14]d) (eg,	0.033	0.25	0.40	0.50	0.68	1.90	15	5	10	15	22	60
REC	81401	AA2			0.027			0.40			15			15		
REF	88291			Cytogenetics and molecular cytogenetics, interpretation and report	0.026			0.52			20			20		
SVY	81402	AA3	61	Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon	0.026	0.25	0.50	0.52	0.87	2.50	20	5	15	20	30	50
REC	81402	AA3			0.025			0.50			20			20		
REF	88291			Cytogenetics and molecular cytogenetics, interpretation and report	0.026			0.52			20			20		
SVY	81403	AA4	47	Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)	0.028	0.40	0.52	0.77	1.00	2.50	28	10	20	28	35	60
REC	81403	AA4			0.019			0.52			28			28		
REF	88291			Level VI - Surgical pathology, gross and microscopic examination	0.026			0.52			20			20		
SVY	81404	AA5	49	Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)	0.028	0.50	0.65	0.83	1.15	2.80	30	7	20	30	45	60
REC	81404	AA5			0.022			0.65			30			30		

Molecular Pathology-Tier 2
TAB 6

Source	CPT	Track	Resp	Long Descriptor	IWPUT	Survey RVW Low	Survey RVW 25th	Survey RVW Median	Survey RVW 75th	Survey RVW High	Total Time	Survey Intra-Service Time Low	Survey Intra-Service Time 25th	Survey Intra-Service Time Median	Survey Intra-Service Time 75th	Survey Intra-Service Time High
REF	88112			Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal	0.027			1.18			43			43		
SVY	81405	AA6	31	Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)	0.031	0.52	0.80	0.94	1.40	4.50	30	10	20	30	60	80
REC	81405	AA6			0.027			0.80			30			30		
REF	88323			Consultation and report on referred material requiring preparation of slides	0.033			1.83			56			56		
SVY	81406	AA7	27	Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)	0.023	0.70	1.00	1.40	1.84	2.80	60	15	38	60	83	120
REC	81406	AA7			0.023			1.40			60			60		
REF	88309			Level VI - Surgical pathology, gross and microscopic examination	0.031			2.80			90			90		
SVY	81407	AA8	15	Molecular pathology procedure, Level 8 (eg, analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform)	0.031	1.00	1.20	1.85	2.80	5.00	60	20	30	60	100	180
REC	81407	AA8			0.031			1.85			60			60		
REF	88309			Level VI - Surgical pathology, gross and microscopic examination	0.031			2.80			90			90		
SVY	81408	AA9	15	Molecular pathology procedure, Level 9 (eg, analysis of >50 exons in a single gene by DNA sequence analysis)	0.035	1.30	2.35	2.80	2.85	3.50	80	18	45	80	150	215
REC	81408	AA9			0.029			2.35			80			80		

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81210 Tracking Number Z1 Original Specialty Recommended RVU: **0.37**
Presented Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.37**

CPT Descriptor: BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 54-year-old man with metastatic colorectal carcinoma is being considered for targeted therapy with anti-epidermal growth factor receptor (EGFR) monoclonal antibodies. Initial molecular studies indicate the tumor does not contain any of 12 common KRAS mutations at codons 12 or 13. A tumor-rich tissue sample is submitted for BRAF gene mutation testing.

Percentage of Survey Respondents who found Vignette to be Typical: 94%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: Paraffin is removed, and high quality DNA is isolated from the patient's tumor tissue. DNA is subjected to PCR amplification for exon 15 of the BRAF gene. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing on a capillary electrophoresis instrument. The pathologist evaluates the electropherograms to identify nucleotide sequence variants. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81210		
Sample Size: 875	**Resp N:** 66	**Response:** 7.5 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	20.00	**50.00**	100.00	800.00
Survey RVW:	0.15	0.37	**0.52**	0.77	1.83
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	10.00	**15.00**	20.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81210	**Recommended Physician Work RVU: 0.37**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
96446	XXX	0.37	**RUC Time**

CPT Descriptor Chemotherapy administration into the peritoneal cavity via indwelling port or catheter

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 19 **% of respondents:** 28.7 **%**

TIME ESTIMATES (Median)	**CPT Code: 81210**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.47
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.26	3.32
Urgency of medical decision making	3.53	3.53
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.79	3.89
Physical effort required	2.63	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.21	3.37
Outcome depends on the skill and judgment of physician	3.47	3.63
Estimated risk of malpractice suit with poor outcome	3.21	3.32

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.26	3.58
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*
Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from 66 pathologists and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81210 is slightly less intense

and complex as 88291, although the median Work RVU = 0.52. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.37 appropriately values new CPT code 81210 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 7,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81225 Tracking Number Z2 Original Specialty Recommended RVU: **0.37**
Presented Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.37**

CPT Descriptor: CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60 year-old Caucasian man is seen by a cardiologist after experiencing an acute myocardial infarct. The physician is considering percutaneous coronary intervention for this patient and needs to place the patient on an anti-platelet drug (clopidogrel) to prevent clotting. To determine whether the standard 300 mg loading dose of clopidogrel should be altered, a sample of anticoagulated peripheral blood is submitted to the laboratory to test for common variants in the CYP2C19 gene.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to two amplification reactions (PCR). Pooled PCR amplicons are enzymatically fragmented, labeled with biotin, and hybridized to a microarray containing oligonucleotide probes. After staining with a streptavidin-conjugated fluorescent dye, the array is scanned to detect signal from the hybridized DNA fragments. The pathologist evaluates the allelic ratios and data supporting the recommended identification of specific CYP2C19 variants. The pathologist composes a report which specifies the patient's CYP2C19 allele status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81225		
Sample Size: 875	**Resp N:** 16	**Response:** 1.8 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	19.00	**23.00**	50.00	120.00
Survey RVW:	0.16	0.37	**0.50**	0.73	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	10.00	**13.00**	21.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81225	**Recommended Physician Work RVU: 0.37**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**13.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
96446	XXX	0.37	**RUC Time**

CPT Descriptor Chemotherapy administration into the peritoneal cavity via indwelling port or catheter

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 5 **% of respondents:** 31.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 81225**	**Key Reference CPT Code:** 86320	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	13.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**13.00**	**17.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.20
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.20	3.40
Urgency of medical decision making	3.80	3.40
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.40	3.60
Physical effort required	2.00	2.20
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.60	3.20
Outcome depends on the skill and judgment of physician	3.00	3.20
Estimated risk of malpractice suit with poor outcome	3.60	3.00

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.20	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*
Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 886320 (Work RVU = 0.37, 17 minutes). The survey respondents indicated code 81225 is

more intense and complex than 86320 with a median Work RVU = 0.50. The expert panel agreed that the median physician time of 13 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.37 appropriately values new CPT code 81225 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81226 Tracking Number Z3 Original Specialty Recommended RVU: **0.43**
Presented Recommended RVU: **0.43**
Global Period: XXX RUC Recommended RVU: **0.43**

CPT Descriptor: CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A pre-menopausal 47-year-old woman is seen by an oncologist for breast cancer. Her tumor was positive for estrogen and progesterone receptors. The oncologist is considering treatment with tamoxifen rather than an aromatase inhibitor. To aid in this decision, the oncologist desires to predict the patient's ability to metabolize tamoxifen to the more active drug, endoxifen. A sample of anticoagulated peripheral blood is submitted to the laboratory to test for common variants in the CYP2D6 gene.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to two amplification reactions (PCR). Pooled PCR amplicons are enzymatically fragmented, labeled with biotin, and hybridized to a microarray containing oligonucleotide probes. After staining with a streptavidin-conjugated fluorescent dye, the array is scanned to detect signal from the hybridized DNA fragments. The pathologist evaluates the allelic ratios and data supporting the recommended identification of specific CYP2D6 variants. The pathologist composes a report which specifies the patient's CYP2D6 allele status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81226		
Sample Size: 875	**Resp N:** 8	**Response:** 0.9 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**10.00**	12.00	50.00
Survey RVW:	0.37	0.43	**0.50**	0.50	0.52
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	14.00	**15.00**	15.00	20.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81226	**Recommended Physician Work RVU: 0.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92250	XXX	0.44	**RUC Time**	2,186,775

CPT Descriptor 1 Fundus photography with interpretation and report

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 2 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

Other Reference CPT Code	Global	Work RVU	Time Source
93923	XXX	0.45	**RUC Time**

CPT Descriptor 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 level(s), or single level study with provocative functional maneuvers (eg, measurements with postural provocative tests, or measurements with reactive hyperemia)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 42.8 **%**

TIME ESTIMATES (Median)	**CPT Code: 81226**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	

Median Office Visit Time	0.0	0.00
Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	3.33
Urgency of medical decision making	4.00	3.33
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.33	3.67
Physical effort required	3.67	3.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.67	3.33
Outcome depends on the skill and judgment of physician	3.67	3.33
Estimated risk of malpractice suit with poor outcome	3.67	4.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.33
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81226 is more intense and complex than 88291, although the median Work RVU = 0.50. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.43 appropriately values new CPT code 81226 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81227 Tracking Number Z4 Original Specialty Recommended RVU: **0.38**
Presented Recommended RVU: **0.38**
Global Period: XXX RUC Recommended RVU: **0.38**

CPT Descriptor: CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60-year-old man presents to his physician with complaints of fatigue, lightheadedness, and palpitations. Diagnostic workup revealed atrial fibrillation, for which the physician would like to prescribe warfarin. In order to facilitate rapid achievement of the proper dose, she orders warfarin sensitivity genotyping for common variants of the CYP2C9 gene, which have been shown to significantly influence the dose of warfarin needed to achieve appropriate therapeutic levels. A sample of peripheral blood is submitted to the laboratory for genotypic analysis of the CYP2C9 gene.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to a multiplexed PCR reaction, using primers specific for the most common variants, CYP2C9(*2) and CYP2C9(*3). The amplified target DNA is hybridized to a ferrocene signal probe and to an allele-specific capture probe, which is immobilized on an oligoarray. The captured target DNA generates a specific electrochemical signal that identifies the target DNA sequence. The pathologist examines the data and analytic system controls, and determines whether CYP2C9 variants are present in the patient's sample. The pathologist composes a report which specifies the patient's genotype. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81227		
Sample Size:	875	**Resp N:** 12	**Response:** 1.3 %
Sample Type:	Convenience	**Additional Sample Information:**	

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	18.00	20.00	**20.00**	56.00	100.00
Survey RVW:	0.32	0.38	**0.50**	0.71	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	10.00	**14.00**	19.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81227	**Recommended Physician Work RVU: 0.38**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**14.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status

Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:

Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
93790	XXX	0.38	**RUC Time**

CPT Descriptor Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; physician review with interpretation and report

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 6 **% of respondents:** 50.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81227**	**Key Reference CPT Code: 86320**	**Source of Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	14.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**14.00**	**17.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.67	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.17	3.17
Urgency of medical decision making	3.50	2.83
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.83	3.17
Physical effort required	2.33	2.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.33	3.00
Outcome depends on the skill and judgment of physician	3.17	3.33
Estimated risk of malpractice suit with poor outcome	3.17	2.83

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	2.83
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 86320 (Work RVU = 0.37, 17 minutes). The survey respondents indicated code 81227 is more intense and complex as 86320 and the median Work RVU = 0.50. The expert panel agreed that the median physician time of 14 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.38 appropriately values new CPT code 81227 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. `

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81245 Tracking Number Z6 Original Specialty Recommended RVU: **0.37**
Presented Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.37**

CPT Descriptor: FLT3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene analysis, internal tandem duplication (ITD) variants (ie, exons 14, 15)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55 year old man presents to his primary care physician complaining of fatigue, dyspnea on exertion, and easy bruising. The patient's hemogram demonstrates leukocytosis with 30% blasts, anemia and thrombocytopenia. The peripheral blood smear shows decreased platelets and red blood cells along with large blasts with prominent nucleoli and Auer rods. The bone marrow contains 80% blasts which demonstrate an aberrant immunophenotype (CD33/CD13-positive with some cells expressing CD34 and CD117). The karyotype of the malignant cells is normal. An anticoagulated bone marrow specimen is submitted to the laboratory for FLT3 internal tandem duplication (ITD) mutation analysis.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from the bone marrow sample and subjected to a single PCR amplification encompassing the region which normally contains FLT3 internal tandem duplications. The fluorescent PCR products are separated by capillary electrophoresis. The pathologist evaluates the electropherogram comparing the relative sizes of the PCR product(s) to a control peak to determine FLT3/ITD mutation status. The pathologist composes a report which specifies the FLT3 ITD mutation status of the patient's leukemic cells. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81245		
Sample Size: 875	**Resp N:** 44	**Response:** 5.0 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	20.00	**35.00**	80.00	150.00
Survey RVW:	0.13	0.37	**0.45**	0.52	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	10.00	**15.00**	20.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81245	**Recommended Physician Work RVU: 0.37**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
96446	XXX	0.37	**RUC Time**

CPT Descriptor Chemotherapy administration into the peritoneal cavity via indwelling port or catheter

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 14 **% of respondents:** 31.8 **%**

TIME ESTIMATES (Median)	**CPT Code: 81245**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.14	3.43
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.36	3.57
Urgency of medical decision making	3.43	3.50
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.50	3.93
Physical effort required	2.37	3.21
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.29
Outcome depends on the skill and judgment of physician	3.36	3.71
Estimated risk of malpractice suit with poor outcome	3.29	3.93

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.21	3.43
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*
Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from 44 pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81245 is less intense and

complex as 88291, and theWork RVU = 0.45. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.37 appropriately values new CPT code 81245 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 5,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81257 Tracking Number Z7 Original Specialty Recommended RVU: **0.50**
Presented Recommended RVU: **0.50**
Global Period: XXX RUC Recommended RVU: **0.50**

CPT Descriptor: HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart's hydrops fetalis syndrome, HbH disease), gene analysis; for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and Constant Spring)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 26-year-old G1P0 woman of Vietnamese descent presents to her obstetrician for a first prenatal visit after missing a menstrual cycle and obtaining a positive home pregnancy test result. Both the patient and her partner have been identified as alpha thalassemia carriers by hemoglobin electrophoresis. An anticoagulated peripheral blood sample is submitted to the laboratory for testing to identify the specific type of alpha thalassemia mutation the patient carries.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to multiplex PCR amplification utilizing primers for 7 commonly occurring alpha thalassemia deletions. The PCR products, a molecular weight marker, and an allelic ladder are separated by gel electrophoresis. The pathologist evaluates the patterns of the PCR products on the gel in order to identify the patient's specific deletion. The pathologist composes a report specifying the patient's mutation status and the respective chromosomal locations (eg cis, trans). The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81257		
Sample Size: 875	**Resp N:** 5	**Response:** 0.5 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	10.00	**25.00**	400.00	716.00
Survey RVW:	0.30	0.50	**0.52**	0.52	0.65
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	4.00	5.00	**15.00**	15.00	25.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81257	**Recommended Physician Work RVU: 0.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 1 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
99407	XXX	0.50	**RUC Time**

CPT Descriptor Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 60.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81257**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	20.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**20.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.67	3.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.67	3.67
Urgency of medical decision making	3.33	3.33
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.67	3.67
Physical effort required	3.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.33
Outcome depends on the skill and judgment of physician	3.33	3.33
Estimated risk of malpractice suit with poor outcome	3.00	3.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.67	3.67
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81257 with that of new tier 2 service 81402 *Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon)* (Recommended Work RVU = 0.50, 20 minutes). CAP recommends a direct crosswalk of 81257 to the physician work and time of CPT code 81402, based on work described in the CPT descriptors. A physician Work RVU of 0.50 also represents the 25th percentile of the survey respondents.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 5,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81261 Tracking Number Z8 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas) gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An enlarged supraclavicular lymph node is identified during physical examination of 62-year-old man at a routine physician visit. A biopsy of the supraclavicular node is taken; initial morphologic and immunologic studies demonstrate a B-cell population that is suspicious for malignancy. A lymph node sample is submitted for immunoglobulin heavy chain gene rearrangement analysis for further evidence of a clonal B-lymphoid population.

Percentage of Survey Respondents who found Vignette to be Typical: 98%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from the lymph node sample and subjected to five multiplex PCR amplification reactions using fluorescently-tagged primers directed at various framework, diversity and joining regions of the immunoglobulin heavy chain gene. Following amplification, the reaction products from each tube are separately subjected to capillary electrophoresis. The pathologist evaluates the electrophoretic tracings for one or two predominant fragments of discrete size against background polyclonal or oligoclonal peaks for evidence of clonality. The pathologist composes a report which specifies the clonality status of the B-cell population in the patient sample. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81261		
Sample Size: 875	**Resp N:** 58	**Response:** 6.6 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	35.00	**50.00**	126.00	500.00
Survey RVW:	0.35	0.52	**0.77**	0.93	2.20
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	7.00	15.00	**21.00**	30.00	50.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81261	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**21.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service?

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 1 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 2 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 15 **% of respondents:** 25.8 **%**

TIME ESTIMATES (Median)	**CPT Code: 81261**	**Key Reference CPT Code: 88291**	**Source of Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	21.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**21.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.27
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.13
Urgency of medical decision making	3.93	3.87
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	4.13
Physical effort required	3.27	3.27
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.93	3.87
Outcome depends on the skill and judgment of physician	4.47	4.40
Estimated risk of malpractice suit with poor outcome	3.60	3.60

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.93	4.07
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). All intensity and complexity measures indicated a high intensity and complexity. The expert panel agreed that the median physician time of 21 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.52 appropriately values 81261 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions:

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 5,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81262 Tracking Number Z9 Original Specialty Recommended RVU: **0.61**
Presented Recommended RVU: **0.61**
Global Period: XXX RUC Recommended RVU: **0.61**

CPT Descriptor: IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas) gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, Southern blot)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An enlarged inguinal lymph node and splenomegaly was found on physical examination of a 54-year-old white man who visited his internist complaining of increasing abdominal discomfort. The enlarged inguinal lymph node is excised and initial morphologic and immunologic studies demonstrate a B-cell population that is suspicious for malignancy. A lymph node sample retained frozen is submitted for Immunoglobulin heavy chain gene rearrangement Southern blot analysis.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: A large quantity of high quality genomic DNA is isolated from the lymph node sample, and gel electrophoresis is performed to assess integrity of the extracted DNA. The DNA undergoes digestion with the 3 restriction enzymes. The genomic fragments are separated by gel electrophoresis, transferred to a nylon membrane by capillary action, and hybridized to radiolabeled probes directed toward sequences in the immunoglobulin heavy chain joining region. The pathologist evaluates the autoradiographically generated hybridization patterns of the digestion fragments in relation to marker and control lanes for evidence of clonal rearrangements or polymorphisms. The pathologist composes a report specifying the clonality status of the B-cell population. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81262		
Sample Size: 875	**Resp N:** 13	**Response:** 1.4 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	5.00	**50.00**	40.00	75.00
Survey RVW:	0.37	0.61	**0.80**	0.84	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	14.00	**20.00**	20.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81262	**Recommended Physician Work RVU: 0.61**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88182	XXX	0.77	**RUC Time**

CPT Descriptor Flow cytometry, cell cycle or DNA analysis

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 2 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 13 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81262**	**Key Reference CPT Code:** 88182	**Source of Time** RUC Time
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	20.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	20.00	20.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.75	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.75	4.00
Urgency of medical decision making	3.25	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	4.25
Physical effort required	3.25	3.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.50	4.00
Outcome depends on the skill and judgment of physician	4.00	4.25
Estimated risk of malpractice suit with poor outcome	4.00	4.50

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.75	3.50
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88182 (Work RVU = 0.77, 20 minutes). All intensity and complexity measures indicated a high intensity and complexity. The expert panel agreed that the median physician time of 20 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.61 appropriately values 81262 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 700
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81263 Tracking Number Z10

Original Specialty Recommended RVU: **0.74**
Presented Recommended RVU: **0.52**
RUC Recommended RVU: **0.52**

Global Period: XXX

CPT Descriptor: IGH@ (Immunoglobulin heavy chain locus) (eg, leukemia and lymphoma) variable region somatic mutation analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60-year-old man presents to his primary care physician complaining of recent fatigue, early satiety, and a 5 – 10 lb. weight loss. The patient has generalized lymphadenopathy and a palpable spleen tip. The complete blood count demonstrates lymphocytosis with anemia and thrombocytopenia. The peripheral blood smear shows an excess of small lymphocytes, occasional prolymphocytes, and smudge cells. Flow cytometry confirms a diagnosis of chronic lymphocytic leukemia. A blood specimen is submitted for IgVH sequencing to assess for somatic hypermutation in the leukemic cells.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to two multiplex PCR reactions utilizing primers directed at the leader, framework 1 and junctional regions of the immunoglobulin heavy chain gene. PCR products are separated by gel electrophoresis. After purification, clonal PCR products are subjected to dideoxynucleotide sequencing. The pathologist evaluates the degree of divergence from an appropriately selected reference sequence in order to determine somatic hypermutation status. The pathologist composes a report which specifies the patient's IvGH mutation status. The report is edited, signed, and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81263		
Sample Size: 875	**Resp N:** 10	**Response:** 1.1 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	26.00	**55.00**	100.00	100.00
Survey RVW:	0.50	0.52	**0.74**	0.78	0.90
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	8.00	20.00	**23.00**	30.00	35.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81263	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**23.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88182	XXX	0.77	**RUC Time**

CPT Descriptor Flow cytometry, cell cycle or DNA analysis

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93307	XXX	0.92	**RUC Time**	92,368

CPT Descriptor 2 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, without spectral or color Doppler echocardiography

Other Reference CPT Code	Global	Work RVU	Time Source
78707	XXX	0.96	**RUC Time**

CPT Descriptor Kidney imaging morphology; with vascular flow and function, single study without pharmacological intervention

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 40.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81263**	**Key Reference CPT Code: 88182**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	23.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**23.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.25	3.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.25	3.50
Urgency of medical decision making	2.75	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.75	3.50
Physical effort required	3.25	3.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.25
Outcome depends on the skill and judgment of physician	3.50	3.50
Estimated risk of malpractice suit with poor outcome	2.25	2.75

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.75
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88182 (Work RVU = 0.77, 20 minutes). All intensity and complexity measures indicated a high intensity and complexity. The committee also distinguished this service as a unique complex mutation analysis unlike others. The expert panel agreed that the median physician time of 23 minutes is typical and compared to the key reference service, and the median work RVU of 0.74 appropriately values 81263 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 400
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81264 Tracking Number Z11 Original Specialty Recommended RVU: **0.75**
Presented Recommended RVU: **0.58**
Global Period: XXX RUC Recommended RVU: **0.58**

CPT Descriptor: IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An enlarged supraclavicular lymph node is identified during physical examination of 62-year-old male patient at a routine physician visit. A biopsy of the enlarged node is taken and initial morphologic and immunologic studies demonstrate a B-cell population that is suspicious for malignancy. A lymph node sample is submitted for immunoglobulin kappa light chain gene rearrangement analysis for further evidence of a clonal B-lymphoid population.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from the lymph node sample and subjected to two multiplex PCR amplification reactions using fluorescently-tagged primers directed at various framework, intronic, joining and kappa-deletion regions of the immunoglobulin kappa light chain gene. Following amplification, the reaction products from each tube are separately subjected to capillary electrophoresis. The pathologist evaluates the electrophoretic tracings for one or two predominant fragments of discrete size against background polyclonal or oligoclonal peaks for evidence of clonality. The pathologist composes a report which specifies the rearrangement and clonality status of the B-cell population in the patient sample. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81264		
Sample Size: 875	**Resp N:** 23	**Response:** 2.6 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	20.00	**50.00**	63.00	300.00
Survey RVW:	0.40	0.58	**0.75**	0.86	2.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	7.00	14.00	**22.00**	30.00	45.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81264	**Recommended Physician Work RVU: 0.58**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**22.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88182	XXX	0.77	**RUC Time**

CPT Descriptor Flow cytometry, cell cycle or DNA analysis

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
78707	XXX	0.96	**RUC Time**	19,729

CPT Descriptor 1 Kidney imaging morphology; with vascular flow and function, single study without pharmacological intervention

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
93016	XXX	0.45	**RUC Time**

CPT Descriptor Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 6 **% of respondents:** 26.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81264**	**Key Reference CPT Code: 88182**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	22.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**22.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.83	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.50	3.67
Urgency of medical decision making	3.50	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.83	4.00
Physical effort required	2.67	3.17
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.50	3.83
Outcome depends on the skill and judgment of physician	3.67	4.00
Estimated risk of malpractice suit with poor outcome	3.50	3.83

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.67	3.83
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88182 (Work RVU = 0.77, 20 minutes). The committee agreed that this service is similar to 81261 however it is a more complex service. In addition, the survey respondents assimilated the work to that of 88182. The expert panel agreed that the median physician time of 22 minutes is typical and compared to the key reference service, and the median work RVU of 0.75 appropriately values 81264 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81265 Tracking Number Z12 Original Specialty Recommended RVU: **0.40**
Presented Recommended RVU: **0.40**
Global Period: XXX RUC Recommended RVU: **0.40**

CPT Descriptor: Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old man presents to his physician complaining of fatigue, dyspnea on exertion, and easy bruising. The patient's complete blood count, peripheral blood smear, flow cytometry analysis, and bone marrow examination support a diagnosis of acute myeloid leukemia. Normal cytogenetic findings and the presence of a FLT3 internal tandem duplication mutation place him at high risk for relapse following initial treatment. The patient achieves remission with induction chemotherapy, and he is referred for peripheral blood stem cell transplantation. A matched related donor is found. Stem cells are collected from the donor, and blood specimens from the patient and the donor are submitted for pre-transplant testing to identify informative short tandem repeat (STR) markers for post-transplant chimerism testing.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from the recipient and donor whole blood samples. The individual DNA isolates are each subjected to a single multiplex PCR amplification reaction that utilizes a combination of 16 primer sets directed toward 15 polymorphic STRs and the gender marker amelogenin. The donor and recipient fluorescent PCR products are separated by capillary electrophoresis. The pathologist compares the relative sizes of the PCR products from the respective electropherograms, and identifies informative alleles that can be used for post-transplant engraftment monitoring. The pathologist composes a report specifying the informative STRs for future chimerism testing. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81265		
Sample Size: 875	**Resp N:** 37	**Response:** 4.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	8.00	40.00	**70.00**	130.00	1000.00
Survey RVW:	0.24	0.40	**0.70**	0.92	2.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	13.00	**17.00**	25.00	50.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81265	**Recommended Physician Work RVU: 0.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**17.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 1 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94060	XXX	0.31	**RUC Time**	1,260,624

CPT Descriptor 2 Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 9 **% of respondents:** 24.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81265**	**Key Reference CPT Code: 86320**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	17.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**17.00**	**17.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.78	2.78
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.56	2.67
Urgency of medical decision making	2.78	2.78
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	2.67
Physical effort required	2.56	2.22
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	2.78
Outcome depends on the skill and judgment of physician	2.78	2.78
Estimated risk of malpractice suit with poor outcome	3.22	2.67

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.89	2.67
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 86320 (Work RVU = 0.37, 17 minutes). This service involves the analysis of more than one specimen and the expert panel agreed that the median physician time of 17 minutes is typical and compared to the key reference service, and the 25th percentile work RVU of 0.40 appropriately values 81265 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   ☐ Multiple codes are used to maintain consistency with similar codes.
   ☐ Historical precedents.
   ☒ Other reason (please explain) 81265 may be billed with add on code 81265. It may be also billed at or around the time as any HLA typing codes are billed.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
15,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81266 Tracking Number Z13 Original Specialty Recommended RVU: **0.41**
Presented Recommended RVU: **0.41**
Global Period: XXX RUC Recommended RVU: **0.41**

CPT Descriptor: Comparative analysis using Short Tandem Repeat (STR) markers; each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) (List separately in addition to code for primary procedure)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old man presents to his physician complaining of fatigue, dyspnea on exertion, and easy bruising. The patient's complete blood count, peripheral blood smear, flow cytometry analysis, and bone marrow examination support a diagnosis of acute myeloid leukemia. Normal cytogenetic findings and the presence of a FLT3 internal tandem duplication mutation place him at high risk for relapse following initial treatment. The patient achieves remission with induction chemotherapy, and he is referred for peripheral blood stem cell transplantation. Because a matched donor cannot be identified, the patient will undergo a double cord blood transplant. A blood specimen from the patient and samples of each donor cord blood are submitted for pre-transplant testing to identify informative short tandem repeat (STR) markers for post-transplant chimerism testing.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from the recipient whole blood and both cord blood samples. The individual DNA isolates are each subjected to a single multiplex PCR amplification reaction that utilizes a combination of 16 primer sets directed toward 15 polymorphic STRs and the gender marker amelogenin. The fluorescent PCR products from the donors and recipient are separated by capillary electrophoresis. The pathologist compares the relative sizes of the PCR products from the respective electropherograms, and identifies informative alleles that can be used for post-transplant engraftment monitoring. The pathologist composes a report which specifies the informative STRs for future chimerism testing. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81266		
Sample Size: 875	**Resp N:** 12	**Response:** 1.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	7.00	10.00	**20.00**	50.00	400.00
Survey RVW:	0.25	0.41	**0.48**	0.52	1.20
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	6.00	11.00	**15.00**	19.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81266	**Recommended Physician Work RVU: 0.41**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94060	XXX	0.31	**RUC Time**	1,260,624

CPT Descriptor 1 Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 2 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81266**	**Key Reference CPT Code: 86320**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**17.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.50	2.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.25	2.00
Urgency of medical decision making	2.25	2.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.25	2.50
Physical effort required	2.75	2.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.50	2.00
Outcome depends on the skill and judgment of physician	2.50	2.25
Estimated risk of malpractice suit with poor outcome	2.75	2.00

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.75	2.25
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 86320 (Work RVU = 0.37, 17 minutes). The committee agreed that the work of 81266 more intense than 86320. In addition, the survey respondents assimilated the work to that of 88182. The expert panel agreed that the median physician time of 22 minutes is typical and compared to the key reference service, and the 25th percentile work RVU of 0.41 appropriately values 81266 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   ☒ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   ☐ Multiple codes are used to maintain consistency with similar codes.
   ☐ Historical precedents.
   ☒ Other reason (please explain) 81266 is an add on code and it may be billed at or around the same time as a HLA typing code.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed)

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty How often?

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 300
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81267 Tracking Number Z14 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.45**

CPT Descriptor: Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; without cell selection

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old man who presents with normal karyotype acute myeloid leukemia (AML) undergoes a peripheral blood stem cell transplant after achieving remission with cytarabine and anthracycline chemotherapy. Thirty days post-transplant a blood specimen from the patient is submitted for engraftment (chimerism) testing.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to a single multiplex PCR amplification reaction that utilizes a combination of 16 primer sets directed toward 15 polymorphic STRs and the gender marker amelogenin. The fluorescent PCR products are separated by capillary electrophoresis. The pathologist compares electropherogram to the pretransplant recipient and donor electropherograms, and analyzes the informative alleles for the relative proportions of donor and recipient DNA. The pathologist composes a report that states the percentages of donor and recipient alleles present. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81267		
Sample Size: 875	**Resp N:** 27	**Response:** 3.0 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	20.00	100.00	**110.00**	200.00	1200.00
Survey RVW:	0.37	0.45	**0.52**	0.80	1.39
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	6.00	15.00	**18.00**	21.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81267	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**18.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92093	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 1 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 2 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 10 **% of respondents:** 37.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81267**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	18.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**18.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.40	3.60
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.50	3.50
Urgency of medical decision making	3.90	3.90
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.90	4.20
Physical effort required	3.40	3.20
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.00	4.10
Outcome depends on the skill and judgment of physician	4.10	4.10
Estimated risk of malpractice suit with poor outcome	3.50	3.70

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.40	3.50
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The committee agreed that the work of 81267 more intense than 88291. In addition, 81267 is similar to 81265 (Work RVU recommended = 0.40, 17 minutes) but is much more work as it involves an intense and complex comparison of analyses. The expert panel agreed that the median physician time of 18 minutes is typical and compared to the key reference service, and the median work RVU of 0.52 appropriately values 81267 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81268 Tracking Number Z15 Original Specialty Recommended RVU: **0.75**
Presented Recommended RVU: **0.51**
Global Period: XXX RUC Recommended RVU: **0.51**

CPT Descriptor: Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; with cell selection (eg, CD3, CD33), each cell type
(If comparative STR analysis of recipient [using buccal swab or other germline tissue sample] and donor are performed after hematopoietic stem cell transplantation, report IXXX6-IXXX7 in conjunction with IXXX8-IXXX9 for chimerism testing)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old man who presents with normal karyotype acute myeloid leukemia (AML) undergoes a peripheral blood stem cell transplant after achieving remission with cytarabine and anthracycline chemotherapy. Thirty days post-transplant a blood specimen from the patient is submitted for engraftment (chimerism) testing.

Percentage of Survey Respondents who found Vignette to be Typical: 96%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: CD3-positive and CD33-positive cells are isolated using fluorescent antibody-based flow cytometry. High quality genomic DNA is isolated from each of these cellular fractions and subjected to a single multiplex PCR amplification reaction that utilizes a combination of 16 primer sets directed toward 15 polymorphic STRs and the gender marker amelogenin. The fluorescent PCR products are separated by capillary electrophoresis. The pathologist compares the electropherograms to the pretransplant recipient and donor electropherograms, and analyzes the informative alleles for the relative proportions of donor and recipient DNA for each cellular component. The pathologist composes a report that states the percentages of donor and recipient alleles present for each cellular component. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81268		
Sample Size: 875	**Resp N:** 23	**Response:** 2.6 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	20.00	50.00	**100.00**	300.00	1200.00
Survey RVW:	0.45	0.51	**0.75**	0.90	1.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	8.00	15.00	**20.00**	22.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81268	**Recommended Physician Work RVU: 0.51**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 2 Ultrasound, abdominal, real time with image documentation; complete

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 30.4 **%**

TIME ESTIMATES (Median)	**CPT Code: 81268**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	20.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**20.00**	**20.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.57	3.86
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.86	3.71
Urgency of medical decision making	4.00	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.86	4.00
Physical effort required	3.29	3.14
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.71	3.71
Outcome depends on the skill and judgment of physician	4.14	4.00
Estimated risk of malpractice suit with poor outcome	3.29	3.71

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.86	3.71
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The committee agreed that the work of 81268 more intense than 88291 and more work. 81268 involves more work than 81267 whereas individual cell sorting is performed and compared to baseline analyses. The survey respondents agreed that the physician work was greater than the reference code and that of 81267. The intensity and complexity indicators agree there is more work as well. The expert panel agreed that the median physician time of 20 minutes is typical and compared to the key reference service, and the median work RVU of 0.75 appropriately values 81268 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 300
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81292 Tracking Number Z16

Original Specialty Recommended RVU: **1.40**
Presented Recommended RVU: **1.40**
RUC Recommended RVU: **1.40**

Global Period: XXX

CPT Descriptor: MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old male patient presents with fatigue and weight loss. On physical examination, occult blood is discovered in the stool. The patient's family history is positive for colon cancer in several relatives. The patient undergoes a right hemicolectomy after a large, poorly differentiated adenocarcinoma with lymphocytic infiltration is found in the right colon. Microsatellite instability testing performed on the tumor demonstrates high level instability (MSI-H). Immunohistochemical staining reveals a loss of MLH1 protein expression. Mutation testing of the tumor for the BRAF V600E mutation and MLH1 hypermethylation are negative. An anticoagulated peripheral blood sample is submitted for MLH1 gene sequencing to assess the patient for the presence of an HNPCC-related mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 19 individual PCR amplification reactions whose products encompass the entire coding sequence, exon-intron boundaries and portions of 5'and 3'-untranslated regions of the MLH1 gene. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variants suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report which specifies the patient's mutation status to include information from a database and literature search regarding the significance of variants identified. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81292		
Sample Size:	875	**Resp N:** 4	**Response:** 0.4 %
Sample Type:	Convenience	**Additional Sample Information:**	

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	4.00	**8.00**	45.00	150.00
Survey RVW:	0.80	0.91	**1.15**	1.36	1.40
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	15.00	15.00	**28.00**	42.00	48.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81292	**Recommended Physician Work RVU: 1.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88173	XXX	1.39	**RUC Time**

CPT Descriptor Cytopathology, evaluation of fine needle aspirate; interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94621	XXX	1.42	**RUC Time**	12,557

CPT Descriptor 1 Pulmonary stress testing; complex (including measurements of CO2 production, O2 uptake, and electrocardiographic recordings)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
73721	XXX	1.35	**RUC Time**	609,187

CPT Descriptor 2 Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material

Other Reference CPT Code	Global	Work RVU	Time Source
49423	000	1.46	**RUC Time**

CPT Descriptor Exchange of previously placed abscess or cyst drainage catheter under radiological guidance (separate procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 75.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81292**	**Key Reference CPT Code: 88173**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	60.00	50.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**60.00**	**50.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	3.00
Urgency of medical decision making	2.67	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	4.00
Physical effort required	3.33	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.67	3.67
Outcome depends on the skill and judgment of physician	4.33	4.00
Estimated risk of malpractice suit with poor outcome	3.00	3.33

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.67
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81292 with that of new tier 2 service 81406 *Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)* (Recommended Work RVU = 1.40, 60 minutes). CAP recommends a direct crosswalk of 81292 to the physician work and time of CPT code 81406, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 800
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81293 Tracking Number Z17 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old asymptomatic woman whose 45-year-old brother was recently diagnosed with colon cancer and Lynch Syndrome presents to her physician for genetic testing. The brother has a disease-associated mutation in the MLH1 gene. An anticoagulated peripheral blood sample from the asymptomatic woman is submitted for testing for this known familial mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to PCR amplification for the respective MLH1 exon that contains the known familial mutation. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for the known familial mutation and any other variants that may be present. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81293		
Sample Size: 875	**Resp N:** 4	**Response:** 0.4 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	4.00	5.00	**28.00**	50.00	50.00
Survey RVW:	0.50	0.50	**0.51**	0.74	1.39
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	9.00	**15.00**	21.00	25.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81293	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
93285	XXX	0.52	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with physician analysis, review and report; implantable loop recorder system

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 75.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81293**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**28.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.33	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.67	3.00
Urgency of medical decision making	2.67	2.67
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.67	3.67
Physical effort required	2.33	2.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.67	3.00
Outcome depends on the skill and judgment of physician	3.67	3.67
Estimated risk of malpractice suit with poor outcome	3.33	2.67

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81293 with that of new tier 2 service 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* (Recommended Work RVU = 0.52, 28 minutes). CAP recommends a direct crosswalk of 81293 to the physician work and time of CPT code 81403, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 500
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81294 Tracking Number Z18 Original Specialty Recommended RVU: **0.80**
Presented Recommended RVU: **0.80**
Global Period: XXX RUC Recommended RVU: **0.80**

CPT Descriptor: MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old man with a family history of colon cancer undergoes a right hemicolectomy to remove a poorly differentiated colonic adenocarcinoma with lymphocytic infiltration. The tumor demonstrates high level microsatellite instability (MSI-H). Immunohistochemistry staining reveals a loss of MLH1 protein expression. Mutation testing on the tumor for the BRAF V600E mutation and MLH1 hypermethylation are negative. Prior MLH1 sequencing performed to assess the patient for the presence of an HNPCC-related mutation was negative. Deletion/duplication analysis of the MLH1 gene is performed.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA previously isolated from whole blood is subjected to multiplex ligation probe ligation analysis (MLPA), which involves hybridization and ligation of multiple pairs of oligonucleotide probes specific for the 19 exons of the MLH1 gene to assess dosage of each exon. The pathologist examines peak heights and calculated ratios of individual exons to control gene sequences to determine dosage status for all exons tested in the MLH1 gene. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81294		
Sample Size: 875	**Resp N:** 3	**Response:** 0.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	101.00	**200.00**	200.00	200.00
Survey RVW:	0.40	0.45	**0.50**	0.84	1.18
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	15.00	**25.00**	35.00	45.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81294	**Recommended Physician Work RVU: 0.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88112	XXX	1.18	**RUC Time**

CPT Descriptor Cyto, select cell enhance tech w/ interpret (eg, liquid based slide prep methd), exc. cerv or vag

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
96406	000	0.80	**RUC Time**

CPT Descriptor Chemotherapy administration; intralesional, more than 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81294**	**Key Reference CPT Code: 88112**	**Source of Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	0.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**30.00**	**0.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	4.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	4.00
Physical effort required	1.00	1.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	2.00	2.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81294 with that of new tier 2 service 81405 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* (Recommended Work RVU = 0.80, 30 minutes). CAP recommends a direct crosswalk of 81294 to the physician work and time of CPT code 81405, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 800
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81295 Tracking Number Z19 Original Specialty Recommended RVU: **1.40**
Presented Recommended RVU: **1.40**
Global Period: XXX RUC Recommended RVU: **1.40**

CPT Descriptor: MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old male patient presents with fatigue and weight loss. On physical examination, occult blood is discovered in the stool. The patient's family history is positive for colon cancer in several relatives. The patient undergoes a right hemicolectomy after a large, poorly differentiated adenocarcinoma with lymphocytic infiltration is found in the right colon. Microsatellite instability testing is performed on the tumor demonstrates high level instability (MSI-H). Immunohistochemical staining reveals a loss of MSH2 protein expression. An anticoagulated peripheral blood sample is submitted for MSH2 gene sequencing to assess the patient for the presence of an HNPCC-related mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 16 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's mutation status to include information from a database and literature search regarding the significance of variants identified. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81295		
Sample Size: 875	**Resp N:** 2	**Response:** 0.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	25.00	**50.00**	75.00	100.00
Survey RVW:	0.94	1.05	**1.17**	1.28	1.39
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	15.00	24.00	**33.00**	41.00	50.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81295	**Recommended Physician Work RVU: 1.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88173	XXX	1.39	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94621	XXX	1.42	**RUC Time**	12,557

CPT Descriptor 1 Pulmonary stress testing; complex (including measurements of CO2 production, O2 uptake, and electrocardiographic recordings)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
73721	XXX	1.35	**RUC Time**	609,187

CPT Descriptor 2 Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material

Other Reference CPT Code	Global	Work RVU	Time Source
49423	000	1.46	**RUC Time**

CPT Descriptor Exchange of previously placed abscess or cyst drainage catheter under radiological guidance (separate procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 50.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81295**	**Key Reference CPT Code: 88173**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	60.00	50.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**60.00**	**50.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	3.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	4.00
Physical effort required	2.00	2.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	2.00	2.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	4.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81295 with that of new tier 2 service 81406 *Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)* (Recommended Work RVU = 1.40, 60 minutes). CAP recommends a direct crosswalk of 81295 to the physician work and time of CPT code 81406, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 800
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81296 Tracking Number Z20 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old asymptomatic woman whose 45 year-old brother was recently diagnosed with colon cancer and Lynch Syndrome presents to her primary care physician for genetic testing. The brother has a disease-associated mutation in the MSH2 gene. An anticoagulated peripheral blood sample from the asymptomatic woman is submitted for testing for this known familial mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to PCR amplification for the respective MSH2 exon that contains the known familial mutation. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for the known familial mutation and any other variants that may be present. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81296		
Sample Size: 875	**Resp N:** 3	**Response:** 0.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	10.00	**15.00**	23.00	30.00
Survey RVW:	0.50	0.58	**0.65**	0.71	0.77
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	13.00	**22.00**	30.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81296	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
96405	000	0.52	**RUC Time**

CPT Descriptor Chemotherapy administration; intralesional, up to and including 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 2 **% of respondents:** 66.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81296**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**28.00**	**20.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.00	2.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.00	2.50
Urgency of medical decision making	3.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.50	3.50
Physical effort required	2.00	2.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.50	4.00
Outcome depends on the skill and judgment of physician	3.50	3.50
Estimated risk of malpractice suit with poor outcome	4.50	4.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.50	2.50
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81296 with that of new tier 2 service 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* (Recommended Work RVU = 0.52, 28 minutes). CAP recommends a direct crosswalk of 81296 to the physician work and time of CPT code 81403, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 500
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81297 Tracking Number Z21 Original Specialty Recommended RVU: **0.80**
Presented Recommended RVU: **0.80**
Global Period: XXX RUC Recommended RVU: **0.80**

CPT Descriptor: MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non- polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old man with a family history of colon cancer undergoes a right hemicolectomy to remove a poorly differentiated colonic adenocarcinoma with lymphocytic infiltration. The tumor demonstrates high level microsatellite instability (MSI-H). Immunohistochemistry staining reveals a loss of MSH2 protein expression. Prior MLH2 sequencing performed to assess the patient for the presence of an HNPCC-related mutation was negative. Deletion/duplication analysis of the MSH2 gene is performed.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA previously isolated from whole blood is subjected to multiplex ligation probe ligation analysis (MLPA), which involves hybridization and ligation of multiple pairs of oligonucleotide probes specific for the 16 exons of the MSH2 gene to assess dosage of each exon. The pathologist examines peak heights and calculated ratios of individual exons to control gene sequences to determine dosage status for all exons tested in the MSH2 gene. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81297		
Sample Size: 875	**Resp N:** 3	**Response:** 0.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	13.00	**20.00**	60.00	100.00
Survey RVW:	0.50	0.50	**0.50**	0.84	1.18
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	14.00	**23.00**	32.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81297	**Recommended Physician Work RVU: 0.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88112	XXX	1.18	**RUC Time**

CPT Descriptor Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.00	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
96406	000	0.80	**RUC Time**

CPT Descriptor Chemotherapy administration; intralesional, more than 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 2 **% of respondents:** 66.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81297**	**Key Reference CPT Code:** 88112	**Source of Time** RUC Time
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	43.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	30.00	43.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	3.00
Urgency of medical decision making	3.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	1.00	1.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	3.00	3.00

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81297 with that of new tier 2 service 81405 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* (Recommended Work RVU = 0.80, 30 minutes). CAP recommends a direct crosswalk of 81297 to the physician work and time of CPT code 81405, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 800
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81298 Tracking Number Z22 Original Specialty Recommended RVU: **0.80**
Presented Recommended RVU: **0.80**
Global Period: XXX RUC Recommended RVU: **0.80**

CPT Descriptor: MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old male patient presents with fatigue and weight loss. On physical examination, occult blood is discovered in the stool. The patient's family history is positive for colon cancer in several relatives. The patient undergoes a right hemicolectomy after a large, poorly differentiated adenocarcinoma with lymphocytic infiltration is found in the right colon. Microsatellite instability testing is performed on the tumor demonstrates high level instability (MSI-H). Immunohistochemical staining reveals a loss of MSH6 protein expression. An anticoagulated peripheral blood sample is submitted for MSH6 gene sequencing to assess the patient for the presence of an HNPCC-related mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 10 individual PCR amplification reactions whose products encompass the entire coding sequence, exon-intron boundaries and portions of 5' and 3'-untranslated regions of the MSH6 gene. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report which specifies the patient's mutation status to include information from a database and literature search regarding the significance of variants identified. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81298		
Sample Size: 875	**Resp N:** 3	**Response:** 0.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	15.00	**20.00**	25.00	30.00
Survey RVW:	0.80	0.87	**0.94**	1.06	1.18
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	15.00	18.00	**20.00**	30.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81298	**Recommended Physician Work RVU: 0.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88112	XXX	1.18	**RUC Time**

CPT Descriptor Cyto, select cell enhance tech w/ interpret (eg, liquid based slide prep methd), exc. cerv or vag

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
96406	000	0.80	**RUC Time**

CPT Descriptor Chemotherapy administration; intralesional, more than 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 0 **% of respondents:** 0.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81298**	**Key Reference CPT Code: 88112**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	43.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**30.00**	**43.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	3.00
Urgency of medical decision making	3.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	3.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	3.00	3.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81298 with that of new tier 2 service 81405 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* (Recommended Work RVU = 0.80, 30 minutes). CAP recommends a direct crosswalk of 81298 to the physician work and time of CPT code 81405, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 500
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81299 Tracking Number Z23 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old asymptomatic woman whose 45-year-old brother was recently diagnosed with colon cancer and Lynch Syndrome presents to her primary care physician for genetic testing. The brother was found to have a disease-associated mutation in the MSH6 gene. An anticoagulated peripheral blood sample from the asymptomatic woman is submitted to test for an MSH6 gene known familial mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: Upon receipt of the specimen, high quality genomic DNA is isolated from whole blood and subjected to PCR amplification for the respective MSH6 exon that contains the known familial mutation. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for the known familial mutation and any other variants that may be present. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81299		
Sample Size: 875	**Resp N:** 2	**Response:** 0.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	20.00	**30.00**	40.00	50.00
Survey RVW:	0.50	0.57	**0.64**	0.70	0.77
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	13.00	**20.00**	28.00	35.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81299	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
93285	XXX	0.52	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with physician analysis, review and report; implantable loop recorder system

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 2 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81299**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	

Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**28.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.00	3.00
Urgency of medical decision making	2.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	4.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	4.00	3.00
Estimated risk of malpractice suit with poor outcome	4.00	4.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81299 with that of new tier 2 service 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* (Recommended Work RVU = 0.52, 28 minutes). CAP recommends a direct crosswalk of 81299 to the physician work and time of CPT code 81403, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 600
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81300 Tracking Number Z24 Original Specialty Recommended RVU: **0.65**
Presented Recommended RVU: **0.65**
Global Period: XXX RUC Recommended RVU: **0.65**

CPT Descriptor: MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old man with a family history of colon cancer undergoes a right hemicolectomy to remove a poorly differentiated colonic adenocarcinoma with lymphocytic infiltration. The tumor demonstrates high level microsatellite instability (MSI-H). Immunohistochemical staining reveals a loss of MSH6 protein expression. Prior MLH6 gene sequencing performed to assess the patient for the presence of an HNPCC-related mutation was negative. Deletion/duplication analysis of the MSH6 gene is performed.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA previously isolated from whole blood is subjected to multiplex ligation probe ligation analysis (MLPA), which involves hybridization and ligation of multiple pairs of oligonucleotide probes specific for the 10 exons of the MSH6 gene to assess dosage of each exon. The pathologist examines peak heights and calculated ratios of individual exons to control gene sequences to determine dosage status for all exons tested in the MSH6 gene. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81300		
Sample Size: 875	**Resp N:** 3	**Response:** 0.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	15.00	**20.00**	35.00	50.00
Survey RVW:	0.50	0.50	**0.50**	0.72	0.94
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	14.00	**23.00**	32.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81300	**Recommended Physician Work RVU: 0.65**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86077	XXX	0.94	**RUC Time**

CPT Descriptor Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
99408	XXX	0.65	**RUC Time**

CPT Descriptor Alcohol and/or substance (other than tobacco) abuse structured screening (eg, AUDIT, DAST), and brief intervention (SBI) services; 15 to 30 minutes

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 2 **% of respondents:** 66.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81300**	**Key Reference CPT Code: 86077**	**Source of Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	40.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**30.00**	**40.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	3.00
Urgency of medical decision making	3.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	1.00	1.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	2.00	2.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81300 with that of new tier 2 service 81404 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* (Recommended Work RVU = 0.65, 30 minutes). CAP recommends a direct crosswalk of 81300 to the physician work and time of CPT code 81404, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 500
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81301 Tracking Number Z25 Original Specialty Recommended RVU: **0.50**
Presented Recommended RVU: **0.50**
Global Period: XXX RUC Recommended RVU: **0.50**

CPT Descriptor: Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old male patient presents with fatigue and weight loss. On physical examination, occult blood is discovered in the stool. The patient's family history is positive for colon cancer in several relatives. The patient undergoes a right hemicolectomy after a large, poorly differentiated adenocarcinoma with lymphocytic infiltration is found in the right colon. Microsatellite instability (MSI) testing is performed on the tumor and adjacent normal tissue.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: Paraffin is removed, and DNA is isolated from the patient's tumor and normal tissue. Each DNA isolate is subjected to a multiplex PCR amplification reaction that utilizes a combination of 7 fluorescently-labeled primer sets directed toward 5 mononucleotide repeat markers (BAT-25, BAT-26, NR-21, NR-24, and MONO-27), and 2 pentanucleotide repeat markers (Penta C and Penta D). The fluorescent PCR products from the tumor and normal tissue are each separated by capillary electrophoresis. The pathologist determines the MSI status of the tumor by comparing the electrophoretic patterns generated by the PCR products from tumor and normal tissue DNA in relation to a sizing standard for each of the repeat markers, and assessing the proportion of unstable markers. The pathologist composes a report which specifies the MSI status of the tumor. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81301		
Sample Size: 875	**Resp N:** 41	**Response:** 4.6 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	20.00	**50.00**	100.00	300.00
Survey RVW:	0.32	0.50	**0.70**	0.99	2.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	10.00	**20.00**	30.00	50.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81301	**Recommended Physician Work RVU: 0.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 1 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 2 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

Other Reference CPT Code	Global	Work RVU	Time Source
99402	XXX	0.50	**RUC Time**

CPT Descriptor Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 8 **% of respondents:** 19.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 81301**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	20.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**20.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.50	3.38
Urgency of medical decision making	2.63	3.38
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.38
Physical effort required	2.75	3.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.88	3.38
Outcome depends on the skill and judgment of physician	3.25	3.50
Estimated risk of malpractice suit with poor outcome	2.88	3.38

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.50	3.50
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from 41 pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81301 is less slightly intense and complex as 88291, although they indicated it was more overall work, with a median Work RVU = 0.70. The expert panel agreed that the median physician time of 20 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.50 appropriately values new CPT code 81301 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81302 Tracking Number Z26 Original Specialty Recommended RVU: **0.65**
Presented Recommended RVU: **0.65**
Global Period: XXX RUC Recommended RVU: **0.65**

CPT Descriptor: MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; full sequence analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 2 1/2 year-old girl born to a G2P2 mother following an unremarkable pregnancy presents to her pediatrician with regression in her language and motor skills over several months. On physical examination, the patient is small, with a head circumference in the 5th percentile. She has mildly decreased muscle tone in her limbs and slight truncal ataxia. She displays occasional abnormal limb posturing, as well as repetitive hand wringing. Rett syndrome is suspected. An anticoagulated peripheral blood sample is submitted for MECP2 sequencing to assess the patient's MECP2 mutation status.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 4 individual PCR amplification reactions, the products of which encompass the entire coding sequence, intron-exon boundaries and portions of 5' and 3'-untranslated regions of the MECP2 gene. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81302		
Sample Size: 875	**Resp N:** 4	**Response:** 0.4 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	9.00	**15.00**	20.00	20.00
Survey RVW:	0.52	0.69	**0.83**	0.93	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	20.00	39.00	**55.00**	68.00	75.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81302	**Recommended Physician Work RVU: 0.65**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
99408	XXX	0.65	**RUC Time**

CPT Descriptor Alcohol and/or substance (other than tobacco) abuse structured screening (eg, AUDIT, DAST), and brief intervention (SBI) services; 15 to 30 minutes

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 75.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81302**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	30.00	20.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.67
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	3.67
Urgency of medical decision making	3.33	3.33
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.67	3.67
Physical effort required	3.33	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.00	3.67
Outcome depends on the skill and judgment of physician	4.00	3.67
Estimated risk of malpractice suit with poor outcome	4.00	3.67

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.33	3.67
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81302 with that of new tier 2 service 81404 *Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)* (Recommended Work RVU = 0.65, 30 minutes). CAP recommends a direct crosswalk of 81302 to the physician work and time of CPT code 81404, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 200
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81303 Tracking Number Z27 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variant

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 14 month-old girl born to a G2P2 mother who has a known MECP2 mutation presents to her pediatrician with developmental delay. The patient's older sister was diagnosed with Rett syndrome two years previously, and a mutation in the MECP2 gene was identified. At that time, the patient's mother was tested and was found to carry the identical MECP2 mutation. An anticoagulated peripheral blood sample is submitted for MECP2 sequencing to assess the patient for the known familial MECP2 mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to PCR amplification reaction of the exon that contains the known familial MECP2 mutation. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for the known familial mutation and any other variants that may be present. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81303		
Sample Size:	875	**Resp N:** 1	**Response:** 0.1 %
Sample Type:	Convenience	**Additional Sample Information:**	

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**5.00**	5.00	5.00
Survey RVW:	0.60	0.60	**0.60**	0.60	0.60
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	35.00	35.00	**35.00**	35.00	35.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81303	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88387	XXX	0.62	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); each tissue preparation (eg, a single lymph node)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
11900	000	0.52	**RUC Time**

CPT Descriptor Injection, intralesional; up to and including 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81303**	**Key Reference CPT Code: 88387**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**28.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	3.00
Urgency of medical decision making	4.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	4.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.00	3.00
Outcome depends on the skill and judgment of physician	4.00	3.00
Estimated risk of malpractice suit with poor outcome	4.00	3.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81303 with that of new tier 2 service 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* (Recommended Work RVU = 0.52, 28 minutes). CAP recommends a direct crosswalk of 81303 to the physician work and time of CPT code 81403, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 50 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81304 Tracking Number Z28 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; duplication/deletion variants

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 2 1/2 year-old girl born to a G2P2 mother following an unremarkable pregnancy presents to her pediatrician with regression in her language and motor skills over several months. On physical examination, the patient is small with a head circumference in the 5th percentile. She has mildly decreased muscle tone in her limbs and slight truncal ataxia. She displays occasional abnormal limb posturing, as well as repetitive hand wringing. Rett syndrome is suspected. An anticoagulated peripheral blood sample was submitted to the laboratory for MECP2 sequencing, and a mutation was not detected. Deletion/duplication analysis of the MECP2 gene is performed.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA previously isolated from whole blood is subjected to multiplex ligation probe ligation analysis (MLPA), which involves hybridization and ligation of oligonucleotide probes specific for the 4 exons of the MECP2 gene to assess dosage of each exon. The pathologist examines peak heights and calculated ratios of individual exons to control gene sequences to determine dosage status for all exons tested in the MECP2 gene. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81304		
Sample Size: 875	**Resp N:** 1	**Response:** 0.1 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**5.00**	5.00	5.00
Survey RVW:	0.80	0.80	**0.80**	0.80	0.80
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	15.00	15.00	**15.00**	15.00	15.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81304	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
11900	000	0.52	**RUC Time**

CPT Descriptor Injection, intralesional; up to and including 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81304**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**28.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	3.00
Urgency of medical decision making	3.00	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	4.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.00	3.00
Outcome depends on the skill and judgment of physician	4.00	3.00
Estimated risk of malpractice suit with poor outcome	4.00	3.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81304 with that of new tier 2 service 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* (Recommended Work RVU = 0.52, 28 minutes). CAP recommends a direct crosswalk of 81304 to the physician work and time of CPT code 81403, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 150
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81310 Tracking Number N29 Original Specialty Recommended RVU: **0.39**
Presented Recommended RVU: **0.39**
Global Period: XXX RUC Recommended RVU: **0.39**

CPT Descriptor: NPM1 (nucleophosmin) (eg, acute myeloid leukemia) gene analysis, exon 12 variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old man presents to his primary care physician complaining of fatigue, dyspnea on exertion, and easy bruising. The patient's hemogram demonstrates leukocytosis with 30% blasts, anemia and thrombocytopenia. The peripheral blood smear shows decreased platelets and red blood cells along with large blasts with prominent nucleoli and Auer rods. The bone marrow contains 80% blasts which demonstrate an aberrant immunophenotype (CD33/CD13-positive with some cells expressing CD34 and CD117). The karyotype of the malignant cells is normal. A sample of anticoagulated bone marrow is submitted for NPM1 exon 12 tetranucleotide insertion mutation testing.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: Upon receipt of the specimen high quality genomic DNA is isolated. A single PCR amplification is performed encompassing the region which normally contains NPM1 tetranucleotide insertion mutations. The fluorescent PCR products are separated by capillary electrophoresis. The pathologist evaluates the electropherogram comparing the relative sizes of the PCR product(s) in relation to a control peak to determine the NPM1 exon 12 mutation status. The pathologist composes a report describing the NPM1 exon 12 mutation status of the patient's leukemic cells. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81310		
Sample Size: 875	**Resp N:** 26	**Response:** 2.9 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	7.00	20.00	**28.00**	50.00	100.00
Survey RVW:	0.30	0.39	**0.51**	0.71	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	8.00	**10.00**	19.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81310	**Recommended Physician Work RVU: 0.39**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**19.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99212	XXX	0.48	**RUC Time**	19,291,310

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A problem focused history; A problem focused examination; Straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
75902	XXX	0.39	**RUC Time**

CPT Descriptor Mechanical removal of intraluminal (intracatheter) obstructive material from central venous device through device lumen, radiologic supervision and interpretation

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 9 **% of respondents:** 34.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81310**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	19.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	

Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**19.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.22	3.78
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.33	3.67
Urgency of medical decision making	3.78	3.89
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.22	3.56
Physical effort required	2.56	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.44	3.67
Outcome depends on the skill and judgment of physician	3.67	3.89
Estimated risk of malpractice suit with poor outcome	3.33	3.78

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.22	3.67
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81310 is less intense and complex than 88291, and the median Work RVU = 0.51. The expert panel agreed that the survey respondents underestimated the time spent creating the report and communicating the results. The expert panel therefore recommends 19 total minutes of physician time similar to 88291 (20 minutes) as typical for this service. The expert panel also agreed that the 25th percentile work RVU of 0.39 appropriately values new CPT code 81310 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 5,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81317 Tracking Number Z30

Original Specialty Recommended RVU: **1.40**
Presented Recommended RVU: **1.40**
RUC Recommended RVU: **1.40**

Global Period: XXX

CPT Descriptor: PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old male patient presents with fatigue and weight loss. On physical examination, occult blood is discovered in the stool. The patient's family history is positive for colon cancer in several relatives. The patient undergoes a right hemicolectomy after a large, poorly differentiated adenocarcinoma with lymphocytic infiltration is found in the right colon. Microsatellite instability testing is performed on the tumor demonstrates high level instability (MSI-H). Immunohistochemical staining reveals a loss of PMS2 protein expression. An anticoagulated peripheral blood sample is submitted for PMS2 sequencing to assess the patient for the presence of an HNPCC-related mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 15 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report which specifies the patient's mutation status to include information from a database and literature search regarding the significance of variants identified. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81317		
Sample Size: 875	**Resp N:** 1	**Response:** 0.1 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**5.00**	5.00	5.00
Survey RVW:	1.60	1.60	**1.60**	1.60	1.60
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	60.00	60.00	**60.00**	60.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81317	**Recommended Physician Work RVU: 1.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88173	XXX	1.39	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94621	XXX	1.42	**RUC Time**	12,557

CPT Descriptor 1 Pulmonary stress testing; complex (including measurements of CO2 production, O2 uptake, and electrocardiographic recordings)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
73721	XXX	1.35	**RUC Time**	609,187

CPT Descriptor 2 Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material

Other Reference CPT Code	Global	Work RVU	Time Source
49423	000	1.46	**RUC Time**

CPT Descriptor Exchange of previously placed abscess or cyst drainage catheter under radiological guidance (separate procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81317**	**Key Reference CPT Code: 88173**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	60.00	50.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**60.00**	**50.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	2.00	2.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	4.00
Physical effort required	1.00	1.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.00	2.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	1.00	1.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81317 with that of new tier 2 service 81406 *Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)* (Recommended Work RVU = 1.40, 60 minutes). CAP recommends a direct crosswalk of 81317 to the physician work and time of CPT code 81406, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 600
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81318 Tracking Number Z31 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old asymptomatic woman whose 45-year-old brother was recently diagnosed with colon cancer and Lynch Syndrome presents to her primary care physician for genetic testing. The brother has a disease-associated mutation in the PMS2 gene. An anticoagulated peripheral blood sample from the asymptomatic woman is submitted for testing for this known familial mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to PCR amplification for the respective PMS2 gene exon that contains the known familial mutation. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for the known familial mutation and any other variants that may be present. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81318		
Sample Size: 875	**Resp N:** 1	**Response:** 0.1 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**5.00**	5.00	5.00
Survey RVW:	0.62	0.62	**0.62**	0.62	0.62
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	35.00	35.00	**35.00**	35.00	35.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81318	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88387	XXX	0.62	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); each tissue preparation (eg, a single lymph node)

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
99407	XXX	0.50	**RUC Time**

CPT Descriptor Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81318**	**Key Reference CPT Code: 88387**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**28.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.00	2.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.00	2.00
Urgency of medical decision making	2.00	2.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.00	2.00
Physical effort required	2.00	2.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.00	2.00
Outcome depends on the skill and judgment of physician	3.00	2.00
Estimated risk of malpractice suit with poor outcome	2.00	2.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81318 with that of new tier 2 service 81403 *Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)* (Recommended Work RVU = 0.52, 28 minutes). CAP recommends a direct crosswalk of 81318 to the physician work and time of CPT code 81403, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 200
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81319 Tracking Number Z32 Original Specialty Recommended RVU: **0.80**
Presented Recommended RVU: **0.80**
Global Period: XXX RUC Recommended RVU: **0.80**

CPT Descriptor: PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old man with a family history of colon cancer undergoes a right hemicolectomy to remove a poorly differentiated colonic adenocarcinoma with lymphocytic infiltration. The tumor demonstrates high level microsatellite instability. Immunohistochemistry staining reveals a loss of PMS2 protein expression. Prior PMS2 gene sequencing performed to assess the patient for the presence of an HNPCC-related mutation was negative. Deletion/duplication analysis of the PMS2 gene is performed.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA previously isolated from whole blood is subjected to multiplex ligation probe ligation analysis (MLPA) which involves hybridization and ligation of multiple pairs of oligonucleotide probes specific for 13 of the 15 exons of the PMS2 gene to assess dosage of each exon. The pathologist examines peak heights and calculated ratios of individual exons to control gene sequences to determine dosage status for all exons tested in the PMS2 gene. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81319		
Sample Size:	875	**Resp N:** 1	**Response:** 0.1 %
Sample Type:	Convenience	**Additional Sample Information:**	

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**5.00**	5.00	5.00
Survey RVW:	0.94	0.94	**0.94**	0.94	0.94
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	40.00	40.00	**40.00**	40.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81319	**Recommended Physician Work RVU: 0.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86077	XXX	0.94	**RUC Time**

CPT Descriptor Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11100	000	0.81	**RUC Time**	2,805,709

CPT Descriptor 1 Biopsy of skin, subcutaneous tissue and/or mucous membrane (including simple closure), unless otherwise listed; single lesion

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
20551	000	0.71	**RUC Time**	155,962

CPT Descriptor 2 Injection(s); single tendon origin/insertion

Other Reference CPT Code	Global	Work RVU	Time Source
96406	XXX	0.80	**RUC Time**

CPT Descriptor Chemotherapy administration; intralesional, more than 7 lesions

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 1 **% of respondents:** 100.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81319**	**Key Reference CPT Code: 86077**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	40.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**30.00**	**40.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	2.00	2.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.00
Physical effort required	1.00	1.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	3.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	1.00	1.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.00	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81319 with that of new tier 2 service 81405 *Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)* (Recommended Work RVU = 0.80, 30 minutes). CAP recommends a direct crosswalk of 81319 to the physician work and time of CPT code 881405, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 400
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81331 Tracking Number Z33 Original Specialty Recommended RVU: **0.39**
Presented Recommended RVU: **0.39**
Global Period: XXX RUC Recommended RVU: **0.39**

CPT Descriptor: SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 2-year-old girl is brought to a pediatrician for evaluation. She has consistently been in the 5th to 10th percentile on growth charts, is somewhat developmentally delayed, and is a voracious eater. The pediatrician discusses the possibility of Prader-Willi syndrome with the parents. A sample of anticoagulated peripheral blood is submitted for SNRPN/UBE3A methylation analysis.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from the blood sample and undergoes bisulfite modification to convert unmethylated cystosine nucleotides to uracil. Following PCR amplification using primers specific for sequences on the maternal (methylated) and paternal (unmethylated) chromosomes, the PCR products are separated on agarose gels. The pathologist evaluates the electrophoretic patterns to determine whether normal biparental inheritance is demonstrated. The pathologist composes a report which specifies the patient's SNRPN/UBE3A mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81331		
Sample Size: 875	**Resp N:** 11	**Response:** 1.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	8.00	**18.00**	53.00	100.00
Survey RVW:	0.22	0.39	**0.48**	0.52	1.83
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	10.00	**15.00**	20.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81331	**Recommended Physician Work RVU: 0.39**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99212	XXX	0.48	**RUC Time**	19,291,310

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A problem focused history; A problem focused examination; Straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
75902	XXX	0.39	**RUC Time**

CPT Descriptor Mechanical removal of intraluminal (intracatheter) obstructive material from central venous device through device lumen, radiologic supervision and interpretation

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 9 **% of respondents:** 81.8 **%**

TIME ESTIMATES (Median)	**CPT Code: 81331**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	

Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.40	3.40
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.40	3.40
Urgency of medical decision making	2.80	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.80	3.60
Physical effort required	2.80	2.80
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.40	3.40
Outcome depends on the skill and judgment of physician	3.40	3.40
Estimated risk of malpractice suit with poor outcome	3.20	3.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.60	3.40
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81331 is slightly less overall work than 88291 with the median Work RVU = 0.48, but also indicated the work was more intense than the reference code in the intra-service period. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile Work RVU of 0.39 appropriately values new CPT code 81331 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 250
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81332 Tracking Number Z34 Original Specialty Recommended RVU: **0.40**
Presented Recommended RVU: **0.40**
Global Period: XXX RUC Recommended RVU: **0.40**

CPT Descriptor: SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1) (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *S and *Z)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 53-year-old woman with an extensive smoking history complains to her family physician that she has been experiencing modest but increasing shortness of breath. Pulmonary function studies suggest mild airflow obstruction consistent with chronic obstructive pulmonary disease. Liver enzyme studies are normal. Alpha-1-antitrypsin deficiency is part of the differential diagnosis. An anticoagulated peripheral blood sample is submitted for SERPINA1 genotype determination of the 'Z' and 'S' alleles.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to two separate PCR amplification reactions encompassing the regions of the SERPIN1A gene which code for the 'Z' and 'S' alleles. PCR amplification products are digested with different restriction endonucleases, and the digestion products are visualized separately by ethidium bromide staining following agarose gel electrophoresis. The pathologist evaluates the patterns of restriction endonuclease digestion products on gel photographs to determine the patient's mutation status for the normal 'M" as well as mutant 'Z' and 'S' alleles. The pathologist composes a report which specifies the patient's SERPINA1 mutation status. The report is edited, signed and the results are communicated to the appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81332		
Sample Size: 875	**Resp N:** 3	**Response:** 0.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	12.00	**13.00**	15.00	16.00
Survey RVW:	0.37	0.44	**0.50**	0.95	1.39
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	10.00	**15.00**	15.00	15.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81332	**Recommended Physician Work RVU: 0.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 1 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94060	XXX	0.31	**RUC Time**	1,260,624

CPT Descriptor 2 Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration

Other Reference CPT Code	Global	Work RVU	Time Source
96902	XXX	0.41	**RUC Time**

CPT Descriptor Microscopic examination of hairs plucked or clipped by the examiner (excluding hair collected by the patient) to determine telogen and anagen counts, or structural hair shaft abnormality

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 2 **% of respondents:** 66.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81332**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	5.00	5.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	5.00	5.00
Urgency of medical decision making	3.00	2.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	5.00	5.00
Physical effort required	1.00	1.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.00	2.00
Outcome depends on the skill and judgment of physician	3.00	3.00
Estimated risk of malpractice suit with poor outcome	2.00	2.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	4.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81332 with that of new tier 2 service 81401 *Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)* (Recommended Work RVU = 0.40, 15 minutes). CAP recommends a direct crosswalk of 81332 to the physician work and time of CPT code 81401, based on work described in the CPT descriptors.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81340 Tracking Number Z35 Original Specialty Recommended RVU: **0.63**
Presented Recommended RVU: **0.63**
Global Period: XXX RUC Recommended RVU: **0.63**

CPT Descriptor: TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old male patient presents with fever, episodic night sweats, weight loss and lymphadenopathy. A biopsy of an enlarged supraclavicular node is taken; initial morphologic and immunologic studies demonstrate a T-cell population that is suspicious for malignancy. A frozen sample of the lymph node is submitted for T-cell antigen receptor gene, beta rearrangement studies as part of a pathologic evaluation for lymphoma.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is extracted from a lymph node sample. In order to detect a clonally rearranged population of T-cells against a background of polyclonal T-cells, 3 multiplex PCR reactions are performed using fluorescent-linked primers directed at the variable, joining, and diversity regions of the T-cell receptor beta chain genes. The resulting PCR products are separated using capillary electrophoresis. The pathologist evaluates the capillary tracing for a predominant fragment of discrete size and appropriate morphology against background polyclonal or oligoclonal peaks for evidence of clonality. The pathologist composes a report which specifies the clonality status of the T-cell population. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81340		
Sample Size: 875	**Resp N:** 28	**Response:** 3.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	33.00	**65.00**	100.00	300.00
Survey RVW:	0.37	0.63	**0.77**	0.94	2.79
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	15.00	**25.00**	30.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81340	**Recommended Physician Work RVU: 0.63**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**25.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88182	XXX	0.77	**RUC Time**

CPT Descriptor Flow cytometry, cell cycle or DNA analysis

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
65205	000	0.71	**RUC Time**	35,304

CPT Descriptor 1 Removal of foreign body, external eye; conjunctival superficial

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
92615	XXX	0.63	**RUC Time**

CPT Descriptor Flexible fiberoptic endoscopic evaluation, laryngeal sensory testing by cine or video recording; physician interpretation and report only

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 25.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81340**	**Key Reference CPT Code: 88182**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	25.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	25.00	20.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.14	4.29
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.29	4.00
Urgency of medical decision making	4.00	4.29
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.57	4.57
Physical effort required	3.00	3.14
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.29	4.29
Outcome depends on the skill and judgment of physician	4.57	4.57
Estimated risk of malpractice suit with poor outcome	4.29	4.29

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.86	3.86
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 88182 (Work RVU = 0.77, 20 minutes). The survey respondents indicated code 81340 is slightly less intense and complex than 88182. However, the respondents also equated the new code's overall work with that of 88182, with a median Work RVU = 0.77. The expert panel agreed that the median physician time of 25 minutes is typical and compared to the key reference service, the survey's 25th percentile work RVU of 0.63 appropriately values new CPT code 81210 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81341 Tracking Number Z36 Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.45**

CPT Descriptor: TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using direct probe methodology (eg, Southern blot)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old male patient presents with fever, episodic night sweats, weight loss and lymphadenopathy. A biopsy of an enlarged supraclavicular node is taken; initial morphologic and immunologic studies demonstrate a T-cell population that is suspicious for malignancy. T-cell gene rearrangement studies performed using PCR analysis are indeterminate. A frozen sample of the lymph node is submitted to the laboratory for Southern blot analysis to further assessm for a clonally rearranged population of T-cells.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: A large quantity of high quality genomic DNA is isolated from the lymph node sample. Gel electrophoresis of the extracted DNA is performed to assess DNA integrity. The DNA undergoes digestion with 3 restriction enzymes. The genomic fragments are separated by gel electrophoresis, transferred to a nylon membrane by capillary action, and hybridized to radiolabeled probes directed toward the TCRB joining regions (Jβ1 and 2). The pathologist evaluates the autoradiographically generated hybridization patterns of the digestion fragments in relation to marker and control lanes to determine T-cell clonality status. The pathologist composes a report which specifies the clonality status of the T-cell population. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81341		
Sample Size: 875	**Resp N:** 8	**Response:** 0.9 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	6.00	**18.00**	44.00	80.00
Survey RVW:	0.50	0.56	**0.65**	0.83	0.94
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	19.00	**19.00**	31.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81341	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**19.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99212	XXX	0.48	**RUC Time**	19,291,310

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A problem focused history; A problem focused examination; Straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92250	XXX	0.44	**RUC Time**	2,186,775

CPT Descriptor 2 Fundus photography with interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 37.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 81341**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	19.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	

Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**19.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	4.00	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	4.00
Physical effort required	4.00	4.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.00	4.00
Outcome depends on the skill and judgment of physician	4.00	4.00
Estimated risk of malpractice suit with poor outcome	3.67	3.67

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	4.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey results and agreed that the number of survey respondents was extremely low and that conclusions could not be drawn from the data. The expert panel assimilated the overall physician work of 81341 with that of CPT code 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)* (Recommended Work RVU = 0.45, 12 minutes). However the expert panel agreed that the survey median time of 19 minutes accurately reflects the typical time required to perform this service. CAP recommends a direct crosswalk of 81341 to the physician Work RVU of 88388 at 0.45 RVUs and a total physician time of 19 minutes, based on time, physician work effort, and intensity and complexity of the service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81342 Tracking Number Z36 Original Specialty Recommended RVU: **0.57**
Presented Recommended RVU: **0.57**
Global Period: XXX RUC Recommended RVU: **0.57**

CPT Descriptor: TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old male patient presents with fever, episodic night sweats, weight loss and lymphadenopathy. A biopsy of an enlarged supraclavicular node is taken; initial morphologic and immunologic studies demonstrate a T-cell population that is suspicious for malignancy. A frozen sample of the lymph node is submitted for T-cell antigen receptor gene, gamma rearrangement studies as part of a pathologic evaluation for lymphoma.

Percentage of Survey Respondents who found Vignette to be Typical: 98%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is extracted from a lymph node sample. In order to detect a clonally rearranged population of T-cells against a background of polyclonal T-cells, 2 multiplex PCR reactions are performed using fluorescent linked primers directed toward the variable and joining regions of the T-cell receptor gamma genes. The resulting PCR products are separated using capillary electrophoresis. The pathologist evaluates the capillary tracing for a predominant fragment of discrete size and appropriate shape against background polyclonal or oligoclonal peaks for evidence of clonality. The pathologist composes a report which specifies the clonality status of the T-cell population. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81342		
Sample Size: 875	**Resp N:** 50	**Response:** 5.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	30.00	**85.00**	163.00	500.00
Survey RVW:	0.37	0.57	**0.77**	0.94	2.80
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	8.00	15.00	**25.00**	30.00	50.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81342	**Recommended Physician Work RVU: 0.57**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**25.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11000	000	0.60	**RUC Time**	105,397

CPT Descriptor 1 Debridement of extensive eczematous or infected skin; up to 10% of body surface

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11721	000	0.54	**RUC Time**	7,622,371

CPT Descriptor 2 Debridement of nail(s) by any method(s); 6 or more

Other Reference CPT Code	Global	Work RVU	Time Source
76881	XXX	0.58	**RUC Time**

CPT Descriptor Ultrasound, extremity, nonvascular, real-time with image documentation; complete

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 15 **% of respondents:** 30.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81342**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	25.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**25.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.07	4.07
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.87	3.87
Urgency of medical decision making	3.73	3.73
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.93	3.93
Physical effort required	3.20	3.07
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.67	3.73
Outcome depends on the skill and judgment of physician	4.07	4.00
Estimated risk of malpractice suit with poor outcome	3.67	3.60

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.87	3.87
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*
Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from 50 pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81342 takes more time

and work than 88291. The survey's median Work RVU=0.77, and median time = 25 minutes. The survey respondents also indicated overall that the intensity and complexity of the new code is greater than the key reference code. The expert panel agreed that the median physician time of 25 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.57 appropriately values new CPT code 81342 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 6,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81350 Tracking Number Z38 Original Specialty Recommended RVU: **0.37**
Presented Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.37**

CPT Descriptor: UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, irinotecan metabolism), gene analysis, common variants (eg, *28, *36, *37)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60-year-old male patient presents with fatigue and weight loss. The patient is found to have poorly differentiated adenocarcinoma of the colon with unresectable metastases to the liver. Despite 5-FU, leucovorin, and oxaliplatin (FLOFOX) therapy, the patient's disease progresses, and irinotecan therapy is recommended. Prior to beginning irinotecan treatment, an anticoagulated peripheral blood sample is submitted to test the patient's UGT1A1 promoter TA repeat numbers.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to PCR amplification for the region containing the UGT1A1 promoter TA repeat segment. The fluorescent products are subjected to analysis using capillary electrophoresis. The pathologist evaluates the electropherogram and compares it to a sizing ladder to determine the patient's genotype. Based on this analysis, the pathologist composes a report which specifies the patient's genotype. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81350		
Sample Size: 875	**Resp N:** 10	**Response:** 1.1 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	7.00	**10.00**	13.00	20.00
Survey RVW:	0.32	0.37	**0.48**	0.55	0.55
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	10.00	**15.00**	15.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81350	**Recommended Physician Work RVU: 0.37**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics & molecular cytogenetics, interpret & report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
96446	XXX	0.37	**RUC Time**

CPT Descriptor Chemotherapy administration into the peritoneal cavity via indwelling port or catheter

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 2 **% of respondents:** 20.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81350**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.50	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.50	4.00
Urgency of medical decision making	4.50	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	3.50
Physical effort required	4.00	3.50
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.50	4.00
Outcome depends on the skill and judgment of physician	4.50	4.00
Estimated risk of malpractice suit with poor outcome	4.50	4.00

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.50
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*
Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81350 takes 15 minutes

to provide with less overall work than the key reference service. (median Work RVU = 0.48) The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.37 appropriately values new CPT code 81350 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 750
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81355 Tracking Number Z5 Original Specialty Recommended RVU: **0.38**
Presented Recommended RVU: **0.38**
Global Period: XXX RUC Recommended RVU: **0.38**

CPT Descriptor: VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variants (eg, -1639/3673)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60-year-old man presents to his physician with complaints of fatigue, lightheadedness, and palpitations. A diagnostic workup revealed atrial fibrillation, for which the physician would like to prescribe warfarin. In order to facilitate rapid achievement of the proper dose, she orders warfarin sensitivity genotyping for common variants of the VKORC1 gene, which have been shown to significantly influence the dose of warfarin needed to achieve appropriate therapeutic levels. A sample of peripheral blood is submitted for genotypic analysis of the VKORC1 gene.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to a multiplexed PCR reaction, using primers specific for the most common variants, VKORC1 (-1639A). The amplified target DNA is hybridized to a ferrocene signal probe and to an allele-specific capture probe, which is immobilized on an oligoarray. The captured target DNA generates a specific electrochemical signal that identifies the target DNA sequence. The pathologist examines the patient's results and analytic system controls, and determines whether VKORC1 variants are present in the patient's sample. The pathologist composes a report which specifies the patient's genotype. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81355		
Sample Size: 875	**Resp N:** 12	**Response:** 1.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	18.00	20.00	**20.00**	60.00	100.00
Survey RVW:	0.30	0.38	**0.50**	0.71	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	7.00	11.00	**15.00**	19.00	40.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81355	**Recommended Physician Work RVU: 0.38**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	2

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
93790	XXX	0.38	**RUC Time**

CPT Descriptor Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; physician review with interpretation and report

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81355**	**Key Reference CPT Code: 86320**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**17.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	3.00
Urgency of medical decision making	3.50	2.75
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.00	3.25
Physical effort required	2.25	2.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.25	3.00
Outcome depends on the skill and judgment of physician	3.25	3.00
Estimated risk of malpractice suit with poor outcome	3.25	3.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.25	2.75
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data from pathologists who perform the service and compared it to the key reference code 86320 (Work RVU = 0.37, 17 minutes). The survey respondents indicated code 81355 is more intense and complex as 86320 and the median Work RVU = 0.50. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.38 appropriately values new CPT code 81355 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81370 Tracking Number Z39 Original Specialty Recommended RVU: **0.54**
Presented Recommended RVU: **0.54**
Global Period: XXX RUC Recommended RVU: **0.54**

CPT Descriptor: HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old man with insulin dependent diabetes mellitus has end stage renal disease for which he is receiving dialysis treatment. The patient is found to be a suitable renal transplant candidate, and HLA typing is requested for listing on the UNOS kidney registry for potential recipients. A sample of anticoagulated peripheral blood is submitted to the laboratory for low resolution HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1 testing.

Percentage of Survey Respondents who found Vignette to be Typical: 93%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic regions containing the HLA-A, -B, -C, -DRB1/3/4/5 and -DQB1 loci are amplified by PCR using a series of 142 sequence specific primer sets. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of amplicon patterns and with the assistance of computer software, the pathologist determines the HLA type for the HLA-A, -B, -C, DRB1/3/4/5, and –DQB1 loci. The pathologist composes a report which specifies the patient's HLA type at the low resolution level. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81370		
Sample Size: 171	**Resp N:** 30	**Response:** 17.5 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	30.00	100.00	**200.00**	510.00	2000.00
Survey RVW:	0.35	0.54	**0.77**	0.90	2.20
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	8.00	10.00	**15.00**	30.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81370	**Recommended Physician Work RVU: 0.54**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 1 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 2 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 10 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81370**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.20	3.30
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	2.80
Urgency of medical decision making	3.70	3.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.20	4.10
Physical effort required	3.20	3.10
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.90	3.90
Outcome depends on the skill and judgment of physician	3.40	3.20
Estimated risk of malpractice suit with poor outcome	3.90	3.50

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.40	3.30
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The 30 survey respondents indicated 813730 requires more physician work and is more complex or intense in 7 out of 9 measures compared to the key reference service. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.54 appropriately values 81370 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
15,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81371 Tracking Number Z40

Original Specialty Recommended RVU: **0.77**
Presented Recommended RVU: **0.60**
RUC Recommended RVU: **0.60**

Global Period: XXX

CPT Descriptor: HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, and -DRB1/3/4/5 (eg, verification typing)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old man with acute myelogenous leukemia with unfavorable cytogenetics is in his first remission. The patient will require a hematopoietic stem cell transplant. A potential HLA matched unrelated donor has been identified through the National Marrow Donor Program. Prior to final donor selection, a sample of anticoagulated peripheral blood is submitted to the laboratory for low resolution typing for HLA-A, -B, -DRB1/3/4/5 to confirm the recipient's typing and donor match.

Percentage of Survey Respondents who found Vignette to be Typical: 93%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic regions containing the HLA-A, -B, -DRB1/3/4/5 loci are amplified by PCR using a series of 95 sequence specific primer sets. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA type for the HLA-A, -B, and -DRB1/3/4/5 loci, and compares the results to the original high resolution typing used for the donor search to verify the original typing result. The pathologist composes a report which specifies the patient's HLA type from both analyses. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81371		
Sample Size: 171	**Resp N:** 15	**Response:** 8.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	20.00	50.00	**100.00**	200.00	600.00
Survey RVW:	0.40	0.60	**0.77**	0.94	1.10
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	8.00	10.00	**30.00**	30.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81371	**Recommended Physician Work RVU: 0.60**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86077	XXX	0.94	**RUC Time**

CPT Descriptor Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
76700	XXX	0.81	**RUC Time**	1,053,471

CPT Descriptor 1 Ultrasound, abdominal, real time with image documentation; complete

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 2 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 26.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81371**	**Key Reference CPT Code: 86077**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	40.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**30.00**	**40.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.25	4.75
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.50	4.75
Urgency of medical decision making	4.75	4.75
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.75	4.75
Physical effort required	3.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	5.00	5.00
Outcome depends on the skill and judgment of physician	4.50	4.75
Estimated risk of malpractice suit with poor outcome	5.00	5.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.50	4.75
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 86077 (Work RVU = 0.94, 40 minutes). The survey respondents indicated that new code 81371 requires less physician work than the reference code. The expert panel agreed that the median physician time of 30 minutes is typical and compared to the key reference service, the median work RVU of 0.77 appropriately values 81371 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
10,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81372 Tracking Number Z41

Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
RUC Recommended RVU: **0.52**

Global Period: XXX

CPT Descriptor: HLA Class I typing, low resolution (eg, antigen equivalents); complete (ie, HLA-A, -B, and -C)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40-year-old woman has a history of diffuse large cell lymphoma. The patient has undergone chemotherapy and has been multiply transfused. She has become refractory to platelet transfusion as a result of antibodies to Class I HLA antigens. A sample of anticoagulated peripheral blood is submitted to the laboratory for low resolution HLA-A, -B, -C testing to initiate a search for an HLA matched platelet unit for transfusion.

Percentage of Survey Respondents who found Vignette to be Typical: 93%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic regions containing the HLA-A, -B, -C loci are amplified by PCR using a series of 95 sequence specific primer sets. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA type for the HLA-A, -B, and -C loci. The pathologist composes a report which specifies the patient's HLA type at the low resolution level. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81372		
Sample Size: 171	**Resp N:** 15	**Response:** 8.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	25.00	**50.00**	100.00	600.00
Survey RVW:	0.37	0.52	**0.62**	0.77	1.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	4.00	5.00	**15.00**	20.00	25.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81372	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88182	XXX	0.77	**RUC Time**

CPT Descriptor Flow cytometry, cell cycle or DNA analysis

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 1 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 2 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 26.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81372**	**Key Reference CPT Code: 88182**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.25	4.25
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.25
Urgency of medical decision making	3.75	3.75
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.50	4.50
Physical effort required	3.50	3.50
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.00	4.00
Outcome depends on the skill and judgment of physician	4.25	4.25
Estimated risk of malpractice suit with poor outcome	3.50	3.50

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.25	4.25
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 88182 (Work RVU = 0.77, 20 minutes). The survey respondents indicated 81372 requires less physician work than the reference code yet this service has a high intensity and complexity within the HLA family. The expert panel agreed that the median physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.52 appropriately values 81372 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81373 Tracking Number Z42 Original Specialty Recommended RVU: **0.37**
Presented Recommended RVU: **0.37**
Global Period: XXX RUC Recommended RVU: **0.37**

CPT Descriptor: HLA Class I typing, low resolution (eg, antigen equivalents); one locus (eg, HLA-A, B, or -C), each

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 32-year-old woman has a complex array of symptoms and signs that indicate the presence of an autoimmune disorder. Several disorders with HLA-B associations are considered. A sample of anticoagulated peripheral blood is submitted to the laboratory for HLA-B typing.

Percentage of Survey Respondents who found Vignette to be Typical: 93%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA-B locus is amplified by PCR using 47 sequence-specific primers sets. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA type for the HLA-B locus. The pathologist composes a report which specifies the patient's HLA-B type at the low resolution level. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81373		
Sample Size: 171	**Resp N:** 15	**Response:** 8.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	35.00	**60.00**	88.00	600.00
Survey RVW:	0.15	0.37	**0.38**	0.60	0.77
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	4.00	**7.00**	15.00	18.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81373	**Recommended Physician Work RVU: 0.37**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 1 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	0

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
94060	XXX	0.31	**RUC Time**

CPT Descriptor Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 46.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81373**	**Key Reference CPT Code: 86320**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	15.00	17.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.14	2.29
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.00	2.29
Urgency of medical decision making	2.00	2.57
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.71	2.86
Physical effort required	1.57	1.71
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.57	2.71
Outcome depends on the skill and judgment of physician	2.00	2.71
Estimated risk of malpractice suit with poor outcome	2.43	2.43

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.43	2.43
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 86320 (Work RVU = 0.37, 17 minutes). The survey respondents assimilated the physician work of 81373 to the key reference service. The expert panel agreed that the survey respondents underestimated the total time for the service. Specifically the CAP expert panel agreed that the interpretation and report time was underestimated. The expert panel agreed that a total physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.37 appropriately values 81373 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 4,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81374 Tracking Number Z43

Original Specialty Recommended RVU: **0.34**
Presented Recommended RVU: **0.34**
RUC Recommended RVU: **0.34**

Global Period: XXX

CPT Descriptor: HLA Class I typing, low resolution (eg, antigen equivalents); one antigen equivalent (eg, B*27), each

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 37-year-old man has suspected ankylosing spondylitis. A sample of anticoagulated peripheral blood is submitted to the laboratory for HLA-B*27 testing.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA-B locus is amplified with the PCR using a set of primers specific for HLA-B27. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA-B*27 status. The pathologist composes a report which specifies the patient's HLA-B*27 status. The report is edited, signed and the results communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81374		
Sample Size: 171	**Resp N:** 10	**Response:** 5.8 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	30.00	**60.00**	60.00	3000.00
Survey RVW:	0.20	0.34	**0.40**	0.55	0.77
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	1.00	3.00	**4.00**	13.00	20.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81374	**Recommended Physician Work RVU: 0.34**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**13.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94060	XXX	0.31	**RUC Time**	1,260,624

CPT Descriptor 1 Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 5 **% of respondents:** 50.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81374**	**Key Reference CPT Code: 86320**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	13.00	17.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**13.00**	**17.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	1.67	2.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	1.33	2.33
Urgency of medical decision making	2.33	2.33
Technical Skill/Physical Effort (Mean)		
Technical skill required	1.67	2.33
Physical effort required	1.67	2.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	1.67	2.33
Outcome depends on the skill and judgment of physician	1.67	2.33
Estimated risk of malpractice suit with poor outcome	1.67	2.33

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.00	2.33
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 86320 (Work RVU = 0.37, 17 minutes). The survey respondents indicated the physician work of 81374 was slightly greater than the key reference service however less intense and complex. The expert panel agreed that the survey respondents underestimated the total time for the service. Specifically the CAP expert panel agreed that the interpretation and report time was underestimated. The expert panel agreed that a total physician time of 13 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.34 appropriately values 81374 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
10,000 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81375 Tracking Number Z44

Original Specialty Recommended RVU: **0.60**
Presented Recommended RVU: **0.60**
RUC Recommended RVU: **0.60**

Global Period: XXX

CPT Descriptor: HLA Class II typing, low resolution (eg, antigen equivalents); HLA-DRB1/3/4/5 and -DQB1

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 28-year-old man is being considered as a potential hematopoietic stem cell donor for his sister who has been diagnosed with acute myelogenous leukemia. He and the other asymptomatic siblings were initially typed for Class I HLA (HLA-A,-B,-C). He was found to be a full match for his sister at these loci. A sample of anticoagulated peripheral blood is submitted to the laboratory for low resolution HLA-DRB1/3/4/5 and -DQB1 typing.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA-DRB1/3/4/5 and -DQB1 loci are amplified by PCR using 48 sequence-specific primer sets. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA type for the HLA-DRB1/3/4/5, and –DQB1 loci. The pathologist composes a report which specifies the donor's HLA-DRB1/3/4/5 and –DQB1 type at the low resolution level and assesses the match with the recipient. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81375		
Sample Size: 171	**Resp N:** 11	**Response:** 6.4 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	20.00	**100.00**	152.00	450.00
Survey RVW:	0.45	0.60	**0.75**	0.85	1.56
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	8.00	10.00	**15.00**	16.00	20.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81375	**Recommended Physician Work RVU: 0.60**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 1 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93307	XXX	0.92	**RUC Time**	92,368

CPT Descriptor 2 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, without spectral or color Doppler echocardiography

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 36.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81375**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**20.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	2.75
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	2.75
Urgency of medical decision making	4.00	2.75
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	2.75
Physical effort required	3.00	2.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.50	2.75
Outcome depends on the skill and judgment of physician	4.00	2.75
Estimated risk of malpractice suit with poor outcome	3.50	2.25

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	2.75
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated the physician work of 81375 is much greater than the key reference service as the median Work RVU was 0.75. In addition all of the intensity and complexity measures indicated that 81375 is much more complex and intense than 88291. The expert panel agreed that a total physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile Work RVU of 0.60 appropriately values 81375 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81376 Tracking Number Z45 Original Specialty Recommended RVU: **0.62**
Presented Recommended RVU: **0.50**
Global Period: XXX RUC Recommended RVU: **0.50**

CPT Descriptor: HLA Class II typing, low resolution (eg, antigen equivalents); one locus (eg, HLA-DRB1/3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old man is being considered as a potential kidney donor for a friend with end stage renal disease. The potential recipient has antibodies against multiple HLA-DQ antigens and will be incompatible with 85% of the donor pool. The physician wishes to screen the potential donor for HLA-DQB1 before proceeding with a full donor work-up. A sample of anticoagulated peripheral blood from the potential donor is submitted to the laboratory for HLA-DQB1 typing.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA -DQB1 loci is amplified by PCR using 24 sequence-specific primer sets. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA type for the HLA–DQB1 locus. The pathologist composes a report which specifies the patient's HLA-DQB1 type at the low resolution level. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81376		
Sample Size: 171	**Resp N:** 12	**Response:** 7.0 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	1.00	33.00	**50.00**	100.00	350.00
Survey RVW:	0.40	0.50	**0.62**	0.79	1.20
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	8.00	**15.00**	15.00	27.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81376	**Recommended Physician Work RVU: 0.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88182	XXX	0.77	**RUC Time**

CPT Descriptor Flow cytometry, cell cycle or DNA analysis

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77300	XXX	0.62	**RUC Time**	1,695,583

CPT Descriptor 1 Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
65205	XXX	0.71	**RUC Time**	35,304

CPT Descriptor 2 Removal of foreign body, external eye; conjunctival superficial

Other Reference CPT Code	Global	Work RVU	Time Source
93279	XXX	0.65	**RUC Time**

CPT Descriptor Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with physician analysis, review and report; single lead pacemaker system

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81376**	**Key Reference CPT Code: 88182**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	4.00	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.25	4.25
Physical effort required	3.25	3.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.75	4.00
Outcome depends on the skill and judgment of physician	4.25	4.00
Estimated risk of malpractice suit with poor outcome	4.75	4.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	3.75
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 88182 (Work RVU = 0.77, 20 minutes). The survey respondents indicated the physician work of 81376 is less physician work than the key reference service as the median Work RVU was 0.62. However, the all intensity and complexity measures indicated that 81376 is similar in complexity and intensity as 88291. The expert panel agreed that a total physician time of 15 minutes is typical and compared to the key reference service, the median Work RVU of 0.62 appropriately values 81376 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81377 Tracking Number Z46

Original Specialty Recommended RVU: **0.43**
Presented Recommended RVU: **0.43**
RUC Recommended RVU: **0.43**

Global Period: XXX

CPT Descriptor: HLA Class II typing, low resolution (eg, antigen equivalents); one antigen equivalent, each

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 50-year-old woman presents to an ophthalmologist for ocular pain and photophobia. She has been suffering headaches and dizziness for several weeks. Upon examination, the doctor finds signs of posterior uveitis and observes vitiligo on her face and her arms. He suspects Vogt-Koyanagi-Harada (VKH), an autoimmune disease strongly associated with HLA-DR4. A sample of anti-coagulated peripheral blood is submitted to the laboratory for HLA-DR4 typing.

Percentage of Survey Respondents who found Vignette to be Typical: 89%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to PCR amplification using a set of primers specific for the HLA-DRB1*04 allele group. A series of negative and positive control DNA samples are run in parallel. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines a digitized image or photograph of the ethidium bromide stained gel to assess the presence or absence of amplicons produced for the allele group-specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines the HLA-DRB1*04 status. The pathologist composes a report which specifies the patient's HLA-DRB1*04 status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81377		
Sample Size: 171	**Resp N:** 9	**Response:** 5.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	10.00	**19.00**	20.00	1000.00
Survey RVW:	0.40	0.43	**0.51**	0.71	1.05
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	4.00	**15.00**	17.00	20.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81377	**Recommended Physician Work RVU: 0.43**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
36405	XXX	0.31	**RUC Time**	

CPT Descriptor 2 Venipuncture, younger than age 3 years, necessitating physician's skill, not to be used for routine venipuncture; scalp vein

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 44.4 **%**

TIME ESTIMATES (Median)	**CPT Code: 81377**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.75	3.25
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.25	3.25
Urgency of medical decision making	1.75	2.75
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.25	3.25
Physical effort required	2.25	2.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.50	3.00
Outcome depends on the skill and judgment of physician	2.75	3.25
Estimated risk of malpractice suit with poor outcome	2.50	2.50

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	2.75	3.25
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated the physician work of 81377 is less than the key reference service as the median Work RVU was 0.51. The expert panel also referenced CPT code 88388 (Work RVU = 0.45, 12 minutes total time) as a good comparison code. The expert panel agreed that a total physician time of 15 minutes is typical and compared to the key reference service, the 25th percentile Work RVU of 0.43 appropriately values 81377 within this family of services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81378 Tracking Number Z47

Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
RUC Recommended RVU: **0.45**

Global Period: XXX

CPT Descriptor: HLA Class I and II typing, high resolution (ie, alleles or allele groups), HLA-A, -B, -C, and -DRB1

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old man with acute myelogenous leukemia with unfavorable cytogenetics is in his first remission. The patient will require a hematopoietic stem cell transplant and has no siblings. A sample of anticoagulated peripheral blood is submitted to the laboratory for high resolution HLA-A, -B, -C and -DRB1 testing to search for an HLA matched donor through the National Marrow Donor Program.

Percentage of Survey Respondents who found Vignette to be Typical: 94%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DA is isolated from whole blood. The genomic regions containing the HLA-A, -B, -C and DRB1 genes are amplified by PCR using locus specific primers. For each locus, the PCR products are sequenced with a series of forward and reverse primers. The pathologist visually analyzes the DNA sequences obtained and assesses their alignment against a consensus sequence and comparison with a database of all known alleles with the assistance of software. Ambiguities are resolved using sequence specific primers. Based on these analyses, the pathologist assigns an HLA type for HLA-A, -B, -C and DRB1 at the allele level. The pathologist composes a report which specifies the patient's HLA type. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81378		
Sample Size: 171	**Resp N:** 17	**Response:** 9.9 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	20.00	60.00	**107.00**	300.00	1000.00
Survey RVW:	0.77	0.92	**1.02**	1.35	2.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	15.00	15.00	**20.00**	30.00	45.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81378	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 6 **% of respondents:** 35.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 81378**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	20.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**20.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	2.75
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	2.75
Urgency of medical decision making	4.00	2.75
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	2.75
Physical effort required	3.00	2.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.50	2.75
Outcome depends on the skill and judgment of physician	4.00	2.75
Estimated risk of malpractice suit with poor outcome	3.50	2.25

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	2.75
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and agreed that the survey respondents overestimated the physician work, but not the time involved. The expert panel agreed with the survey respondent's median time of 20 minutes for this service, as the typical time required. The expert panel assimilated the overall physician work with that of recently RUC reviewed service 88388 (Work RVU = 0.45, 12 minutes). CAP recommends a direct crosswalk of 81378 to the physician work of 88388 (Work RVU = 0.45) and a total time of 20 minutes for CPT code 81378.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81379 Tracking Number Z48 Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.45**

CPT Descriptor: HLA Class I typing, high resolution (ie, alleles or allele groups); complete (ie, HLA-A, -B, and -C)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old man with acute myelogenous leukemia is being considered for a hematopoietic stem cell transplant from an unrelated donor. The potential recipient has been previously typed by high resolution for HLA Class II and low resolution for HLA-A, -B, and –C in an unsuccessful attempt to identify a related donor. To select the best unrelated donor, high resolution typing of the patient is necessary. A sample of anticoagulated peripheral blood is submitted to the laboratory for high resolution HLA-A, -B, and -C allele identification.

Percentage of Survey Respondents who found Vignette to be Typical: 89%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic regions containing the HLA-A, -B, and -C genes are amplified by PCR using locus specific primers. For each locus, the PCR products are sequenced with a series of forward and reverse primers. The pathologist evaluates the DNA sequences obtained, assesses their alignment against a consensus sequence and compares results against a database of all known alleles with the assistance of computer software. Ambiguities are resolved using sequence specific primers. Based on these analyses, the pathologist assigns an HLA type for HLA-A, -B, and -C at the allele level. The pathologist composes a report which specifies the patient's HLA type. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81379		
Sample Size: 171	**Resp N:** 9	**Response:** 5.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	50.00	**100.00**	300.00	1000.00
Survey RVW:	0.75	0.77	**0.80**	1.18	1.95
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	6.00	10.00	**15.00**	30.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81379	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86077	XXX	0.94	**RUC Time**

CPT Descriptor Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81379**	**Key Reference CPT Code:** 86077	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	40.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	

Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**40.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.33	4.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.33
Urgency of medical decision making	4.33	4.33
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.67	4.33
Physical effort required	4.00	3.67
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.33	4.33
Outcome depends on the skill and judgment of physician	4.33	4.33
Estimated risk of malpractice suit with poor outcome	4.33	4.33

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.33	4.33
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and agreed that the survey respondents overestimated the physician work, but not the time involved. The expert panel agreed with the survey respondent's median time of 15 minutes for this service, as the typical time required. The expert panel assimilated the overall physician work with that of recently RUC reviewed service 88388 (Work RVU = 0.45, 12 minutes). CAP recommends a direct crosswalk of 81379 to the physician work of 88388 (Work RVU = 0.45) and a total time of 15 minutes for CPT code 81379.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81380 Tracking Number Z49

Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
RUC Recommended RVU: **0.45**

Global Period: XXX

CPT Descriptor: HLA Class I typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-A, -B, or -C), each

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 34 year old woman with acute myelogenous leukemia is being considered for a hematopoietic stem cell transplant from a related donor. Low resolution HLA typing of the patient and several family members identifies a brother who is a potential 2 haplotype match. However, four closely related HLA-B allele groups are segregating in the family, calling into question whether the patient and her brother have inherited identical HLA-B alleles. High resolution typing of the B locus of the patient and her brother is required to resolve this ambiguity. A sample of anticoagulated peripheral blood from the patient is submitted to the laboratory for high resolution HLA-B locus testing to assess her HLA-B allele type for comparison to her brother's type.

Percentage of Survey Respondents who found Vignette to be Typical: 67%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic regions containing the HLA-B gene are amplified by PCR using locus specific primers. The resulting PCR products are sequenced with a series of forward and reverse primers. The pathologist evaluates the DNA sequences obtained, assesses their alignment against a consensus sequence and compares results against a database of all known alleles with the assistance of computer software. Ambiguities are resolved using sequence specific primers. Based on these analyses, the pathologist assigns an HLA type for HLA-B at the allele level. The pathologist composes a report which specifies the patient's HLA type and assesses the match with the potential donor. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81380		
Sample Size: 171	**Resp N:** 9	**Response:** 5.2 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	1.00	4.00	**10.00**	59.00	200.00
Survey RVW:	0.50	0.51	**0.62**	0.79	0.90
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	6.00	**15.00**	18.00	20.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81380	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86077	XXX	0.94	**RUC Time**

CPT Descriptor Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 3 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81380**	**Key Reference CPT Code:** 86077	**Source of Time** RUC Time
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	40.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	

Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**40.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.33	4.33
Urgency of medical decision making	4.33	4.33
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.33	4.33
Physical effort required	2.67	3.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.33	4.33
Outcome depends on the skill and judgment of physician	4.33	4.33
Estimated risk of malpractice suit with poor outcome	4.33	4.33

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.00	4.33
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and agreed that the survey respondents overestimated the physician work, but not the time involved. The expert panel agreed with the survey respondent's median time of 15 minutes for this service, as the typical time required. The expert panel assimilated the overall physician work with that of recently RUC reviewed service 88388 (Work RVU = 0.45, 12 minutes). CAP recommends a direct crosswalk of 81380 to the physician work of 88388 (Work RVU = 0.45) and a total time of 15 minutes for CPT code 81380.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81381 Tracking Number Z50

Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
RUC Recommended RVU: **0.45**

Global Period: XXX

CPT Descriptor: HLA Class I typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, B*57:01P), each

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An antiretroviral regimen including the drug abacavir is planned for a 35-year-old man with a diagnosis of HIV-1. Prior to beginning abacavir treatment, a sample of anticoagulated peripheral blood is submitted to the laboratory for HLA-B*57:01 allele testing.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA-B locus is amplified by PCR, and the amplicons are interrogated in hybridization reactions with 100 oligonucleotide probes immobilized on fluorescent microscopic beads. Fluorescence is then assessed in a fluorescent bead array assay. The pathologist examines the fluorescent intensities seen with each probe and determines the status of the HLA-B*57 allele group with the assistance of computer software. Testing with additional probes to distinguish HLA-B*57:01 from other B*57 alleles is performed if necessary. Based on these analyses, the pathologist determines the status of the HLA-B*57:01 allele. The pathologist composes a report which specifies the patient's HLA-B*57:01 allele status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81381		
Sample Size: 171	**Resp N:** 11	**Response:** 6.4 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	31.00	**50.00**	80.00	150.00
Survey RVW:	0.25	0.47	**0.53**	0.80	0.90
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	4.00	5.00	**7.00**	15.00	20.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81381	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**12.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 4 **% of respondents:** 36.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 81381**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	12.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**12.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.00	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	1.75	2.75
Urgency of medical decision making	3.25	3.25
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.25	3.00
Physical effort required	2.25	2.25
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.25	3.50
Outcome depends on the skill and judgment of physician	2.75	3.00
Estimated risk of malpractice suit with poor outcome	3.50	2.75

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	3.50	3.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and agreed that the survey respondents overestimated the physician work and underestimated the time required. The expert panel assimilated the overall physician work with that of recently RUC reviewed service 88388 (Work RVU = 0.45, 12 minutes). CAP recommends a direct crosswalk of 81381 to the physician work and time of CPT code 88388.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81382 Tracking Number Z51 Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.45**

CPT Descriptor: HLA Class II typing, high resolution (ie, alleles or allele groups); one locus (eg, HLA-DRB1, -DRB3, -DRB4, -DRB5, -DQB1, -DQA1, -DPB1, or -DPA1), each

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 45-year-old man with acute myelogenous leukemia with unfavorable cytogenetics is in his first remission. The patient will require a hematopoietic stem cell transplant and has no siblings. In addition to high resolution HLA-A, -B, -C and DRB1 testing, the physician requests that HLA-DQB1 be included in the search for an HLA matched donor through the National Marrow Donor Program. A sample of anticoagulated peripheral blood is submitted to the laboratory for HLA-DQB1 allele typing.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA Class II gene is amplified by PCR using locus specific primers. The PCR products are sequenced with a series of forward and reverse primers. The pathologist evaluates the DNA sequences obtained, assesses their alignment against a consensus sequence and compares results against a database of all known alleles with the assistance of computer software. Ambiguities are resolved using sequence specific primers.. Based on these analyses, the pathologist assigns an HLA type at the allele level. The pathologist composes a report which specifies the patient's HLA-DQB1 alleles. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81382		
Sample Size: 171	**Resp N:** 10	**Response:** 5.8 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	5.00	**30.00**	188.00	600.00
Survey RVW:	0.62	0.78	**0.85**	0.90	0.94
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	4.00	5.00	**15.00**	15.00	22.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81382	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 5 **% of respondents:** 50.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81382**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.80	5.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.60	5.00
Urgency of medical decision making	4.80	5.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	5.00	5.00
Physical effort required	3.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	5.00	5.00
Outcome depends on the skill and judgment of physician	5.00	5.00
Estimated risk of malpractice suit with poor outcome	4.80	5.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	47.80	5.00
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and agreed that the survey respondents overestimated the physician work but not the time required. The expert panel agrees with the median survey time of 15 minutes as the typical time required to provide this service. The expert panel assimilated the overall physician work with that of recently RUC reviewed service 88388 (Work RVU = 0.45, 12 minutes). CAP recommends a direct crosswalk of 81382 to the physician work of 88388 of 0.45 Work RVUs and total time of 15 minutes for CPT code 81382.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81383 Tracking Number Z52 Original Specialty Recommended RVU: **0.45**
Presented Recommended RVU: **0.45**
Global Period: XXX RUC Recommended RVU: **0.45**

CPT Descriptor: HLA Class II typing, high resolution (ie, alleles or allele groups); one allele or allele group (eg, HLA-DQB1*06:02P), each

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 30-year-old woman describes excessive daytime sleepiness over the past two months and a recent single episode of transient weakness resulting in her collapse to the floor while discussing a family member's recent death. The results of a polysomnogram and a multiple sleep latency test are indeterminate in helping reach a diagnosis of narcolepsy. A sample of anticoagulated peripheral blood is submitted to the laboratory for HLA-DQB1*06:02 allele identification.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: None

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood. The genomic region containing the HLA-DQB1 locus is PCR amplified using sets of sequence specific primers to detect HLA-DQB1*06 group alleles and to distinguish among DQB1*06 alleles. The amplicons produced are separated by size via gel electrophoresis. The pathologist examines the digitized images or photographs of the ethidium bromide stained gels to assess the presence or absence of amplicons produced for the specific reactions in comparison to positive and negative controls. Based on the manual analysis of the amplicon patterns and with the assistance of computer software, the pathologist determines whether the HLA–DQB1*06:02 allele is present. The pathologist composes a report which specifies the patient's HLA-DQB1*06:02 allele status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: None

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Jeffrey A. Kant MD PhD FCAP FAAAS, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists		
CPT Code:	81383		
Sample Size: 171	**Resp N:** 11	**Response:** 6.4 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	6.00	20.00	**30.00**	32.00	300.00
Survey RVW:	0.37	0.40	**0.52**	0.80	0.90
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	4.00	5.00	**15.00**	15.00	22.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81383	**Recommended Physician Work RVU: 0.45**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status?

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
97110	XXX	0.45	**RUC Time**	42,096,399

CPT Descriptor 1 Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
93016	XXX	0.45	**RUC Time**	1,112,086

CPT Descriptor 2 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; physician supervision only, without interpretation and report

Other Reference CPT Code	Global	Work RVU	Time Source
88388	XXX	0.45	**RUC Time**

CPT Descriptor Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 5 **% of respondents:** 50.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81383**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**15.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.33	4.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	4.00
Urgency of medical decision making	3.67	4.00
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.33	4.00
Physical effort required	3.00	2.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.33	4.33
Outcome depends on the skill and judgment of physician	4.00	4.00
Estimated risk of malpractice suit with poor outcome	3.67	3.76

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity		
Intra-Service intensity/complexity	4.25	4.33
Post-Service intensity/complexity		

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and agreed that the survey respondents overestimated the physician work and time. The expert panel assimilated the overall physician work with that of recently RUC reviewed service 88388 (Work RVU = 0.45, 12 minutes). CAP recommends a Work RVU crosswalk of 81383 to the physician work of CPT code 88388 and the intra-service median survey time of 15 minutes total.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty Pathology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/Specialty Society Update Process
Practice Expense Summary of Recommendation
Non Facility Direct Inputs

59 New Molecular Pathology Services

Global Period:_XXX Meeting Date: _September 2011

Please provide a brief description of the process used to develop your recommendation and the composition of your Specialty Society Practice Expense Committee:

TAB 5 – All practice expenses were cross-walked to already reviewed Tier 2 codes (April 2011), except for the HLA code set where CAP surveyed several large and small labs throughout the United States. Survey responses were compiled; questions and clarifications were followed up with lab managers and directors. CAP's expert panel reviewed compiled PE inputs and made adjustments to the clinical labor, supplies, and equipment for all codes.

TAB 9 – All practice expenses were cross-walked to already reviewed Tier 2 codes (April 2011).

If you have provided any comparison practice expense inputs on your spreadsheet, please provide a rationale for the selection of codes. Comparison Code Rationale:

Please describe in detail the clinical activities of your staff:

Pre-Service Clinical Labor Activities:

Molecular DNA analyses based on specific code.

Intra-Service Clinical Labor Activities:

NONE

Post-Service Clinical Labor Activities:
Clean up, document filing, and other activities, see spreadsheet

	A	B	C	D
1	**TAB 5 - Final Recommendation**			**81210**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Cross walk from 88XX8 and 88XX23 (DNA extraction from parriffin)** *Typical Batch Size - 2*			*BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant*
3		**CMS Code**	**Staff Type**	**Total Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**111**
6	*Lab Tech*			*18*
7	*Cytotechnologist*			*93*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**100**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**DNA Extraction**	L045A	Cytotechnologist	6
16	Cutting sections from specimen block using microtome			
17	Removal of paraffin			
18	DNA extraction using extraction instrument			
19	Dilution of DNA extraction 1:5 or 1:10			
20	Discard DNA extraction waste (liquids and solids)			
21	**PCR Set Up**	L045A	Cytotechnologist	13
22	Assemble PCR Primers, buffer, etc… into plates			
23	Combine reagents for PCR master mix			
24	Place tips, PCR reagents and PCR reaction plate on liquid handling instrument 2			
25	Remove extracted DNA from DNA extraction instrument and place on liquid handling system 2			
26	Allow instrument to set up PCR reaction			
27	Cover plate with sealing mat			
28	Place PCR reaction plate in thermal cycler, enter PCR program, and allow instrument to perform PCR			
29	Discard liquid handling system 2 tips from PCR set up			
30	**Check gel**	L045A	Cytotechnologist	13
31	Spin down PCR plate			
32	Mix, heat, cool and pour ethidium bromide containing agarose gel			
33	Combine 8uL of PCR product with 2uL of loading buffer			
34	Add samples, controls and ladder to agarose gel			
35	Photograph gel			
36	Save image and annotate			
37	**PCR Post Processing 1**	L045A	Cytotechnologist	17
38	Prepare EXO/SAP mix			
39	Add mix to PCR products on plate			
40	Place on thermal cycler			
41	**Dye Term Cycle**	L045A	Cytotechnologist	13
42	Prepare sequencing plates			
43	Prepare sequencing Big Dye master mix			
44	Aliquot Big Dye master mix			
45	Add template			
46	Seal, vortex, spin			
47	Place on thermal cycler			
48	**Dye Term Purification**	L045A	Cytotechnologist	24
49	Make fresh Sodium Acetate/ETOH			
50	Add to sequencing samples			
51	Spin down for 20 min			
52	Invert plate on towels			
53	Quick spin plate			
54	Make fresh 70% ETOH			
55	Add ETOH to wells			
56	Spin for 5 min			
57	Add formamide and sequencing standard			
58	Cover with septa and quick spin			

	A	B	C	D
1	**TAB 5 - Final Recommendation**			**81210**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Cross walk from 88XX8 and 88XX23 (DNA extraction from parriffin)** *Typical Batch Size - 2*			*BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant*
3		**CMS Code**	**Staff Type**	**Total Minutes**
59	Ensure sequencer is ready to load by changing buffers, water, and waste. Make sure "OUT" stack is empty			
60	**Sequencing**	L045A	Cytotechnologist	5
61	Load plate onto sequencer			
62	Create new sample sheet using batch name/sample number			
63	Check capillary array after run is completed			
64	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2
65	**End: When specimen is ready for examination by physician**			
66	**Service Period**			
67				
68	**Post-Service Period**			
69	**Start: When specimen examination by physician is complete**			
70	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2
71	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2
72	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
73	Clean Room	L033A	Lab Tech	2
74	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
75	Perform scheduled data management back-up	L033A	Lab Tech	1
76	**End: When specimen, chemical waste and record handling is complete**			
77	**SUPPLIES**		**Type of Unit**	**No. of Units**
78	DNA isolation kit		reaction	1
79	Gown	SB027	item	1
80	Gloves, nonsterile	SB022	pair	5
81	Bleach 10%	SL020	ml	1.5
82	High fidelity hot start Taq polymerase		ul	0.5
83	PCR buffer		ul	10
84	MgCl2		ul	3
85	F Primer		ul	2
86	R Primer		ul	2
87	dNTPs		ul	2
88	PCR grade water	SL244	ul	68
89	Ethidium bromide (10 mg/ml)	SL239	ul	5
90	DNA ladder, 100bp		ul	5
91	Loading buffer with dye	SL210	ul	20
92	Agarose ultrapure		g	0.8
93	Agarose NuSieve GTG		g	1.6
94	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
95	Masking tape		inch	12
96	96 Capillary array		item	1/200
97	Cycle sequencing kit		ul	16
98	Cycle sequencing purification plates		each	1
99	Optical 96 well reaction plate		each	1
100	Sequencing primers		ul	4
101	0.2 ml strip tubes		each	1
102	0.2 ml PCR tubes		each	2
103	Barrier pipet tips1000 uL		ul	1
104	Barrier pipet tips 200 uL		each	3
105	Barrier pipet tips 20uL		each	15
106	Milli-Q water		ml	35
107	Exonuclease 1 / Shrimp alkaline phosphatase		ul	4
108	Formamide	SL192	ul	30
109	Septa		each	0.3
110	Polymer		ul	1/125
111	Sequencing cassette		each	1
112	Running buffer		ul	80
113	15 mL centrifuge tubes	SL241		2
114	50 mL centrifuge tubes			2

	A	B	C	D
1	**TAB 5 - Final Recommendation**			**81210**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Cross walk from 88XX8 and 88XX23 (DNA extraction from parriffin)** *Typical Batch Size - 2*			*BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant*
3		**CMS Code**	**Staff Type**	**Total Minutes**
115	2 mL plastic tubes		each	1
116	0.5 mL microcentrifuge tubes			2
117	Extraction tubs		each	4
118	Extraction tip assembly		each	1
119	100% ethanol	SL189	ml	50
120	Xylene	SL151	ml	50
121	Micro tubes 2.0 mL		item	2
122	Micro tubes, 1.5 mL with caps		item	4
123	Microtube, 1.5 mL with locking lid		item	1
124	Gauze, 4 x 4	SG051	item	1
125	Kimwipe	SM027	item	2
126	**Equipment**			**Time in Use Minutes**
127	Analytical balance		EP004	1
128	Capillary electrophoresis instrument, 96 well - sequencing			12
129	Centrifuge		EP059	3
130	Cooling block			3
131	Gel electrophoresis apparatus with power supply		EP063	15
132	Gel imaging system			4
133	Micro-volume spectrophotometer with specimen retention technology			1
134	Nucleic acid extraction instrument			5
135	Nucleic acid workstation			13
136	Pipet set		EP071	20
137	Thermal cycler			50
138	Water bath		EP043	10
139	Solvent recycler system			2

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81225**	**81226**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX2*			*CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19)* (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)	*CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6)* (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**49**	**49**
6	*Lab Tech*	*L033A*		*18*	*18*
7	*Cytotechnologist*	*L045A*		*31*	*31*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**38**	**38**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**				
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**
11	**PRE-SERVICE**				
12	**Start: When preparing containers/requisitions for physician begins**				
13	**Confirm** orders	L033A	Lab Tech	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4
16	Extraction (run set up)				
17	Extraction (aliquoting, instrument set up, DNA concentration)				
18	**PCR Set Up**	L045A	Cytotechnologist	13	13
19	Generate run on computer, generate a run on computer, and prepare tray map				
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)				
21	Retrieve sample, position on tray map				
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix				
23	Aliqout mastermix and sample to well				
24	Vortex and spin sample				
25	Set up Thermocycler and load samples				
26	Remove samples from thermocycler				
27					
28	**Bead Hybirdization:**	L045A	Cytotechnologist	12	12
29					
30					
31					
32	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2
33	**End: When specimen is ready for examination by physician**				
34	**Service Period**				
35					
36	**End: When specimen is ready for examination by physician**				
37	**Post-Service Period**				
38	**Start: When specimen examination by physician is complete**				
39	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2
40	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2
41	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2
42	Clean Room	L033A	Lab Tech	2	2
43	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2
44	Perform scheduled data management back-up	L033A	Lab Tech	1	1
45	**End: When specimen, chemical waste and record handling is complete**				
46	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**
47	DNA isolation kit		reaction	1	1
48	Gown	SB027	item	0.5	0.5
49	Gloves, nonsterile	SB022	pair	2.5	2.5
50	Bleach 10%	SL020	ml	0.75	0.75
51	High fidelity hot start Taq polymerase		ul	0.75	0.75
52	PCR buffer		ul	15	15
53	MgCl2		ul	4.5	4.5
54	F Primer, fluorescent		ul	3	3
55	R Primer, fluorescent		ul	3	3
56	dNTPs		ul	3	3
57					
58	Ethidium bromide (10 mg/ml)	SL239	ul	5	5
59	DNA ladder, 100bp		ul	5	5
60	Loading buffer with dye	SL210	ul	20	20
61	Agarose ultrapure		g	0.8	0.8
62	Agarose NuSieve GTG		g	1.6	1.6
63	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100
64	Milli-Q water		ml	40	40
65	Masking tape		inch	12	12
66	0.2 mL strip tubes		each	2	2
67	0.5 mL microcentrifuge tubes			2	2
68	2 mL plastic tubes		each	2	2
69	PCR grade water	SL244	ul	228	228
70	Barrier pipet tips1000 uL		ul	1	1
71	Barrier pipet tips 200 uL		each	3	3
72	Barrier pipet tips 20uL		each	10	10
73	Running buffer		ul	10	10
74	Formamide	SL192	ul	30	30
75	Size standard		ul	2.6	2.6

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81225**	**81226**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX2*			*CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19)* (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)	*CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6)* (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
76	Optical 96 well reaction plate		each	1	1
77	Septa		each	0.3	0.3
78	Polymer		ul	3:40	3:40
79	Capillary array		item	1/200	1/200
80	Cassette		each	1	1
81	Extraction tubs		each	4	4
82	Extraction tip assembly		each	1	1
83					
84	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**
85	Analytical balance		EP004	1	1
86					
87					
88	Centrifuge		EP059	2	2
89	Cooling block			1	1
90					
91					
92	Micro-volume spectrophotometer with specimen retention technology			1	1
93	Nucleic acid extraction instrument			5	5
94	Nucleic acid workstation			13	13
95	Pipet set		EP071	14	14
96	Thermal cycler			25	25
97	Water bath		EP043	5	5
98	Luminex Instrument			20	20

	A	B	C	F	G
1	**TAB 5 - FINAL RECOMMENDATION**			**81227**	**81335**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX2*			*CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9)* (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)	*VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variants (eg, 1639/3673)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**49**	**49**
6	*Lab Tech*	*L033A*		*18*	*18*
7	*Cytotechnologist*	*L045A*		*31*	*31*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**38**	**38**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**				
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**
11	**PRE-SERVICE**				
12	**Start: When preparing containers/requisitions for physician begins**				
13	**Confirm** orders	L033A	Lab Tech	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4
16	Extraction (run set up)				
17	Extraction (aliquoting, instrument set up, DNA concentration)				
18	**PCR Set Up**	L045A	Cytotechnologist	13	13
19	Generate run on computer, generate a run on computer, and prepare tray map				
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)				
21	Retrieve sample, position on tray map				
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix				
23	Aliqout mastermix and sample to well				
24	Vortex and spin sample				
25	Set up Thermocycler and load samples				
26	Remove samples from thermocycler				
27					
28	**Bead Hybirdization:**	L045A	Cytotechnologist	12	12
29					
30					
31					
32	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2
33	**End: When specimen is ready for examination by physician**				
34	**Service Period**				
35					
36	**End: When specimen is ready for examination by physician**				
37	**Post-Service Period**				
38	**Start: When specimen examination by physician is complete**				
39	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2
40	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2
41	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2
42	Clean Room	L033A	Lab Tech	2	2
43	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2
44	Perform scheduled data management back-up	L033A	Lab Tech	1	1
45	**End: When specimen, chemical waste and record handling is complete**				
46	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**
47	DNA isolation kit		reaction	1	1
48	Gown	SB027	item	0.5	0.5
49	Gloves, nonsterile	SB022	pair	2.5	2.5
50	Bleach 10%	SL020	ml	0.75	0.75
51	High fidelity hot start Taq polymerase		ul	0.75	0.75
52	PCR buffer		ul	15	15
53	MgCl2		ul	4.5	4.5
54	F Primer, fluorescent		ul	3	3
55	R Primer, fluorescent		ul	3	3
56	dNTPs		ul	3	3
57					
58	Ethidium bromide (10 mg/ml)	SL239	ul	5	5
59	DNA ladder, 100bp		ul	5	5
60	Loading buffer with dye	SL210	ul	20	20
61	Agarose ultrapure		g	0.8	0.8
62	Agarose NuSieve GTG		g	1.6	1.6
63	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100
64	Milli-Q water		ml	40	40
65	Masking tape		inch	12	12
66	0.2 mL strip tubes		each	2	2
67	0.5 mL microcentrifuge tubes			2	2
68	2 mL plastic tubes		each	2	2
69	PCR grade water	SL244	ul	228	228
70	Barrier pipet tips1000 uL		ul	1	1
71	Barrier pipet tips 200 uL		each	3	3
72	Barrier pipet tips 20uL		each	10	10
73	Running buffer		ul	10	10
74	Formamide	SL192	ul	30	30
75	Size standard		ul	2.6	2.6

	A	B	C	F	G
1	**TAB 5 - FINAL RECOMMENDATION**			**81227**	**81335**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX2*			*CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9)* (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)	*VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variants (eg, 1639/3673)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
76	Optical 96 well reaction plate		each	1	1
77	Septa		each	0.3	0.3
78	Polymer		ul	3:40	3:40
79	Capillary array		item	1/200	1/200
80	Cassette		each	1	1
81	Extraction tubs		each	4	4
82	Extraction tip assembly		each	1	1
83					
84	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**
85	Analytical balance		EP004	1	1
86					
87					
88	Centrifuge		EP059	2	2
89	Cooling block			1	1
90					
91					
92	Micro-volume spectrophotometer with specimen retention technology			1	1
93	Nucleic acid extraction instrument			5	5
94	Nucleic acid workstation			13	13
95	Pipet set		EP071	14	14
96	Thermal cycler			25	25
97	Water bath		EP043	5	5
98	Luminex Instrument			20	20

	A	B	C	D	E	F
1	**TAB 5 - FINAL RECOMMENDATION**			**81245**	**81310**	**81350**
2	**Meeting Date: September 2011** **Specialty: Pathology Crosswalk to L2** *Adjusted for Batch Size - 4*			*FLT3 (fms-related tyrosine kinase 3)* (eg, acute myeloid leukemia), gene analysis, internal tandem duplication (ITD) variants (ie, exons 14, 15)	*NPM1 (nucleophosmin)* (eg, acute myeloid leukemia) gene analysis, exon 12 variants	*UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, irinotecan metabolism), gene analysis, common variants (eg, *28, *36, *37)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**62**	**62**	**62**
6	*Lab Tech*	*L033A*		*18*	*18*	*18*
7	*Cytotechnologist*	*L045A*		*44*	*44*	*44*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**51**	**51**	**51**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**					
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**
11	**PRE-SERVICE**					
12	**Start: When preparing containers/requisitions for physician begins**					
13	**Confirm** orders	L033A	Lab Tech	1	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	6	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4	4
16	Extraction (run set up)					
17	Extraction (aliquoting, instrument set up, DNA concentration)					
18	**PCR Set Up**	L045A	Cytotechnologist	13	13	13
19	Generate run on computer, generate a run on computer, and prepare tray map					
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)					
21	Retrieve sample, position on tray map					
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix					
23	Aliqout mastermix and sample to well					
24	Vortex and spin sample					
25	Set up Thermocycler and load samples					
26	Remove samples from thermocycler					
27						
28						
29						
30						
31	**PCR Post Processing**	L045A	Cytotechnologist	25	25	25
32	Post-PCR -Prepare loading master mix					
33	Dilute sample					
34	Denature/cool samples					
35	Load sample onto instrument					
36	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2	2
37	**End: When specimen is ready for examination by physician**					
38	**Service Period**					
39						
40	**End: When specimen is ready for examination by physician**					
41	**Post-Service Period**					
42	**Start: When specimen examination by physician is complete**					
43	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2	2
44	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2	2
45	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2	2
46	Clean Room	L033A	Lab Tech	2	2	2
47	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2	2
48	Perform scheduled data management back-up	L033A	Lab Tech	1	1	1
49	**End: When specimen, chemical waste and record handling is complete**					
50	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**	**No. of Units**
51	DNA isolation kit		reaction	1	1	1
52	Gown	SB027	item	0.5	0.5	0.5
53	Gloves, nonsterile	SB022	pair	2.5	2.5	2.5
54	Bleach 10%	SL020	ml	0.75	0.75	0.75
55	High fidelity hot start Taq polymerase		ul	0.75	0.75	0.75
56	PCR buffer		ul	15	15	15
57	MgCl2		ul	4.5	4.5	4.5
58	F Primer, fluorescent		ul	3	3	3
59	R Primer, fluorescent		ul	3	3	3

	A	B	C	D	E	F
1	**TAB 5 - FINAL RECOMMENDATION**			**81245**	**81310**	**81350**
2	**Meeting Date: September 2011** **Specialty: Pathology Crosswalk to L2** *Adjusted for Batch Size - 4*			*FLT3 (fms-related tyrosine kinase 3)* (eg, acute myeloid leukemia), gene analysis, internal tandem duplication (ITD) variants (ie, exons 14, 15)	*NPM1 (nucleophosmin)* (eg, acute myeloid leukemia) gene analysis, exon 12 variants	*UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, irinotecan metabolism), gene analysis, common variants (eg, *28, *36, *37)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**
60	dNTPs		ul	3	3	3
61						
62	Ethidium bromide (10 mg/ml)	SL239	ul	5	5	5
63						
64						
65						
66						
67						
68	Milli-Q water		ml	40	40	40
69						
70	0.2 mL strip tubes		each	2	2	2
71	0.5 mL microcentrifuge tubes			2	2	2
72	2 mL plastic tubes		each	2	2	2
73	PCR grade water	SL244	ul	228	228	228
74	Barrier pipet tips1000 uL		ul	1	1	1
75	Barrier pipet tips 200 uL		each	3	3	3
76	Barrier pipet tips 20uL		each	10	10	10
77	Running buffer		ul	10	10	10
78	Formamide	SL192	ul	30	30	30
79	Size standard		ul	2.6	2.6	2.6
80	Optical 96 well reaction plate		each	1	1	1
81	Septa		each	0.3	0.3	0.3
82	Polymer		ul	3:40	3:40	3:40
83	Capillary array		item	1/200	1/200	1/200
84	Cassette		each	1	1	1
85	Extraction tubs		each	4	4	4
86	Extraction tip assembly		each	1	1	1
87						
88	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**
89	Analytical balance		EP004	1	1	1
90	Capillary electrophoresis instrument - fragment analysis			15	15	15
91	Capillary electrophoresis instrument - fragment analysis software			15	15	15
92	Centrifuge		EP059	2	2	2
93	Cooling block			1	1	1
94	Gel electrophoresis apparatus with power supply		EP063	8	8	8
95	Gel imaging system			2	2	2
96	Micro-volume spectrophotometer with specimen retention technology			1	1	1
97	Nucleic acid extraction instrument			5	5	5
98	Nucleic acid workstation			13	13	13
99	Pipet set		EP071	14	14	14
100	Thermal cycler			25	25	25
101	Water bath		EP043	5	5	5

	A	B	C	D	E	F	G
1	**TAB 5 - FINAL RECOMMENDATION**			**81261**	**81264**	**81340**	**81342**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX3*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)	IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**59**	**59**	**59**	**59**
6	*Lab Tech*	*L033A*		*18*	*18*	*18*	*18*
7	*Cytotechnologist*	*L045A*		*41*	*41*	*41*	*41*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**48**	**48**	**48**	**48**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**						
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**	**11**
11	**PRE-SERVICE**						
12	**Start: When preparing containers/requisitions for physician begins**						
13	**Confirm** orders	L033A	Lab Tech	1	1	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6	6	6	6
15	**DNA Extraction**	L045A	Cytotech	4	4	4	4
16	place blood sample on rocker						
17	Place tips and microtiter plate on Qiagen 9604						
18	Remove cap from blood tube						
19	place blood sample in Qiagen 9604 rack and allow instrument to read bar code and aliquot blot into microtiter plate						
20	Create plate map for testing and IT interface						
21	Cap blood tube and return specimen to refrigerator until testing completed						
22	Place tips, reagents and microtiter plates on Qiagen M96						
23	Place microtiter plate with blood sample on Qiagen M96						
24	Allow instrument to extract DNA						
25	discard DNA extraction waste (liquids and solids)						
26	**PCR Set Up**	L045A	Cytotech	15	15	15	15
27	combine reagents for PCR master mix			5 master mixes	2 master mixes		
28	Place tips, PCR reagents and PCR reaction plate on Biomek 2000						
29	Remove extracted DNA from Qiagen M96 and place on Biomek 2000						
30	Allow instrument to set up PCR reaction						
31	Cover plate with sealing mat						
32	discard Biomek 2000 tips from PCR set up						
33	Place PCR reaction plate in ABI 9700 thermal cycler, enter Accutype PCR program, and allow instrument to perform PCR						
34							
35							
36	**Post PCR Processing 3**	L045A	Cytotech	20	20	20	20
37	combine reagents for loading master mix						
38	Place tips, 2nd digest plate, loading plate, dilution plate, nuclease free water, ROX size standard and Hi-Di foramide on Biomek 2000 and allow instrument to pipet reagents						
39	Place 3130 loading plate on ABI 9700, enter denature program, and allow thermal cycler to denature						
40	Cover plate with 96-well septa						
41	discard Biomek 2000 tips from loading set up						
42	Prepare 3130 instrument for capillary electrophoresis (upload plate map, add buffer, POP4, capillary array, 16-well septa)						
43	Place loading reaction plate into casette and place on 3130 instrument						
44	Allow instrument to perform capillary electrophoresis						

	A	B	C	D	E	F	G
1	**TAB 5 - FINAL RECOMMENDATION**			**81261**	**81264**	**81340**	**81342**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX3*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)	IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**	**Minutes**
45	**Review sample and prepare data for physician interpretation**	L045A	Cytotech	2	2	2	2
46	**End: When specimen is ready for examination by physician**						
47	**Service Period**						
48							
49	**Post-Service Period**						
50	**Start: When specimen examination by physician is complete**						
51	Enter results in lab information system after physician interp	L033A	Lab Tech	2	2	2	2
52	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2	2	2
53	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2	2	2
54	Clean Room	L033A	Lab Tech	2	2	2	2
55	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2	2	2
56	Perform scheduled data management back-up	L033A	Lab Tech	1	1	1	1
57	**End: When specimen, chemical waste and record handling is complete**						
58							
59	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**	**No. of Units**	**No. of Units**
60	DNA isolation		reaction	1	1	1	1
61	Gown	SB027	item	0.5	0.5	0.5	0.5
62	Gloves, nonsterile	SB022	pair	2.5	2.5	2.5	2.5
63	Bleach 10%	SL020	ml	0.75	0.75	0.75	0.75
64	100% ethanol	SL189	ml	0.44	0.44	0.44	0.44
65	1000uL graduated barrier pipet tips		each	3	3	3	3
66	10mL serological pipet		item	1	1	1	1
67							
68	11 Primer Pairs		ul	2 uL	2 uL	2 uL	2 uL
69	20 uL barrier pipe tips		each	7	7	7	7
70	200uL barrier pipet tips		each	3	3	3	3
71	20uL pipet barrier tips		each	4	4	4	4
72	25 mL pipettes		item	1	1	1	1
73	250uL barrier pipet tips		each	3	3	3	3
74	8-cap strips		each	0.13	0.13	0.13	0.13
75	96 well PCR Plate		each	0.03	0.03	0.03	0.03
76							
77							
78							
79	Capillary Array 16X36Cm		item	0.063	0.063	0.063	0.063
80	Capillary electrophoresis buffer		ul	0.007	0.007	0.007	0.007
81	Capillary electrophoresis polymer		ul	5.2	5.2	5.2	5.2
82	Capillary electrophoresis size standard		ul	0.5	0.5	0.5	0.5
83	Disposable culture tubes 12X75		each	0.01	0.01	0.01	0.01
84	DNA extraction instrument tips		item	6	6	6	6
85	dNTPs		ul	0.4	0.4	0.4	0.4
86							
87	Formamide	SL192	item	0.01	0.01	0.01	0.01
88	green microtiter plates		each	0.01	0.01	0.01	0.01
89	High fidelity hot start taq polymerase		ul	0.3	0.3	0.3	0.3
90	Liquid handling instrument tips		item	1	1	1	1
91	Microcentrifuge tubes	SL240	each	1	1	1	1
92							
93	Plate Sealers		each	0.01	0.01	0.01	0.01
94	Reagent, Water, Sterile Nuclease Free, 100Ml	SL251	ul	26	26	26	26
95	Sealing mat		each	0.03	0.03	0.03	0.03
96	Septa Strip Tray 96 well		item	0.04	0.04	0.04	0.04
97	Strip Tube, 8 Per Strip		each	0.1	0.1	0.1	0.1

	A	B	C	D	E	F	G
1	**TAB 5 - FINAL RECOMMENDATION**			**81261**	**81264**	**81340**	**81342**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX3*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)	IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**	**Minutes**
98	Tube, Thin Wall Pcr 8 Strip W/Cap 200uL		each	0.1	0.1	0.1	0.1
99	U bottom microtiter plates		each	0.01	0.01	0.01	0.01
100	yellow microtiter plates		each	0.01	0.01	0.01	0.01
101							

	A	B	C	D	E	F	G
1	**TAB 5 - FINAL RECOMMENDATION**			**81261**	**81264**	**81340**	**81342**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Crosswalked to L2XXX3*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); amplification methodology (eg, polymerase chain reaction)	IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma, B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis to detect abnormal clonal population(s); using amplification methodology (eg, polymerase chain reaction)	TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**	**Minutes**
102	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**
103	Capillary electrophoresis instrument - fragment analysis			15	15	15	15
104	Capillary electrophoresis instrument - fragment analysis software			15	15	15	15
105	Micro-volume spectrophotometer with specimen retention technology			1	1	1	1
106	Nucleic acid extraction instrument			5	5	5	5
107	Nucleic acid workstation			15	15	15	15
108	Pipet set		EP071	20	20	20	20
109	Thermal cycler			54	54	54	54

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81262**	**81341**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 2* *Referenced to 88XX16*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, Southern blot)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**		
4	**Global Period**				
5	**TOTAL CLINICAL LABOR TIME**			**104**	**104**
6	*Lab Tech*	L033A		18	18
7	*Cytotechnologist*	L045A		86	86
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**93**	**93**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**				
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**
11	**PRE-SERVICE**				
12	**Confirm** orders	L033A	Lab Tech	1	1
13	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6	6
14	Retrieve and accession specimen: Receiving sample, checking for unacceptable conditions.				
15	Gather reports and history on patient.				
16	Check blood tube against requisition				
17	Log in patient with accession ID				
18	Print out labels				
19	Setup extraction labels				
20	**EXTRACTION and Reaction**	L045A	Cytotechnologist	10	10
21	Gather all needed cartriages, internal control, and elution tubes, reagents and racks. Inspect cartriage integrity and fill volume in wells.				
22	Prepare lymph node specimen for extraction				
23	Label and add specimen to 1.5ml sample tube and place elution tube on DNA extraction instrument				
24	Load onto DNA extraction instrument, set up run conditions, and run				
25	Check DNA concentration and 260/280 ratio on NanoDrop				
26	Label patient tubes				
27	Dilute DNA				
28	Prepare 3 restriction enzyme digestion reaction mixes				
29	Aliquot restriction digestion reaction mixes into tubes, add diluted DNA for patient and control to reaction mix in each tube (6 total tubes)				
30	Place in incubator				
31	**Gel**	L045A	Cytotechnologist	40	40
32	Prepare Gel				
33	Add Dye to samples				
34	Load gel				
35	Gel picture				
36	HCL				
37	NacL/NaOH				
38	NacL/Tris				
39	Prepare for blotting: Transfer DNA gel to Nytran membrane using turboblotter, wash membrane				

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81262**	**81341**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 2* *Referenced to 88XX16*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, Southern blot)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**		
40	Blot the membrane dry and wrap in UV-transparent plastic wrap				
41	**Post Processing 1: PreHyb+Hyb**	L045A	Cytotechnologist	9	9
42	Prehyb				
43	Aliquot probe mix				
44	Put probe on ice				
45	Mix probe with hyb solution				
46	Add probe to blot + cap container				
47	**Post Processing 2: Stringency washes**	L045A	Cytotechnologist	5	5
48	Wash 1				
49	Wash 2				
50	**Post Processing 3: Detection**	L045A	Cytotechnologist	20	20
51	Wash 1				
52	Wash 2				
53	Prepare wash 3 (buffer + probe)				
54	Wash 3				
55	Wash 4				
56	Detection Buffer				
57	CPD				
58	Place film in cassette				
59	Expose Film				
60	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2
61	**End: When specimen is ready for examination by physician**				
62	**Post-Service Period**				
63	**Start: When specimen examination by physician is complete**				
64	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2
65	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2
66	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2
67	Clean Room	L033A	Lab Tech	2	2
68	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2
69	Perform scheduled data management back-up	L033A	Lab Tech	1	1
70	**End: When specimen, chemical waste and record handling is complete**				
71					
72	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**
73	DNA isolation		reaction	1	1
74	Bleach 10%	SL020	ml	0.75	0.75
75	Extraction tip assembly		each	1	1
76	Extraction tubs		each	4	4
77	Milli-Q water		ml	35	35
78	Masking tape		inches	12	12
79	1.5 mL tubes	SL240	tubes	5.88	5.88
80	AGAROSE		g	1.76	1.76
81	Anti-Dig Antibody		mcL	2.35	2.35
82	Blood collection (6mL, purple top)	SL242	unit	1.18	1.18
83	Blotting paper		sheet	1.18	1.18
84	Boric Acid		g	3.24	3.24
85	Bromophenol Blue		g	1.18	1.18
86	Chemiluminescent detection reagent		mL	1.18	1.18

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81262**	**81341**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 2* *Referenced to 88XX16*			IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-cell), gene rearrangement analysis to detect abnormal clonal population(s); direct probe methodology (eg, Southern blot)	TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population(s)
3		**CMS Code**	**Staff Type**		
87	Coriell controls		mcL	2.94	2.94
88	Dig Easy Hyb		mL	47.65	47.65
89	Digoxigenin Labeled Probe		mcL	11.76	11.76
90	DNA ladder, 100bp		mcL	23.53	23.53
91					
92	BAMH1		unit	150.00	150.00
93	HINDIII		unit	80.00	80.00
94	EcoR1		unit	40.00	40.00
95	EDTA		g	10.94	10.94
96	Ficoll		g	2.12	2.12
97	Film		film	1.18	1.18
98	Filtered, 1000mcL		tips	11.76	11.76
99	Filtered, 10mcL		tips	70.59	70.59
100	Filtered, 200mcL		tips	70.59	70.59
101	Filtered, 20mcL		tips	70.59	70.59
102	gloves, non-sterile	SB022	pair	1.00	1.00
103	gown, staff, impervious	SB027	item	0.75	0.75
104	HCL	SL178	mL	4.71	4.71
105	Large Volume Compact		cartrid	2.35	2.35
106	NaOH (Pellets), ACS	SL128	g	4.82	4.82
107	Nylon Membrane		sheet	1.18	1.18
108	Potassium Phosphate		g	0.48	0.48
109	Sheet protector	SK044	sheet	1.18	1.18
110	Sodium Chloride	SL126	g	142.99	142.99
111	Sodium Citrate	SL127	g	41.51	41.51
112	Sodium Dodecyl Sulfate		g	11.76	11.76
113	Sodium Phosphate		g	11.76	11.76
114	Spermidine		g	0.03	0.03
115	SYBR Gel Stain		mcL	17.65	17.65
116	Tris Base		g	20.60	20.60
117	Wash and Blocking Buffer Set		blot	1.18	1.18
118	Xylene Cyanol		g	1.18	1.18
119					
120	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**
121	37 degree incubator		EPO21	600	600
122	Analytical balance		EP004	1	2
123	Gel electrophoresis apparatus with power supply		EP063	600	600
124	Gel imaging system			4	4
125	Micro-volume spectrophotometer with specimen retention technology			7	7
126	Nucleic acid extraction instrument			9	9
127	Pipet set		EP071	6	6
128	Water bath		EP043	22	22

	A	B	C	D
1	**TAB 5-FINAL RECOMMENDATION**			**81263**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Referenced Code = L2XXX4*			*IGH@ (Immunoglobulin heavy chain locus)* (eg, leukemia and lymphoma, B-cell), variable region somatic mutation analysis
3		**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**97**
6	*Lab Tech*	*L033A*		*18*
7	*Cytotechnologist*	*L045A*		*79*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**86**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**Preserve RNA**	L045A	Cytotechnologist	2
16	Preparing work area, materials, documentation, and labeling			
17	Red blood cell lysis, white blood cell lysis, and freezing of specimen			
18	**RNA isolation**	L045A	Cytotechnologist	2
19	Preparing work area, materials, and documentation			
20	Isolating and quantitating RNA			
21	**mRNA Preparation**	L045A	Cytotechnologist	8
22	Adding reagents and mixing			
23	Incubating, washing, centrifuging, and quantitating			
24	**cDNA preparation**	L045A	Cytotechnologist	10
25	Preparing reagents, materials, controls, documentation			
26	Assembling master mix, adding to tubes along with specimen and controls; mixing and incubating			
27	Decontaminating area with bleach			
28	**Initial PCR reaction**	L045A	Cytotechnologist	15
29	Preparing reagents, documentation, labeling			
30	Preparing master mix, adding to reaction tubes along with cDNA, mixing, programming thermal cycler, adding and removing reaction tubes from thermal cycler			
31				
32				
33				
34	**Confirm PCR products**	L045A	Cytotechnologist	13
35	Preparing samples for electrophoresis, reagents, documentation and preparing agarose gel			
36	Loading samples into agarose gel, performing electorphoresis, photographing gel in darkroom, and decontaminating transilluminator			
37	**PCR Clean-up**	L045A	Cytotechnologist	3
38	Preparing documentation and labeling			
39	Adding ExoSAP-IT, mixing, programming thermal cycler adding and removing from thermal cycler			
40	**Cycle Sequencing Reaction**	L045A	Cytotechnologist	10
41	Preparing reagents, documentation, and labeling plate			
42	Assembling master mix, adding to plate along with reagents, amplicons, mixing, centrifuging programming thermal cycler, adding and removing from thermal cycler			
43	**Ethanol Precipitation**	L045A	Cytotechnologist	8
44	Preparing reagents, including fresh 70% ethanol, and documentation			
45	Adding reagents, mixing, centrifuging, incubating, heating, cooling			
46	**Sequencing**	L045A	Cytotechnologist	6
47	Preparing documentation and entering run parameters			
48	Placing plate in sequencer and running instrument, exporting data to file			
49	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2
50	**End: When specimen is ready for examination by physician**			
51	**Service Period**			
52				
53	**Post-Service Period**			
54	**Start: When specimen examination by physician is complete**			
55	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2

	A	B	C	D
1	**TAB 5-FINAL RECOMMENDATION**			**81263**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Referenced Code = L2XXX4*			*IGH@ (Immunoglobulin heavy chain locus)* (eg, leukemia and lymphoma, B-cell), variable region somatic mutation analysis
3		**CMS Code**	**Staff Type**	**Minutes**
56	Prepare, pack and transport specimens and records for in-house storage and external storage		Lab Tech	2
57	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
58	Clean Room	L033A	Lab Tech	2
59	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
60	Perform scheduled data management back-up	L033A	Lab Tech	1
61	**End: When specimen, chemical waste and record handling is complete**			

	A	B	C	D
1	**TAB 5-FINAL RECOMMENDATION**			**81263**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *Referenced Code = L2XXX4*			*IGH@ (Immunoglobulin heavy chain locus)* (eg, leukemia and lymphoma, B-cell), variable region somatic mutation analysis
3		**CMS Code**	**Staff Type**	**Minutes**
62	**SUPPLIES**		**Type of Unit**	**No. of Units**
63	RNA isolation kit		reaction	1
64	Gown	SB027	item	0.5
65	Bleach 10%	SL020	ml	0.75
66	High fidelity hot start Taq polymerase		ul	0.5
67	PCR buffer		ul	10
68	MgCl2		ul	3
69	F Primer		ul	2
70	R Primer		ul	2
71	Ethidium bromide (10 mg/ml)	SL239	ul	5
72	DNA ladder, 100bp		ul	5
73	Loading buffer with dye	SL210	ul	20
74	Agarose ultrapure		g	0.8
75	Agarose NuSieve GTG		g	1.6
76	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	1300
77	Masking tape		inch	12
78	96 Capillary array		item	1/200
79	Cycle sequencing kit		ul	16
80	Cycle sequencing purification plates		each	1
81	Optical 96 well reaction plate		each	1
82	0.2 ml strip tubes		each	3
83	Milli-Q water		ml	35
84	Exonuclease I / Shrimp alkaline phosphatase		ul	2
85	Septa		each	0.3
86	Sequencing cassette		each	1
87	Polymer		ul	1/125
88	15 mL centrifuge tubes	SL241		2
89	50 mL centrifuge tubes			2
90	2 mL plastic tubes		each	1
91	Running buffer		ul	80
92	0.5 mL microcentrifuge tubes			2
93	Extraction tubs		each	4
94	dNTPs		uL	6
95	EDTA		item	6
96	Filter Micropipet Tip, 10uL		item	57
97	Filter Micropipet Tip, 20 uL		item	36
98	Filter Micropipet Tip, 200uL		item	17
99	Formamide	SL192	uL	100
100	Gloves, Nonsterile, Latex	SB022	pair	2.5
101	Gloves, Nonsterile, Nitrile	SB023	pair	0.5
102	Gown, Impervious, staff	SB027	item	0.5
103	Kimwipe	SM027	item	6
104	Micropipet Tip, 1000uL		item	7
105	PCR Grade Water	SL244	uL	204
106	Reverse Transcription Kit		item	6
107	RNase Zap		mL	30
108	Sealing Foil		each	2
109				
110	Transfer Pipet		item	1
111	Extraction tubs		each	4
112	Extraction tip assembly		each	1
113	somatic hypermutation analysis kit		each	1/33
114				
115	**Equipment**			**Time in Use Minutes**
116	Analytical balance		EP004	1
117	Capillary electrophoresis instrument, 96 well - sequencing			12
118	Capillary electrophoresis sequencing software			12
119	Centrifuge		EP059	2
120	Cooling block			2
121	Gel electrophoresis apparatus with power supply		EP063	15
122	Gel imaging system			2
123	Micro-volume spectrophotometer with specimen retention technology			1
124	Nucleic acid extraction instrument			9
125	Nucleic acid workstation			20
126	Pipet set		EP071	30
127				
128	Thermal cycler			13
129	Water bath		EP043	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81265**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *IXXXX6 - 9 were crosswalked to L2XX2*			Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells) (Use IXXX7 in conjunction with IXXX6) Performed on 2 specimens
3		**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**93**
6	*Lab Tech*	*L033A*		*27*
7	*Cytotechnologist*	*L045A*		*66*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**96**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**16.5**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1.5
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	9
15	**DNA Extraction**	L045A	Cytotechnologist	6
16	Extraction (run set up)			
17	Extraction (aliquoting, instrument set up, DNA concentration)			
18	**PCR Set Up -**	L045A	Cytotechnologist	19.5
19	Generate run on computer, generate a run on computer, and prepare tray map			
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)			
21	Retrieve sample, position on tray map			
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix			
23	Aliqout mastermix and sample to well			
24	Vortex and spin sample			
25	Set up Thermocycler and load samples			
26	Remove samples from thermocycler			
27				
28	Prepare Gel			
29	Load Gel			
30	Gel and Label picture			
31	**PCR Post Processing -**	L045A	Cytotechnologist	37.5
32	Post-PCR -Prepare loading master mix			
33	Dilute sample			
34	Denature/cool samples			
35	Load sample onto instrument			
36	**Review sample and prepare data for physician interpretation -**	L045A	Cytotechnologist	3
37	**End: When specimen is ready for examination by physician**			
38	**Service Period**			
39				
40	**End: When specimen is ready for examination by physician**			
41	**Post-Service Period**			
42	**Start: When specimen examination by physician is complete**			
43	Enter results in lab information system after physician interpretation	L033A	Lab Tech	3
44	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	3
45	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste -	L033A	Lab Tech	3
46	Clean Room -	L033A	Lab Tech	3
47	Perform station maintenance including system rinse and dry -	L033A	Lab Tech	3
48	Perform scheduled data management back-up	L033A	Lab Tech	1.5
49	**End: When specimen, chemical waste and record handling is complete**			

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81265**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *IXXXX6 - 9 were crosswalked to L2XX2*			Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells) (Use IXXX7 in conjunction with IXXX6) Performed on 2 specimens
3		**CMS Code**	**Staff Type**	**Minutes**
50	**SUPPLIES**		**Type of Unit**	**No. of Units**
51	DNA isolation kit		reaction	1
52	Gown	SB027	item	0.5
53	Gloves, nonsterile	SB022	pair	2.5
54	Bleach 10%	SL020	ml	0.75
55	High fidelity hot start Taq polymerase		ul	0.75
56	PCR buffer		ul	15
57	MgCl2		ul	4.5
58	F Primer, fluorescent		ul	3
59	R Primer, fluorescent		ul	3
60	dNTPs		ul	3
61				
62				
63				
64				
65				
66				
67	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
68	Milli-Q water		ml	40
69	Masking tape		inch	12
70	0.2 mL strip tubes		each	2
71	0.5 mL microcentrifuge tubes			2
72	2 mL plastic tubes		each	2
73	PCR grade water	SL244	ul	228
74	Barrier pipet tips1000 uL		ul	1
75	Barrier pipet tips 200 uL		each	3
76	Barrier pipet tips 20uL		each	10
77	Running buffer		ul	10
78	Formamide	SL192	ul	30
79	Size standard		ul	2.6
80	Optical 96 well reaction plate		each	1
81	Septa		each	0.3
82	Polymer		ul	3:40
83	Capillary array		item	1/200
84	Cassette		each	1
85	Extraction tubs		each	4
86	Extraction tip assembly		each	1
87	**Equipment**			**Time in Use Minutes**
88	Analytical balance		EP004	1
89	Capillary electrophoresis instrument - fragment analysis			15
90	Capillary electrophoresis instrument - fragment analysis software			15
91	Centrifuge		EP059	2
92	Cooling block			1
93				
94				
95	Micro-volume spectrophotometer with specimen retention technology			1
96	Nucleic acid extraction instrument			5
97	Nucleic acid workstation			13
98	Pipet set		EP071	14
99	Thermal cycler			25
100	Water bath		EP043	5

	A	B	C	D	E	F
1	**TAB 5-FINAL RECOMMENDATION**			**81266**	**81267**	**81268**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *IXXXX6 - 9 were crosswalked to L2XX2*			Comparative analysis using Short Tandem Repeat (STR) markers; each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) (List separately in addition to code for primary procedure) (Use IXXX7 in conjunction with IXXX6) Batch size 4	Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; without cell selection Batch size 4	Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; with cell selection (eg, CD3, CD33), each cell type Batch size 4
3		**CMS Code**	**Staff Type**		**Minutes**	**Minutes**
4	**Global Period**			**(Use IXXX7 in conjunction with IXXX6)**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**62**	**62**	**62**
6	*Lab Tech*	*L033A*		*18*	*18*	*18*
7	*Cytotechnologist*	*L045A*		*44*	*44*	*44*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**51**	**51**	**51**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**					
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**
11	**PRE-SERVICE**					
12	**Start: When preparing containers/requisitions for physician begins**					
13	**Confirm** orders	L033A	Lab Tech	1	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	6	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4	4
16	Extraction (run set up)					
17	Extraction (aliquoting, instrument set up, DNA concentration)					
18	**PCR Set Up**	L045A	Cytotechnologist	13	13	13
19	Generate run on computer, generate a run on computer, and prepare tray map					
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)					
21	Retrieve sample, position on tray map					
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix					
23	Aliqout mastermix and sample to well					
24	Vortex and spin sample					
25	Set up Thermocycler and load samples					
26	Remove samples from thermocycler					
27						
28						
29						
30						
31	**PCR Post Processing**	L045A	Cytotechnologist	25	25	25
32	Post-PCR -Prepare loading master mix					
33	Dilute sample					
34	Denature/cool samples					
35	Load sample onto instrument					
36	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2	2
37	**End: When specimen is ready for examination by physician**					
38	**Service Period**					
39						
40	**End: When specimen is ready for examination by physician**					
41	**Post-Service Period**					
42	**Start: When specimen examination by physician is complete**					
43	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2	2
44	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2	2
45	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2	2
46	Clean Room	L033A	Lab Tech	2	2	2
47	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2	2
48	Perform scheduled data management back-up	L033A	Lab Tech	1	1	1
49	**End: When specimen, chemical waste and record handling is complete**					
50	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**	**No. of Units**
51	DNA isolation kit		reaction	1	1	1
52	Gown	SB027	item	0.5	0.5	0.5
53	Gloves, nonsterile	SB022	pair	2.5	2.5	2.5
54	Bleach 10%	SL020	ml	0.75	0.75	0.75
55	High fidelity hot start Taq polymerase		ul	0.75	0.75	0.75
56	PCR buffer		ul	15	15	15
57	MgCl2		ul	4.5	4.5	4.5
58	F Primer, fluorescent		ul	3	3	3
59	R Primer, fluorescent		ul	3	3	3
60	dNTPs		ul	3	3	3
61						
62	Ethidium bromide (10 mg/ml)	SL239	ul	5	5	5

	A	B	C	D	E	F
1	**TAB 5-FINAL RECOMMENDATION**			**81266**	**81267**	**81268**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *IXXXX6 - 9 were crosswalked to L2XX2*			Comparative analysis using Short Tandem Repeat (STR) markers; each additional specimen (eg, additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) (List separately in addition to code for primary procedure) (Use IXXX7 in conjunction with IXXX6) Batch size 4	Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; without cell selection Batch size 4	Chimerism (engraftment) analysis, post hematopoietic stem cell transplantation specimen, includes comparison to previously performed baseline analyses; with cell selection (eg, CD3, CD33), each cell type Batch size 4
3		**CMS Code**	**Staff Type**		**Minutes**	**Minutes**
63	DNA ladder, 100bp		ul	5	5	5
64	Loading buffer with dye	SL210	ul	20	20	20
65	Agarose ultrapure		g	0.8	0.8	0.8
66	Agarose NuSieve GTG		g	1.6	1.6	1.6
67	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100	100
68	Milli-Q water		ml	40	40	40
69	Masking tape		inch	12	12	12
70	0.2 mL strip tubes		each	2	2	2
71	0.5 mL microcentrifuge tubes			2	2	2
72	2 mL plastic tubes		each	2	2	2
73	PCR grade water	SL244	ul	228	228	228
74	Barrier pipet tips1000 uL		ul	1	1	1
75	Barrier pipet tips 200 uL		each	3	3	3
76	Barrier pipet tips 20uL		each	10	10	10
77	Running buffer		ul	10	10	10
78	Formamide	SL192	ul	30	30	30
79	Size standard		ul	2.6	2.6	2.6
80	Optical 96 well reaction plate		each	1	1	1
81	Septa		each	0.3	0.3	0.3
82	Polymer		ul	3:40	3:40	3:40
83	Capillary array		item	1/200	1/200	1/200
84	Cassette		each	1	1	1
85	Extraction tubs		each	4	4	4
86	Extraction tip assembly		each	1	1	1
87	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**
88	Analytical balance		EP004	1	1	1
89	Capillary electrophoresis instrument - fragment analysis			15	15	15
90	Capillary electrophoresis instrument - fragment analysis software			15	15	15
91	Centrifuge		EP059	2	2	2
92	Cooling block			1	1	1
93						
94						
95	Micro-volume spectrophotometer with specimen retention technology			1	1	1
96	Nucleic acid extraction instrument			5	5	5
97	Nucleic acid workstation			13	13	13
98	Pipet set		EP071	14	14	14
99	Thermal cycler			25	25	25
100	Water bath		EP043	5	5	5

	A	B	C	D	E	F
1	**TAB 5 - FINAL RECOMMENDATION**			**81292**	**81295**	**81317**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size -* *Crosswalked to L2XXX7 = 2*			MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
3	**---- DIRECT CROSSWALK**	**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**129**	**129**	**129**
6	*Lab Tech*	*L033A*		*18*	*18*	*18*
7	*Cytotechnologist*	*L045A*		*111*	*111*	*111*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**118**	**118**	**118**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**					
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**
11	**PRE-SERVICE**					
12	**Start: When preparing containers/requisitions for physician begins**					
13	**Confirm** orders	L033A	Lab Tech	1	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4	4
16	**PCR Set-up**	L045A	Cytotechnologist	35	35	35
17	**PCR Gel (***L7: 14products)*	L045A	Cytotechnologist	20	20	20
18	**PCR Post Processing 1**	L045A	Cytotechnologist	30	30	30
19	**Post PCR Processing 2**	L045A	Cytotechnologist	20	20	20
20	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2	2
21	**End: When specimen is ready for examination by physician**					
22	**Service Period**					
23						
24	**Post-Service Period**					
25	**Start: When specimen examination by physician is complete**					
26	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2	2
27	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2	2
28	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2	2
29	Clean Room	L033A	Lab Tech	2	2	2
30	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2	2
31	Perform scheduled data management back-up	L033A	Lab Tech	1	1	1
32	**End: When specimen, chemical waste and record handling is complete**					
33	**SUPPLIES**		**Type of Unit**			
34	DNA isolation kit		reaction	1	1	1
35	Gown	SB027	item	1	1	1
36	Gloves, nonsterile	SB022	pair	5	5	5
37	Bleach 10%	SL020	ml	1.5	1.5	1.5
38	High fidelity hot start Taq polymerase		ul	7	7	7
39	PCR buffer		ul	140	140	140
40	MgCl2		ul	42	42	42
41	F Primer X 14		ul	2	2	2
42	R Primer X 14		ul	2	2	2
43	dNTPs		ul	28	28	28
44	PCR grade water	SL244	ul	952	952	952
45	Ethidium bromide (10 mg/ml)	SL239	ul	5	5	5
46	DNA ladder, 100bp		ul	5	5	5
47	Loading buffer with dye	SL210	ul	20	20	20
48	Agarose ultrapure		g	0.8	0.8	0.8
49	Agarose NuSieve GTG		g	1.6	1.6	1.6
50	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100	100
51	Masking tape		inch	12	12	12
52	96 Capillary array		item	1/200	1/200	1/200
53	Cycle sequencing kit		ul	224	224	224
54	Cycle sequencing purification plates		each	1	1	1
55	Optical 96 well reaction plate		each	1	1	1
56	Sequencing primers		ul	56	56	56
57	0.2 mL strip tubes		each	4	4	4
58	0.2 ml PCR tubes		each	15	15	15
59	Milli-Q water		ml	35	35	35
60	Exonuclease I / Shrimp alkaline phosphatase		ul	28	28	28
61	Septa		each	0.3	0.3	0.3
62	Sequencing cassette		each	1	1	1
63	Polymer		ul	14/125	14/125	14/125
64	Formamide	SL192	ul	420	420	420
65	15 mL centrifuge tubes	SL241		2	2	2
66	50 mL centrifuge tubes			2	2	2
67	2 mL plastic tubes		each	14	14	14
68	Running buffer		ul	80	80	80
69	0.5 mL microcentrifuge tubes			25	25	25
70	Barrier pipet tips1000 uL		ul	4	4	4

	A	B	C	D	E	F
1	**TAB 5 - FINAL RECOMMENDATION**			**81292**	**81295**	**81317**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size -* *Crosswalked to L2XXX7 = 2*			MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
3	**---- DIRECT CROSSWALK**	**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**
71	Barrier pipet tips 200 uL		each	32	32	32
72	Barrier pipet tips 20uL		each	200	200	200
73	Extraction tubs		each	4	4	4
74	Extraction tip assembly		each	1	1	1
75						
76	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**
77	Analytical balance		EP004	1	1	1
78	Capillary electrophoresis instrument - sequencing			36	36	36
79	Capillary electrophoresis sequencing software			36	36	36
80	Centrifuge		EP059	3	3	3
81	Cooling block			3	3	3
82	Gel electrophoresis apparatus with power supply		EP063	15	15	15
83	Gel imaging system			4	4	4
84	Micro-volume spectrophotometer with specimen retention technology			1	1	1
85	Nucleic acid extraction instrument			5	5	5
86	Nucleic acid workstation			35	35	35
87	Pipet set		EP071	40	40	40
88	Thermal cycler			89	89	89
89	Water bath		EP043	5	5	5

	A	B	C	D	E	F	G	H
1	**TAB 5 - FINAL RECOMMENDATION**			**81293**	**81296**	**81299**	**81303**	**81318**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Crosswalk to 88XX8** *Typical Batch Size - 2*			MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variants	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
3	**----- DIRECT CROSSWALK**	**CMS Code**	**Staff Type**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**109**	**109**	**109**	**109**	**109**
6	*Lab Tech*			*18*	*18*	*18*	*18*	*18*
7	*Cytotechnologist*			*91*	*91*	*91*	*91*	*91*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**98**	**98**	**98**	**98**	**98**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**							
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**	**11**	**11**
11	**PRE-SERVICE**							
12	**Start: When preparing containers/requisitions for physician begins**							
13	**Confirm** orders	L033A	Lab Tech	1	1	1	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6	6	6	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4	4	4	4
16	Sort and rack specimen according to test requested							
17	Place blood sample on rocker							
18	Place tips and microtiter plate on liquid handling system 1							
19	Remove cap from blood tube							
20	Place blood sample in liquid handling system 1 rack and allow instrument to read bar code and aliquot blot into microtiter plate							
21	Create plate map for testing and IT interface							
22	Cap blood tube and return specimen to refrigerator until testing completed							
23	Place tips, reagents and microtiter plates on DNA extraction instrument							
24	Place microtiter plate with blood sample on DNA extraction instrument							
25	Discard DNA extraction waste (liquids and solids)							
26	**PCR Set Up**			13	13	13	13	13
27	Assemble PCR Primers, buffer, etc… into plates							
28	Combine reagents for PCR master mix							
29	Place tips, PCR reagents and PCR reaction plate on liquid handling instrument 2							
30	Remove extracted DNA from DNA extraction instrument and place on liquid handling system 2							
31	Allow instrument to set up PCR reaction							
32	Cover plate with sealing mat							
33	Place PCR reaction plate in thermal cycler, enter PCR program, and allow instrument to perform PCR							
34	Discard liquid handling system 2 tips from PCR set up							
35	**Check gel**	L045A	Cytotechnologist	13	13	13	13	13
36	Spin down PCR plate							
37	Mix, heat, cool and pour ethidium bromide containing agarose gel							
38	Combine 8uL of PCR product with 2uL of loading buffer							
39	Add samples, controls and ladder to agarose gel							
40	Photograph gel							
41	Save image and annotate							

	A	B	C	D	E	F	G	H
1	**TAB 5 - FINAL RECOMMENDATION**			**81293**	**81296**	**81299**	**81303**	**81318**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Crosswalk to 88XX8** *Typical Batch Size - 2*			MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variants	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
3	**----- DIRECT CROSSWALK**	**CMS Code**	**Staff Type**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**109**	**109**	**109**	**109**	**109**
6	*Lab Tech*			*18*	*18*	*18*	*18*	*18*
7	*Cytotechnologist*			*91*	*91*	*91*	*91*	*91*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**98**	**98**	**98**	**98**	**98**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**							
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**	**11**	**11**
42	**PCR Post Processing 1**	L045A	Cytotechnologist	17	17	17	17	17
43	Prepare EXO/SAP mix							
44	Add mix to PCR products on plate							
45	Place on thermal cycler							
46	**Dye Term Cycle**	L045A	Cytotechnologist	13	13	13	13	13
47	Prepare sequencing plates							
48	Prepare sequencing Big Dye master mix							
49	Aliquot Big Dye master mix							
50	Add template							
51	Seal, vortex, spin							
52	Place on thermal cycler							
53	**Dye Term Purification**	L045A	Cytotechnologist	24	24	24	24	24
54	Make fresh Sodium Acetate/ETOH							
55	Add to sequencing samples							
56	Spin down for 20 min							
57	Invert plate on towels							
58	Quick spin plate							
59	Make fresh 70% ETOH							
60	Add ETOH to wells							
61	Spin for 5 min							
62	Quick spin plate							
63	Add formamide and sequencing standard							
64	Cover with septa and quick spin							
65	Ensure sequencer is ready to load by changing buffers, water, and waste. Make sure “OUT” stack is empty							
66	**Sequencing**	L045A	Cytotechnologist	5	5	5	5	5
67	Load plate onto sequencer							
68	Create new sample sheet using batch name/sample number							
69	Check capillary array after run is completed							
70	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2	2	2	2
71	**End: When specimen is ready for examination by physician**							
72	**Service Period**							
73								
74	**Post-Service Period**							
75	**Start: When specimen examination by physician is complete**							
76	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2	2	2	2

	A	B	C	D	E	F	G	H
1	**TAB 5 - FINAL RECOMMENDATION**			**81293**	**81296**	**81299**	**81303**	**81318**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Crosswalk to 88XX8** *Typical Batch Size - 2*			MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variants	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
3	**----- DIRECT CROSSWALK**	**CMS Code**	**Staff Type**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**109**	**109**	**109**	**109**	**109**
6	*Lab Tech*			*18*	*18*	*18*	*18*	*18*
7	*Cytotechnologist*			*91*	*91*	*91*	*91*	*91*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**98**	**98**	**98**	**98**	**98**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**							
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**	**11**	**11**
77	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2	2	2	2
78	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2	2	2	2
79	Clean Room	L033A	Lab Tech	2	2	2	2	2
80	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2	2	2	2
81	Perform scheduled data management back-up	L033A	Lab Tech	1	1	1	1	1
82	**End: When specimen, chemical waste and record handling is complete**							
83	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**	**No. of Units**	**No. of Units**	**No. of Units**
84	DNA isolation kit		reaction	1	1	1	1	1
85	Gown	SB027	item	1	1	1	1	1
86	Gloves, nonsterile	SB022	pair	5	5	5	5	5
87	Bleach 10%	SL020	ml	1.5	1.5	1.5	1.5	1.5
88	High fidelity hot start Taq polymerase		ul	0.5	0.5	0.5	0.5	0.5
89	PCR buffer		ul	10	10	10	10	10
90	MgCl2		ul	3	3	3	3	3
91	F Primer		ul	2	2	2	2	2
92	R Primer		ul	2	2	2	2	2
93	dNTPs		ul	2	2	2	2	2
94	PCR grade water	SL244	ul	68	68	68	68	68
95	Ethidium bromide (10 mg/ml)	SL239	ul	5	5	5	5	5
96	DNA ladder, 100bp		ul	5	5	5	5	5
97	Loading buffer with dye	SL210	ul	20	20	20	20	20
98	Agarose ultrapure		g	0.8	0.8	0.8	0.8	0.8
99	Agarose NuSieve GTG		g	1.6	1.6	1.6	1.6	1.6
100	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100	100	100	100
101	Masking tape		inch	12	12	12	12	12
102	96 Capillary array		item	1/200	1/200	1/200	1/200	1/200
103	Cycle sequencing kit		ul	16	16	16	16	16
104	Cycle sequencing purification plates		each	1	1	1	1	1
105	Optical 96 well reaction plate		each	1	1	1	1	1
106	Sequencing primers		ul	4	4	4	4	4
107	0.2 ml strip tubes		each	1	1	1	1	1
108	0.2 ml PCR tubes		each	2	2	2	2	2
109	Barrier pipet tips1000 uL		ul	1	1	1	1	1
110	Barrier pipet tips 200 uL		each	3	3	3	3	3
111	Barrier pipet tips 20uL		each	15	15	15	15	15
112	Milli-Q water		ml	35	35	35	35	35

	A	B	C	D	E	F	G	H
1	**TAB 5 - FINAL RECOMMENDATION**			**81293**	**81296**	**81299**	**81303**	**81318**
2	**Meeting Date: September 2011** **Specialty: Pathology** **Crosswalk to 88XX8** *Typical Batch Size - 2*			MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; known familial variants	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
3	**----- DIRECT CROSSWALK**	**CMS Code**	**Staff Type**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**	**Total Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**109**	**109**	**109**	**109**	**109**
6	*Lab Tech*			*18*	*18*	*18*	*18*	*18*
7	*Cytotechnologist*			*91*	*91*	*91*	*91*	*91*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**98**	**98**	**98**	**98**	**98**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**							
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**	**11**	**11**
113	Exonuclease 1 / Shrimp alkaline phosphatase		ul	4	4	4	4	4
114	Formamide	SL192	ul	30	30	30	30	30
115	Septa		each	0.3	0.3	0.3	0.3	0.3
116	Polymer		ul	1/125	1/125	1/125	1/125	1/125
117	Sequencing cassette		each	1	1	1	1	1
118	Running buffer		ul	80	80	80	80	80
119	15 mL centrifuge tubes	SL241		2	2	2	2	2
120	50 mL centrifuge tubes			2	2	2	2	2
121	2 mL plastic tubes		each	1	1	1	1	1
122	0.5 mL microcentrifuge tubes			2	2	2	2	2
123	Extraction tubs		each	4	4	4	4	4
124	Extraction tip assembly		each	1	1	1	1	1
125								
126	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**
127	Analytical balance		EP004	1	1	1	1	1
128	Capillary electrophoresis instrument, 96 well - sequencing			12	12	12	12	12
129	Centrifuge		EP059	3	3	3	3	3
130	Cooling block			3	3	3	3	3
131	Gel electrophoresis apparatus with power supply		EP063	15	15	15	15	15
132	Gel imaging system			4	4	4	4	4
133	Micro-volume spectrophotometer with specimen retention technology			1	1	1	1	1
134	Nucleic acid extraction instrument			5	5	5	5	5
135	Nucleic acid workstation			13	13	13	13	13
136	Pipet set		EP071	20	20	20	20	20
137	Thermal cycler			50	50	50	50	50
138	Water bath		EP043	10	10	10	10	10
139								
140								

	A	B	C	D	E	F
1	**TAB 5 - FINAL RECOMMENDATION**			**81294**	**81297**	**81319**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size = 2* *All crosswalked to L2XXX6*			*MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants Batch 2*	*MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants Batch 2*	*PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants Batch 2*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**118**	**118**	**118**
6	*Lab Tech*	*L033A*		*18*	*18*	*18*
7	*Cytotechnologist*	*L045A*		*100*	*100*	*100*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**107**	**107**	**107**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**					
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**	**11**
11	**PRE-SERVICE**					
12	**Start: When preparing containers/requisitions for physician begins**					
13	**Confirm** orders	L033A	Lab Tech	1	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4	4
16	**PCR Set-up**	L045A	Cytotechnologist	27	27	27
17	**PCR Gel** *(L6: 8products)*	L045A	Cytotechnologist	17	17	17
18	**PCR Post Processing 1**	L045A	Cytotechnologist	20	20	20
19	**Post PCR Processing 2**	L045A	Cytotechnologist	15	15	15
20	**Post PCR Processing 3**	L045A	Cytotechnologist	15	15	15
21	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2	2
22	**End: When specimen is ready for examination by physician**					
23	**Service Period**					
24						
25	**Post-Service Period**					
26	**Start: When specimen examination by physician is complete**					
27	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2	2
28	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2	2
29	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2	2
30	Clean Room	L033A	Lab Tech	2	2	2
31	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2	2
32	Perform scheduled data management back-up	L033A	Lab Tech	1	1	1
33	**End: When specimen, chemical waste and record handling is complete**					
34	**SUPPLIES**		**Type of Unit**			
35	DNA isolation kit		reaction	1	1	1
36	Gown	SB027	item	1	1	1
37	Gloves, nonsterile	SB022	pair	5	5	5
38	Bleach 10%	SL020	ml	1.5	1.5	1.5
39	High fidelity hot start Taq polymerase		ul	4	4	4
40	PCR buffer		ul	80	80	80
41	MgCl2		ul	24	24	24
42	F Primer X 8		ul	2	2	2
43	R Primer X 8		ul	2	2	2
44	dNTPs		ul	16	16	16
45	PCR grade water	SL244	ul	544	544	544
46	Ethidium bromide (10 mg/ml)	SL239	ul	5	5	5
47	DNA ladder, 100bp		ul	5	5	5
48	Loading buffer with dye	SL210	ul	20	20	20
49	Agarose ultrapure		g	0.8	0.8	0.8
50	Agarose NuSieve GTG		g	1.6	1.6	1.6
51	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100	100
52	Masking tape		inch	12	12	12
53	96 Capillary array		item	1/200	1/200	1/200
54						
55						
56	Optical 96 well reaction plate		each	1	1	1
57						
58	0.2 mL strip tubes		each	2	2	2
59	0.2 ml PCR tubes		each	9	9	9
60	Milli-Q water		ml	35	35	35
61						
62	Septa		each	0.3	0.3	0.3
63						

	A	B	C	D	E	F
1	**TAB 5 - FINAL RECOMMENDATION**			**81294**	**81297**	**81319**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size = 2* *All crosswalked to L2XXX6*			*MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants Batch 2*	*MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants Batch 2*	*PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants Batch 2*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**	**Minutes**
64	Polymer		ul	8/125	8/125	8/125
65	Formamide	SL192	ul	240	240	240
66	15 mL centrifuge tubes	SL241		2	2	2
67	50 mL centrifuge tubes			2	2	2
68	2 mL plastic tubes		each	8	8	8
69	Running buffer		ul	80	80	80
70	0.5 mL microcentrifuge tubes			12	12	12
71	Barrier pipet tips1000 uL		ul	2	2	2
72	Barrier pipet tips 200 uL		each	18	18	18
73	Barrier pipet tips 20uL		each	120	120	120
74	Extraction tubs		each	4	4	4
75	Extraction tip assembly		each	1	1	1
76						
77						
78	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**	**Time in Use Minutes**
79	Analytical balance		EP004	1	1	1
80	Capillary electrophoresis instrument, 96 well - MLPA/Fragment			24	24	24
81	Capillary electrophoresis MLPA/Fragment software			24	24	24
82	Centrifuge		EP059	3	3	3
83	Cooling block			3	3	3
84	Gel electrophoresis apparatus with power supply		EP063	15	15	15
85	Gel imaging system			4	4	4
86	Micro-volume spectrophotometer with specimen retention technology			1	1	1
87	Nucleic acid extraction instrument			5	5	5
88	Nucleic acid workstation			27	27	27
89	Pipet set		EP071	32	32	32
90	Thermal cycler			76	76	76
91	Water bath		EP043	5	5	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81298**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size =2* *All crosswalked to L2XXX6*			*MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis*
3	**--- DIRECT CROSSWALK -**	**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**118**
6	*Lab Tech*	*L033A*		*18*
7	*Cytotechnologist*	*L045A*		*100*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**107**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**DNA Extraction**	L045A	Cytotech	4
16	**PCR Set-up**	L045A	Cytotech	27
17	**PCR Gel** *(L6: 8products)*	L045A	Cytotech	17
18	**PCR Post Processing 1**	L045A	Cytotech	20
19	**Post PCR Processing 2**	L045A	Cytotech	15
20	**Post PCR Processing 3**	L045A	Cytotech	15
21	**Review sample and prepare data for physician interpretation**	L045A	Cytotech	2
22	**End: When specimen is ready for examination by physician**			
23	**Service Period**			
24				
25	**Post-Service Period**			
26	**Start: When specimen examination by physician is complete**			
27	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2
28	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2
29	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
30	Clean Room	L033A	Lab Tech	2
31	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
32	Perform scheduled data management back-up	L033A	Lab Tech	1
33	**End: When specimen, chemical waste and record handling is complete**			
34				
35	**SUPPLIES**		**Type of Unit**	
36	DNA isolation kit		reaction	1
37	Gown	SB027	item	1
38	Gloves, nonsterile	SB022	pair	5
39	Bleach 10%	SL020	ml	1.5
40	High fidelity hot start Taq polymerase		ul	4
41	PCR buffer		ul	80
42	MgCl2		ul	24
43	F Primer X 8		ul	2
44	R Primer X 8		ul	2
45	dNTPs		ul	16
46	PCR grade water	SL244	ul	544
47	Ethidium bromide (10 mg/ml)	SL239	ul	5
48	DNA ladder, 100bp		ul	5
49	Loading buffer with dye	SL210	ul	20
50	Agarose ultrapure		g	0.8
51	Agarose NuSieve GTG		g	1.6
52	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
53	Masking tape		inch	12
54	96 Capillary array		item	1/200
55	Cycle sequencing kit		ul	128
56	Cycle sequencing purification plates		each	1
57	Optical 96 well reaction plate		each	1
58	Sequencing primers		ul	32
59	0.2 mL strip tubes		each	2
60	0.2 ml PCR tubes		each	9
61	Milli-Q water		ml	35
62	Exonuclease I / Shrimp alkaline phosphatase		ul	16
63	Septa		each	0.3

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81298**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size =2* *All crosswalked to L2XXX6*			*MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis*
3	**--- DIRECT CROSSWALK -**	**CMS Code**	**Staff Type**	**Minutes**
64	Sequencing cassette		each	1
65	Polymer		ul	8/125
66	Formamide	SL192	ul	240
67	15 mL centrifuge tubes	SL241		2
68	50 mL centrifuge tubes			2
69	2 mL plastic tubes		each	8
70	Running buffer		ul	80
71	0.5 mL microcentrifuge tubes			12
72	Barrier pipet tips1000 uL		ul	2
73	Barrier pipet tips 200 uL		each	18
74	Barrier pipet tips 20uL		each	120
75	Extraction tubs		each	4
76	Extraction tip assembly		each	1
77	**Equipment**			**Time in Use Minutes**
78	Analytical balance		EP004	1
79	Capillary electrophoresis instrument, 96 well - sequencing			24
80	Capillary electrophoresis sequencing software			24
81	Centrifuge		EP059	3
82	Cooling block			3
83	Gel electrophoresis apparatus with power supply		EP063	15
84	Gel imaging system			4
85	Micro-volume spectrophotometer with specimen retention technology			1
86	Nucleic acid extraction instrument			5
87	Nucleic acid workstation			27
88	Pipet set		EP071	32
89	Thermal cycler			76
90	Water bath		EP043	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81300**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size =2* *Crosswalked to L2XXX5*			MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis;duplication /deletion variants
3		**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**109**
6	*Lab Tech*	*L033A*		*18*
7	*Cytotechnologist*	*L045A*		*91*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**98**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**DNA Extraction**	L045A	Cytotechnologist	4
16	**PCR Set-up**	L045A	Cytotechnologist	25
17	**PCR Gel** *(L5: 4products)*	L045A	Cytotechnologist	15
18	**PCR Post Processing**	L045A	Cytotechnologist	45
19	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2
20	**End: When specimen is ready for examination by physician**			
21	**Service Period**			
22				
23	**Post-Service Period**			
24	**Start: When specimen examination by physician is complete**			
25	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2
26	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2
27	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
28	Clean Room	L033A	Lab Tech	2
29	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
30	Perform scheduled data management back-up	L033A	Lab Tech	1
31	**End: When specimen, chemical waste and record handling is complete**			
32				
33	**SUPPLIES**		**Type of Unit**	**No. of Units**
34	DNA isolation kit		reaction	1
35	Gown	SB027	item	1
36	Gloves, nonsterile	SB022	pair	5
37	Bleach 10%	SL020	ml	1.5
38	High fidelity hot start Taq polymerase		ul	2
39	PCR buffer		ul	40
40	MgCl2		ul	12
41	F Primer X 4		ul	2
42	R Primer X 4		ul	2
43	dNTPs		ul	8
44	PCR grade water	SL244	ul	272
45	Ethidium bromide (10 mg/ml)	SL239	ul	5
46	DNA ladder, 100bp		ul	5
47	Loading buffer with dye	SL210	ul	20
48	Agarose ultrapure		g	0.8
49	Agarose NuSieve GTG		g	1.6
50	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
51	Masking tape		inch	12
52	96 Capillary array		item	1/200
53				
54				
55	Optical 96 well reaction plate		each	1
56				
57	0.2 mL strip tubes		each	1

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81300**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size =2* *Crosswalked to L2XXX5*			MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis;duplication /deletion variants
3		**CMS Code**	**Staff Type**	**Minutes**
58	0.2 ml PCR tubes		each	5
59	Milli-Q water		ml	35
60				
61	Septa		each	0.3
62				
63	Polymer		ul	4/125
64	Formamide	SL192	ul	120
65	15 mL centrifuge tubes	SL241		2
66	50 mL centrifuge tubes			2
67	2 mL plastic tubes		each	4
68	Running buffer		ul	80
69	0.5 mL microcentrifuge tubes			6
70	Barrier pipet tips1000 uL		ul	1
71	Barrier pipet tips 200 uL		each	9
72	Barrier pipet tips 20uL		each	60
73	Extraction tubs		each	4
74	Extraction tip assembly		each	1
75	Size standard		ul	2.6
76	**Equipment**			**Time in Use Minutes**
77	Analytical balance		EP004	1
78	Capillary electrophoresis instrument, 96 well			12
79	Capillary electrophoresis fragment analysis software			12
80	Centrifuge		EP059	3
81	Cooling block			3
82	Gel electrophoresis apparatus with power supply		EP063	15
83	Gel imaging system			4
84	Micro-volume spectrophotometer with specimen retention technology			1
85	Nucleic acid extraction instrument			5
86	Nucleic acid workstation			25
87	Pipet set		EP071	30
88	Thermal cycler			63
89	Water bath		EP043	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81301**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *crosswalked to L2XX2*			Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed Performed on 2 specimens
3	**ADJUSTED FOR PERFORMING PROCEDURE ON 2 SPECIMEN**	**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**115.5**
6	*Lab Tech*	*L033A*		*27*
7	*Cytotechnologist*	*L045A*		*89*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**99**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**16.5**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders -	L033A	Lab Tech	1.5
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	9
15	**DNA Extraction -**	L045A	Cytotechnologist	9
16	Extraction (run set up)			
17	Extraction (aliquoting, instrument set up, DNA concentration)			
18	**PCR Set Up -**	L045A	Cytotechnologist	19.5
19	Generate run on computer, generate a run on computer, and prepare tray map			
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)			
21	Retrieve sample, position on tray map			
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix			
23	Aliqout mastermix and sample to well			
24	Vortex and spin sample			
25	Set up Thermocycler and load samples			
26	Remove samples from thermocycler			
27	**PCR Gel -**	L045A	Cytotechnologist	19.5
28	Prepare Gel			
29	Load Gel			
30	Gel and Label picture			
31	**PCR Post Processing -**	L045A	Cytotechnologist	37.5
32	Post-PCR -Prepare loading master mix			
33	Dilute sample			
34	Denature/cool samples			
35	Load sample onto instrument			
36	**Review sample and prepare data for physician interpretation -**	L045A	Cytotechnologist	3
37	**End: When specimen is ready for examination by physician**			
38	**Service Period**			
39				
40	**End: When specimen is ready for examination by physician**			
41	**Post-Service Period**			
42	**Start: When specimen examination by physician is complete**			
43	Enter results in lab information system after physician interpretation-	L033A	Lab Tech	3
44	Prepare, pack and transport specimens and records for in-house storage and external storage-	L033A	Lab Tech	3
45	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste - added 1 minute	L033A	Lab Tech	3
46	Clean Room-	L033A	Lab Tech	3
47	Perform station maintenance including system rinse and dry -	L033A	Lab Tech	3

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81301**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *crosswalked to L2XX2*			Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed Performed on 2 specimens
48	Perform scheduled data management back-up -	L033A	Lab Tech	1.5
49	**End: When specimen, chemical waste and record handling is complete**			
50	**SUPPLIES**		**Type of Unit**	**No. of Units**
51	DNA isolation kit		reaction	1
52	Gown	SB027	item	0.5
53	Gloves, nonsterile	SB022	pair	2.5
54	Bleach 10%	SL020	ml	0.75
55	High fidelity hot start Taq polymerase		ul	3
56	MSI primer, reagent kit		ul	2/100 kit
57				
58				
59				
60				
61				
62	Ethidium bromide (10 mg/ml)	SL239	ul	5
63	DNA ladder, 100bp		ul	5
64	Loading buffer with dye	SL210	ul	20
65	Agarose ultrapure		g	0.8
66	Agarose NuSieve GTG		g	1.6
67	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
68	Milli-Q water		ml	40
69	Masking tape		inch	12
70	0.2 mL strip tubes		each	2
71	0.5 mL microcentrifuge tubes			2
72	2 mL plastic tubes		each	2
73	PCR grade water	SL244	ul	228
74	Barrier pipet tips1000 uL		ul	1
75	Barrier pipet tips 200 uL		each	3
76	Barrier pipet tips 20uL		each	10
77	Running buffer		ul	10
78	Formamide	SL192	ul	30
79	Size standard		ul	2.6
80	Optical 96 well reaction plate		each	1
81	Septa		each	0.3
82	Polymer		ul	3:40
83	Capillary array		item	1/200
84	Cassette		each	1
85	Extraction tubs		each	4
86	Extraction tip assembly		each	1
87				
88	**Equipment**			**Time in Use Minutes**
89	Analytical balance		EP004	1
90	Capillary electrophoresis instrument - fragment analysis			15
91	Capillary electrophoresis instrument - fragment analysis software			15
92	Centrifuge		EP059	2
93	Cooling block			1
94	Gel electrophoresis apparatus with power supply		EP063	8
95	Gel imaging system			2
96	Micro-volume spectrophotometer with specimen retention technology			1
97	Nucleic acid extraction instrument			5
98	Nucleic acid workstation			13

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81301**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4* *crosswalked to L2XX2*			Microsatellite instability analysis (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (eg, BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed Performed on 2 specimens
99	Pipet set		EP071	14
100	Thermal cycler			25
101	Water bath		EP043	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81302**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size - 2* *REFERENCED CODE = L2XXX5*			*MECP2 (methyl CpG binding protein 2)* (eg, Rett syndrome) gene analysis; full sequence analysis
3	----- DIRECT CROSSWALK --	**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**109**
6	*Lab Tech*	*L033A*		*18*
7	*Cytotechnologist*	*L045A*		*91*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**98**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**DNA Extraction**	L045A	Cytotechnologist	4
16	**PCR Set-up**	L045A	Cytotechnologist	25
17	**PCR Gel** *(L5: 4products)*	L045A	Cytotechnologist	15
18	**PCR Post Processing**	L045A	Cytotechnologist	45
19	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2
20	**End: When specimen is ready for examination by physician**			
21	**Service Period**			
22				
23	**Post-Service Period**			
24	**Start: When specimen examination by physician is complete**			
25	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2
26	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2
27	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
28	Clean Room	L033A	Lab Tech	2
29	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
30	Perform scheduled data management back-up	L033A	Lab Tech	1
31	**End: When specimen, chemical waste and record handling is complete**			
32	**SUPPLIES**		**Type of Unit**	**No. of Units**
33	DNA isolation kit		reaction	1
34	Gown	SB027	item	1
35	Gloves, nonsterile	SB022	pair	5
36	Bleach 10%	SL020	ml	1.5
37	High fidelity hot start Taq polymerase		ul	2
38	PCR buffer		ul	40
39	MgCl2		ul	12
40	F Primer X 4		ul	2
41	R Primer X 4		ul	2
42	dNTPs		ul	8
43	PCR grade water	SL244	ul	272
44	Ethidium bromide (10 mg/ml)	SL239	ul	5
45	DNA ladder, 100bp		ul	5
46	Loading buffer with dye	SL210	ul	20
47	Agarose ultrapure		g	0.8
48	Agarose NuSieve GTG		g	1.6
49	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
50	Masking tape		inch	12
51	96 Capillary array		item	1/200
52	Cycle sequencing kit		ul	64
53	Cycle sequencing purification plates		each	1
54	Optical 96 well reaction plate		each	1
55	Sequencing primers		ul	16

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81302**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size - 2* *REFERENCED CODE = L2XXX5*			*MECP2 (methyl CpG binding protein 2)* (eg, Rett syndrome) gene analysis; full sequence analysis
3	----- DIRECT CROSSWALK --	**CMS Code**	**Staff Type**	**Minutes**
56	0.2 mL strip tubes		each	1
57	0.2 ml PCR tubes		each	5
58	Milli-Q water		ml	35
59	Exonuclease I / Shrimp alkaline phosphatase		ul	8
60	Septa		each	0.3
61	Sequencing cassette		each	1
62	Polymer		ul	4/125
63	Formamide	SL192	ul	120
64	15 mL centrifuge tubes	SL241		2
65	50 mL centrifuge tubes			2
66	2 mL plastic tubes		each	4
67	Running buffer		ul	80
68	0.5 mL microcentrifuge tubes			6
69	Barrier pipet tips1000 uL		ul	1
70	Barrier pipet tips 200 uL		each	9
71	Barrier pipet tips 20uL		each	60
72	Extraction tubs		each	4
73	Extraction tip assembly		each	1
74				
75	**Equipment**			**Time in Use Minutes**
76	Analytical balance		EP004	1
77	Capillary electrophoresis instrument, 96 well - sequencing			12
78	Capillary electrophoresis sequencing software			12
79	Centrifuge		EP059	3
80	Cooling block			3
81	Gel electrophoresis apparatus with power supply		EP063	15
82	Gel imaging system			4
83	Micro-volume spectrophotometer with specimen retention technology			1
84	Nucleic acid extraction instrument			5
85	Nucleic acid workstation			25
86	Pipet set		EP071	30
87	Thermal cycler			63
88	Water bath		EP043	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81304**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size = 2* *Crosswalked to L2XXX5*			*MECP2 (methyl CpG binding protein 2)* (eg, Rett syndrome) gene analysis; duplication/deletion variants
3		**CMS Code**	**Staff Type**	**XXX**
4	**Global Period**			
5	**TOTAL CLINICAL LABOR TIME**			**88**
6	*Lab Tech*	*L033A*		*18*
7	*Cytotechnologist*	*L045A*		*70*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**77**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**DNA Extraction**	L045A	Cytotechnologist	4
16	**PCR Set-up**	L045A	Cytotechnologist	18.75
17	**PCR Gel** *(L5: 4products)* **-**	L045A	Cytotechnologist	11.25
18	**PCR Post Processing -**	L045A	Cytotechnologist	33.75
19	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2
20	**End: When specimen is ready for examination by physician**			
21	**Service Period**			
22				
23	**Post-Service Period**			
24	**Start: When specimen examination by physician is complete**			
25	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2
26	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2
27	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
28	Clean Room	L033A	Lab Tech	2
29	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
30	Perform scheduled data management back-up	L033A	Lab Tech	1
31	**End: When specimen, chemical waste and record handling is complete**			
32				
33	**SUPPLIES**		**Type of Unit**	**No. of Units**
34	DNA isolation kit		reaction	1
35	Gown	SB027	item	1
36	Gloves, nonsterile	SB022	pair	5
37	Bleach 10%	SL020	ml	1.5
38	High fidelity hot start Taq polymerase		ul	2
39	PCR buffer		ul	40
40	MgCl2		ul	12
41	F Primer X 4		ul	8
42	R Primer X 4		ul	8
43	dNTPs		ul	8
44	PCR grade water	SL244	ul	272
45	Ethidium bromide (10 mg/ml)	SL239	ul	5
46	DNA ladder, 100bp		ul	5
47	Loading buffer with dye	SL210	ul	20
48	Agarose ultrapure		g	0.8
49	Agarose NuSieve GTG		g	1.6
50	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
51	Masking tape		inch	12
52	96 Capillary array		item	1/200
53				
54				
55	Optical 96 well reaction plate		each	1
56				

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81304**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Typical Batch Size = 2* *Crosswalked to L2XXX5*			*MECP2 (methyl CpG binding protein 2)* (eg, Rett syndrome) gene analysis; duplication/deletion variants
3		**CMS Code**	**Staff Type**	**XXX**
57	0.2 mL strip tubes		each	1
58	0.2 ml PCR tubes		each	5
59	Milli-Q water		ml	35
60				
61	Septa		each	0.3
62				
63	Polymer		ul	4/125
64	Formamide	SL192	ul	120
65	15 mL centrifuge tubes	SL241		2
66	50 mL centrifuge tubes			2
67	2 mL plastic tubes		each	4
68	Running buffer		ul	80
69	0.5 mL microcentrifuge tubes			6
70	Barrier pipet tips1000 uL		ul	1
71	Barrier pipet tips 200 uL		each	9
72	Barrier pipet tips 20uL		each	60
73	Extraction tubs		each	4
74	Extraction tip assembly		each	1
75	Size standard		ul	2.6
76	**Equipment**			**Time in Use Minutes**
77	Analytical balance		EP004	1
78	Capillary electrophoresis instrument, 96 well			12
79	Capillary electrophoresis fragment analysis software			12
80	Centrifuge		EP059	3
81	Cooling block			3
82	Gel electrophoresis apparatus with power supply		EP063	15
83	Gel imaging system			4
84	Micro-volume spectrophotometer with specimen retention technology			1
85	Nucleic acid extraction instrument			5
86	Nucleic acid workstation			25
87	Pipet set		EP071	30
88	Thermal cycler			63
89	Water bath		EP043	5

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81331**	**81257**
2	**Meeting Date: September 2011** **Specialty: Pathology Crosswalk to L2** *Adjusted for Batch Size - 4*			*SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide* N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis	*HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis, for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and Constant Spring)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
4	**Global Period**			**XXX**	**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**50**	**50**
6	*Lab Tech*	*L033A*		*18*	*18*
7	*Cytotechnologist*	*L045A*		*32*	*32*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**39**	**39**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**				
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**	**11**
11	**PRE-SERVICE**				
12	**Start: When preparing containers/requisitions for physician begins**				
13	**Confirm** orders	L033A	Lab Tech	1	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	LO45B	Lab Tech	6	6
15	**DNA Extraction**	L045A	Cytotechnologist	4	4
16	Extraction (run set up)				
17	Extraction (aliquoting, instrument set up, DNA concentration)			5 (bisulfite modification)	X
18	**PCR Set Up**	L045A	Cytotechnologist	13	13
19	Generate run on computer, generate a run on computer, and prepare tray map				
20	Prepare tray map (calculation reagent volumes, lots, expiration dates)				
21	Retrieve sample, position on tray map				
22	Thaw reagents (PCR premix and primer sets)/Prepare Master mix				
23	Aliqout mastermix and sample to well				
24	Vortex and spin sample				
25	Set up Thermocycler and load samples				
26	Remove samples from thermocycler				
27	**PCR Gel**	L045A	Cytotechnologist	13	13
28	Prepare Gel				
29	Load Gel				
30	Gel and Label picture				
31					
32					
33					
34					

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81331**	**81257**
2	**Meeting Date: September 2011** **Specialty: Pathology Crosswalk to L2** *Adjusted for Batch Size - 4*			*SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide* N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis	*HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis, for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and Constant Spring)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
35					
36					
37					
38	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2	2
39	**End: When specimen is ready for examination by physician**				
40	**Service Period**				
41					
42	**End: When specimen is ready for examination by physician**				
43	**Post-Service Period**				
44	**Start: When specimen examination by physician is complete**				
45	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2	2
46	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2	2
47	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2	2
48	Clean Room	L033A	Lab Tech	2	2
49	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2	2
50	Perform scheduled data management back-up	L033A	Lab Tech	1	1
51	**End: When specimen, chemical waste and record handling is complete**				
52	**SUPPLIES**		**Type of Unit**	**No. of Units**	**No. of Units**
53	DNA isolation kit		reaction	1	1
54	Gown	SB027	item	0.5	0.5
55	Gloves, nonsterile	SB022	pair	2.5	2.5
56	Bleach 10%	SL020	ml	0.75	0.75
57	High fidelity hot start Taq polymerase		ul	0.75	0.75
58	PCR buffer		ul	15	15
59	MgCl2		ul	4.5	4.5
60					
61					
62	F Primer		ul	3	3
63	R Primer		ul	3	3
64	dNTPs		ul	3	3
65					
66	Ethidium bromide (10 mg/ml)	SL239	ul	5	5
67	DNA ladder, 100bp		ul	5	5
68	Loading buffer with dye	SL210	ul	20	20
69	Agarose ultrapure		g	0.8	0.8
70	Agarose NuSieve GTG		g	1.6	1.6
71	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100	100
72	Milli-Q water		ml	40	40
73	Masking tape		inch	12	12
74	0.2 mL strip tubes		each	2	2
75	0.5 mL microcentrifuge tubes			2	2
76	2 mL plastic tubes		each	2	2
77	PCR grade water	SL244	ul	228	228
78	Barrier pipet tips1000 uL		ul	1	1
79	Barrier pipet tips 200 uL		each	3	3
80	Barrier pipet tips 20uL		each	10	10
81	Cassette		each	1	1
82	Extraction tubs		each	4	4
83	Extraction tip assembly		each	1	1
84					
85					
86					
87					
88					
89					
90					

	A	B	C	D	E
1	**TAB 5 - FINAL RECOMMENDATION**			**81331**	**81257**
2	**Meeting Date: September 2011** **Specialty: Pathology Crosswalk to L2** *Adjusted for Batch Size - 4*			*SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide* N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis	*HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis, for common deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, and Constant Spring)*
3		**CMS Code**	**Staff Type**	**Minutes**	**Minutes**
91					
92	**Equipment**			**Time in Use Minutes**	**Time in Use Minutes**
93	Analytical balance		EP004	1	1
94					
95					
96	Centrifuge		EP059	2	2
97	Cooling block			1	1
98	Gel electrophoresis apparatus with power supply		EP063	8	8
99	Gel imaging system			2	2
100	Micro-volume spectrophotometer with specimen retention technology			1	1
101	Nucleic acid extraction instrument			5	5
102	Nucleic acid workstation			13	13
103	Pipet set		EP071	14	14
104	Thermal cycler			25	25
105	Water bath		EP043	5	5

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81332**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4*			*SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1)* (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *S and *Z)
3		**CMS Code**	**Staff Type**	**Minutes**
4	**Global Period**			**XXX**
5	**TOTAL CLINICAL LABOR TIME**			**68**
6	*Lab Tech*	*L033A*		*18*
7	*Cytotechnologist*	*L045A*		*50*
8	**TOTAL PRE-SERV CLINICAL LABOR TIME**			**57**
9	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**			
10	**TOTAL POST-SERV CLINICAL LABOR TIME**			**11**
11	**PRE-SERVICE**			
12	**Start: When preparing containers/requisitions for physician begins**			
13	**Confirm** orders	L033A	Lab Tech	1
14	**Accession** specimen, label and prepare specimen for storage until scheduled processing date	L033A	Lab Tech	6
15	**DNA Extraction**	L045A	Cytotechnologist	4
16	**PCR Set Up -**	L045A	Cytotechnologist	15
17	Retrieve sample, verify order/position on tray map			
18	Prepare cocktail and add to samples			
19	Set up Thermocycler and load samples			
20	Remove samples from thermocycler			
21	**PCR Gel -**	L045A	Cytotechnologist	20
22	Prepare Gel			
23	Load Gel			
24	Gel and Label picture			
25	**PCR Post Processing -**	L045A	Cytotechnologist	9
26	Prepare and add digest mix			
27	Pulse samples			
28	Set up thermocycler			
29	Load samples on thermocycler			
30	Remove samples from thermocycler			
31	Pulse samples			
32	**Review sample and prepare data for physician interpretation**	L045A	Cytotechnologist	2
33	**End: When specimen is ready for examination by physician**			
34	**Service Period**			
35				
36	**Post-Service Period**			
37	**Start: When specimen examination by physician is complete**			
38	Enter results in lab information system after physician interpretation	L033A	Lab Tech	2
39	Prepare, pack and transport specimens and records for in-house storage and external storage	L033A	Lab Tech	2
40	Dispose of remaining specimens, spent chemicals/other consumables, and hazardous waste	L033A	Lab Tech	2
41	Clean Room	L033A	Lab Tech	2
42	Perform station maintenance including system rinse and dry	L033A	Lab Tech	2
43	Perform scheduled data management back-up	L033A	Lab Tech	1
44	**End: When specimen, chemical waste and record handling is complete**			

	A	B	C	D
1	**TAB 5 - FINAL RECOMMENDATION**			**81332**
2	**Meeting Date: September 2011** **Specialty: Pathology** *Adjusted for Batch Size - 4*			*SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1)* (eg, alpha-1-antitrypsin deficiency), gene analysis, common variants (eg, *S and *Z)
3		**CMS Code**	**Staff Type**	**Minutes**
45	**SUPPLIES**		**Type of Unit**	**No. of Units**
46	DNA isolation kit		reaction	1
47	Gown	SB027	item	0.5
48	Gloves, nonsterile	SB022	pair	2.5
49	Bleach 10%	SL020	ml	1.5
50	High fidelity hot start Taq polymerase -		ul	1
51	PCR buffer -		ul	30
52	MgCl2		ul	9
53	F Primer		ul	6
54	R Primer		ul	6
55	dNTPs		ul	6
56	Taq 1 restriction enzyme		ul	6
57	Agarose ultrapure		g	0.8
58	Agarose NuSieve GTG		g	1.6
59	1X TBE Buffer (Tris, Boric Acid, EDTA)		ml	100
60	Milli-Q water		ml	35
61	Masking tape		inches	12
62	DNA ladder, 100bp		ul	5
63	Loading buffer with dye	SL210	ul	40
64	BSA 100X		ul	6
65	PCR grade water	SL244	ul	204
66	0.2 mL PCR tubes		each	12
67	2 mL plastic tubes		each	4
68	Restriction enzyme buffer		ul	120
69	Milli-Q water		ml	70
70	Extraction tubs		each	4
71	15 mL centrifuge tubes	SL241		4
72	50 mL centrifuge tubes			4
73	Barrier pipet tips 200 uL		item	44
74	Barrier pipet tips 1000 uL		item	4
75	Barrier pipet tips 20 uL		item	55
76	0.5 mL tube		each	3
77	Extraction tip assembly		each	1
78				
79	**Equipment**			**Time in Use Minutes**
80	Analytical balance		EP004	1
81	Centrifuge		EP059	2
82	Cooling block			1
83	Gel electrophoresis apparatus with power supply		EP063	30
84	Gel imaging system			2
85	Micro-volume spectrophotometer with specimen retention technology			1
86	Nucleic acid extraction instrument			5
87	Nucleic acid workstation			10
88	Pipet set		EP071	11
89	Thermal cycler			25
90	Water bath		EP043	270

AMA/Specialty Society RVS Update Committee Summary of Recommendations

September 2011

Molecular Pathology Test-Tier 2

In response to payer requests, the CPT Editorial Panel developed a new coding structure to describe molecular pathology services, based on the efforts and recommendations of the Molecular Pathology Coding Workgroup convened beginning in October 2009. In October 2010, the Panel accepted 9 Tier 2 codes, which are a list of codes to be reported when the service is not listed in the Tier 1 codes. The Tier 2 codes are arranged by the level of technical resources and interpretive professional work required. The RUC understands that these services will be rarely reported and represent tests that are established and well developed, however their low volume does not warrant characterization as Tier 1 and unlikely to be automated at this time. If increases, the RUC understands that the test will be assigned a Tier 1 code. These services were previously reported with a series of "stacking codes." The RUC understands that payment for these services is currently based on a mixture of payment methodologies, including the physician fee schedule and the clinical lab fee schedule. CMS has requested that the RUC review data provided by the College of American Pathologists to provide the agency with more information as a policy is developed to determine which payment schedule is appropriate for these services.

In April 2011, the RUC found it difficult to appropriately assign a physician work valuation to these services. The number of survey respondents for each code ranged from 11 to 26, all below the RUC's required minimum of thirty respondents. The recommendations submitted by the specialty did not reflect appropriate valuation given the corresponding time recommendations. The RUC proposed interim recommendations and the specialty society re-surveyed for the September 2011 RUC Meeting. For the September 2011 RUC meeting, the specialty society was able to garner a significantly higher response rate and thus the RUC has considerable confidence in their survey data for the following Molecular Pathology Tier 2 Tests.

81400 Molecular pathology procedure, Level 1 (eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis)

The RUC reviewed the specialty's survey data from 94 molecular pathologists who provide these services.The survey results indicated a median physician time for 81400 of 10 minutes and a work value of 0.37. The RUC agreed that the median time accurately reflects the amount of time required to perform the service. The RUC compared 81400 to the key reference code 86320 *Immunoelectrophoresis; serum* (work RVU = 0.37) and agreed that the reference code requires more time to perform than the surveyed code, 17 minutes and 10 minutes, respectively The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), and noted that the

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surveyed code requires less time to perform than this reference code. **Based on these comparisons, the RUC recommends a work RVU of 0.32, the survey's 25th percentile, for CPT code 81400**.

81401 Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)

The RUC reviewed the specialty society's survey data from 59 molecular pathologists who provide these services. The survey data resulted in amedian physician time for 81401 of 15 minutes and a work RVU of 0.50.. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81401 to the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (work RVU = 0.52) and agreed that the reference code requires more time to perform than the surveyed code, 20 minutes and 15 minutes, respectively. Further, the RUC noted that the key reference code is a more intense service to perform as compared to the reference code. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), and noted that the surveyed code requires similar physician time to perform as compared to this reference code. **Based on these comparisons, the RUC recommends a work RVU of 0.40, the survey's 25th percentile, for CPT code 81401**.

81402 Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon)
The RUC reviewed the specialty society's survey data from 61 molecular pathologists who provide these services.that the survey data resulted in a median physician time for 81402 was 20 minutes and a work RVU of 0.52. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81402 to the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (work RVU = 0.52) and agreed that the reference code requires the same time to provide as compared to the surveyed code, 20 minutes. The RUC also compared this service to 93784 *Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation and report* (intra-time=15 minutes, work RVU=0.38), and noted that the surveyed code requires more time to perform as compared to this reference code. **Based on these comparisons, the RUC recommends a work RVU of 0.50, the survey's 25th percentile, for CPT code 81402**.

81403 Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)

The RUC reviewed the specialty's society's survey data from 47 molecular pathologists who provide these services, The survey data indicated a median time for 81403 of 28 minutes with a median physician work RVU of 0.77. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81403 to the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (work RVU = 0.52) and agreed that the reference code requires less time to perform as compared to the surveyed code, 20 minutes and 28 minutes, respectively. However, the specialty acknowledged, and the RUC agreed, that although the surveyed code requires

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more time to perform as compared to the reference code, they are similarly intense services. The RUC also compared this service to 95251 *Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; interpretation and report* (intra-time=30 minutes, work RVU=0.85), and noted that the surveyed code requires less time and is a less intense service to perform as compared to this reference code. **Based on these comparisons, the RUC recommends a work RVU of 0.52, the survey's 25th percentile, for CPT code 81403**.

81404 Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)

The RUC reviewed the specialty society's survey data from 49 molecular pathologist who provide these services. The survey data indicated a median time for 81404 of 30 minutes with a median physician work RVU of 0.83. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81404 to the key reference code 88291 *Cytogenetics and molecular cytogenetics, interpretation and report* (work RVU = 0.52) and agreed that the reference code requires less time to perform as compared to the surveyed code, 20 minutes and 30 minutes, respectively. Further, the specialty acknowledged ,and the RUC agreed, that the surveyed code is a more intense service to perform in comparison to the reference code. The RUC also compared this service to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Work RVU=0.94) and noted that the reference code requires more time to perform in comparison to the surveyed code, 40 minutes and 30 minutes, respectively. **Based on these comparisons, the RUC recommends a work RVU of 0.65, the survey's 25th percentile, for CPT code 81404**.

81405 Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)

The RUC reviewed the specialty's survey data from 31 molecular pathologists who provide these services, The survey data indicated a median time for 81405 of 30 minutes with a median physician work RVU of 0.94.. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81403 to the key reference code 88112 *Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal* (work RVU = 1.18) and agreed that the reference code requires more time to perform as compared to the surveyed code, 43 minutes and 30 minutes, respectively. The RUC also compared this service to 86077 *Blood bank physician services; difficult cross match and/or evaluation of irregular antibody(s), interpretation and written report* (Work RVU=0.94) and noted that the reference code requires more time to perform in comparison to the surveyed code, 40 minutes and 30 minutes, respectively. **Based on these comparisons, the RUC recommends a work RVU of 0.80, the survey's 25th percentile, for CPT code 81405**.

81406 Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)

The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81406 was 60 minutes, with a median work RVU of 1.40. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC

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compared 81406 to the key reference code 88323 *Consultation and report on referred material requiring preparation of slides* (work RVU = 1.83) and agreed that the reference code requires similar time to perform as compared to the surveyed code, 56 minutes and 60 minutes, respectively. However, the specialty acknowledged and the RUC agreed that although the surveyed code requires similar time to perform as compared to the reference code, the reference code is a more intense service to perform in comparison to the surveyed code. The RUC also compared this service to 92626 *Evaluation of auditory rehabilitation status; first hour* (intra-time=60 minutes, work RVU=1.40), and noted that the surveyed code requires the same time and is a similarly intense service to perform as compared to this reference code. **Based on these comparisons, the RUC recommends a work RVU of 1.40, the survey's median, for CPT code 81406**.

81407 Molecular pathology procedure, Level 8 (eg, analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform)

The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81406 was 60 minutes, with a median work RVU of 1.85. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81407 to the key reference code 88309 *Level VI - Surgical pathology, gross and microscopic examination* (work RVU = 2.80) and agreed that the reference code requires more time to perform as compared to the surveyed code, 90 minutes and 60 minutes, respectively. The RUC also compared this service to 96118 *Neuropsychological testing (eg, Halstead-Reitan Neuropsychological Battery, Wechsler Memory Scales and Wisconsin Card Sorting Test), per hour of the psychologist's or physician's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report* (Work RVU=1.86) and noted that this reference code requires the same time to perform in comparison to the surveyed code, 60 minutes. **Based on these comparisons, the RUC recommends a work RVU of 1.85, the survey's median percentile, for CPT code 81407**.

81408 Molecular pathology procedure, Level 9 (eg, analysis of >50 exons in a single gene by DNA sequence analysis)

The RUC reviewed the survey data as presented by the specialty society which indicated that the median time for 81408 was 80 minutes, with a median work RVU of 2.80. The RUC agreed that this time accurately reflects the amount of time required to perform the service. The RUC compared 81408 to the key reference code 88309 *Level VI - Surgical pathology, gross and microscopic examination* (work RVU = 2.80) and agreed that the reference code requires more time to perform as compared to the surveyed code, 90 minutes and 80 minutes, respectively. The RUC also compared this service to 88325 *Consultation, comprehensive, with review of records and specimens, with report on referred material* (Work RVU=2.50) and noted that this reference code requires the same time to perform in comparison to the surveyed code, 80 minutes. **Based on these comparisons, the RUC recommends a work RVU of 2.35, the survey's 25th percentile, for CPT code 81408**.

Practice Expense

The practice expense inputs for these services were approved at the April 2011 RUC meeting and forwarded to CMS in May 2011.

Work Neutrality

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Reviewing the Medicare utilization data for 83912 *Molecular diagnostics; interpretation and report* (work RVU = 0.37) and the specialty's estimate of utilization of these individual services, the RUC understands that these recommendations will be work neutral to the family.

New Technology

The entire set of molecular pathology codes should be re-reviewed after claims data are available and there is experience with the new coding system. The time, work valuation, and practice expense inputs should all be reviewed again in the future as these estimates are based on a good faith effort using available information in 2011.

CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recom-mendation
Pathology and Laboratory **Molecular Pathology** The following Molecular Pathology Procedure (Tier 2) codes are used to report procedures not listed in the Tier 1 molecular pathology codes (AXXX1-UXXX1). They represent medically useful procedures that are generally performed in lower volumes than Tier 1 procedures (eg, the incidence of the disease being tested is rare). They are arranged by level of technical resources and interpretive work by the physician.. The individual analyses listed under each code (ie, level of procedure) utilize the definitions and coding principles as described in the introduction preceding the Tier 1 molecular pathology codes. The parenthetical examples of methodologies presented near the beginning of each code provide general guidelines used to group procedures for a given level and are not all-inclusive. Use the appropriate molecular pathology procedure level code that includes the specific analyte listed after the code descriptor. If the analyte tested is not listed under one of the Tier 2 codes or is not represented by a Tier 1 code, use the appropriate methodology codes in the 83890-83914 and 88384-88386 series.				

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(e) 81400	AA1	Molecular pathology procedure, Level 1 (eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis) *ACADM (acyl-CoA dehydrogenase, C-4 to C-12 straight chain, MCAD)* (eg, medium chain acyl dehydrogenase deficiency), K304E variant *ACE (angiotensin converting enzyme)* (eg, hereditary blood pressure regulation), insertion/deletion variant *AGTR1 (angiotensin II receptor, type 1)* (eg, essential hypertension), 1166A>C variant *CCR5 (chemokine C-C motif receptor 5)* (eg, HIV resistance), 32-bp deletion mutation/794 825del32 deletion *DPYD (dihydropyrimidine dehydrogenase)* (eg, 5-fluorouracil/5-FU and capecitabine drug metabolism), IVS14+1G>A variant *F2 (coagulation factor 2)* (eg, hereditary hypercoagulability), 1199G>A variant *F5 (coagulation factor V)* (eg, hereditary hypercoagulability), HR2 variant *F7 (coagulation factor VII [serum prothrombin conversion accelerator])* (eg, hereditary hypercoagulability), R353Q variant *FGB (fibrinogen beta chain)* (eg, hereditary ischemic heart disease), -455G>A variant *F13B (coagulation factor XIII, B polypeptide)* (eg, hereditary hypercoagulability), V34L variant Human Platelet Antigen 1 genotyping (HPA-1), *ITGB3 (integrin, beta 3 [platelet glycoprotein IIIa], antigen CD61 [GPIIIa])* (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-1a/b (L33P) Human Platelet Antigen 2 genotyping (HPA-2), *GP1BA (glycoprotein Ib [platelet], alpha polypeptide [GPIba])* (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-2a/b (T145M) Human Platelet Antigen 3 genotyping (HPA-3), *ITGA2B (integrin, alpha 2b [platelet glycoprotein IIb of IIb/IIIa complex], antigen CD41 [GPIIb])* (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-3a/b (I843S) Human Platelet Antigen 4 genotyping (HPA-4), *ITGB3 (integrin, beta 3 [platelet glycoprotein IIIa], antigen CD61 [GPIIIa])* (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-4a/b (R143Q) Human Platelet Antigen 5 genotyping (HPA-5), *ITGA2 (integrin, alpha 2 [CD49B, alpha 2 subunit of VLA-2 receptor] [GPIa])* (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-5a/b (K505E) Human Platelet Antigen 6 genotyping (HPA-6w), *ITGB3 (integrin, beta 3 [platelet glycoprotein IIIa, antigen CD61] [GPIIIa])* (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-6a/b (R489Q) Human Platelet Antigen 9 genotyping (HPA-9w), *ITGA2B (integrin, alpha 2b [platelet glycoprotein IIb*	XXX	0.32

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(e) 81401	AA2	Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat) *ABL (c-abl oncogene 1, receptor tyrosine kinase)* (eg, acquired imatinib resistance), T315I variant *ACADM (acyl-CoA dehydrogenase, C-4 to C-12 straight chain, MCAD)* (eg, medium chain acyl dehydrogenase deficiency), common~~s~~ variants (eg, K304E, Y42H) *ADRB2 (adrenergic beta-2 receptor surface)* (eg, drug metabolism), common variants (eg, G16R, Q27E) *APOE (apolipoprotein E)* (eg, hyperlipoproteinemia type III, cardiovascular disease, Alzheimer disease), common variants (eg, *2, *3, *4) *CBFB/MYH11 (inv(16))* (eg, acute myeloid leukemia), qualitative, and quantitative, if performed *CCND1/~~IgH~~ IGH (BCL1/~~IgH~~ IGH, t[(11;14]d)* (eg, mantle cell lymphoma) translocation analysis, major breakpoint, qualitative, and quantitative, if performed *CYP3A4 (cytochrome P450, family 3, subfamily A, polypeptide 4)* (eg, drug metabolism), common variants (eg, *2, *3, *4, *5, *6) *CYP3A5 (cytochrome P450, family 3, subfamily A, polypeptide 5)* (eg, drug metabolism), common variants (eg, *2, *3, *4, *5, *6)	XXX	0.40

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(e) 81402	AA3	Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon) *CYP21A2 (cytochrome P450, family 21, subfamily A, polypeptide 2)* (eg, congenital adrenal hyperplasia, 21-hydroxylase deficiency), common variants (eg, IVS2-13G, P30L, I172N, exon 6 mutation cluster [I235N, V236E, M238K], V281L, L307FfsX6, Q318X, R356W, P453S, G110VfsX21, 30-kb deletion variant) *ESR1/PGR (receptor 1/progesterone receptor)* ratio (eg, breast cancer) *KIT (v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog)* (eg, mastocytosis), common variants (eg, D816V, D816Y, D816F) *MEFV (Mediterranean fever)* (eg, familial Mediterranean fever), common variants (eg, E148Q, P369S, F479L, M680I, I692del, M694V, M694I, K695R, V726A, A744S, R761H) *MPL (myeloproliferative leukemia virus oncogene, thrombopoietin receptor, TPOR)* (eg, myeloproliferative disorder), common variants (eg, W515A, W515K, W515L, W515R) *TCD@ (T cell antigen receptor, delta)* (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population	XXX	0.50

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(e) 81403	AA4	Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons) *ABL1 (c-abl oncogene 1, receptor tyrosine kinase)* (eg, acquired imatinib tyrosine kinase inhibitor resistance), variants in the kinase domain *DAZ/SRY (deleted in azoospermia and sex determining region Y)* (eg, male infertility), common deletions (eg, AZFa, AZFb, AZFc, AZFd) *GJB1 (gap junction protein, beta 1)* (eg, Charcot-Marie-Tooth X-linked), full gene sequence *JAK2 (Janus kinase 2)* (eg, myeloproliferative disorder), exon 12 sequence and exon 13 sequence, if performed *KRAS (v-Ki-ras2 Kirsten rat sarcoma viral oncogene)* (eg, carcinoma), gene analysis, variant(s) in exon 2 *MPL (myeloproliferative leukemia virus oncogene, thrombopoietin receptor, TPOR)* (eg, myeloproliferative disorder), exon 10 sequence *VHL (von Hippel-Lindau tumor suppressor)* (eg, von Hippel-Lindau familial cancer syndrome), duplication/deletion analysis *VWF (von Willebrand factor)* (eg, von Willebrand disease types 2A, 2B, 2M), targeted sequence analysis (eg, exon 28)	XXX	0.52

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(e) 81404	AA5	Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis) *BTD (biotinidase)* (eg, biotinidase deficiency), full gene sequence *CYP1B1 (cytochrome P450, family 1, subfamily B, polypeptide 1)* (eg, primary congenital glaucoma), full gene sequence *DMPK (dystrophia myotonica-protein kinase)* (eg, myotonic dystrophy type 1), characterization of abnormal (eg, expanded) alleles *EGR2 (early growth response 2)* (eg, Charcot-Marie-Tooth), full gene sequence *FKRP (Fukutin related protein)* (eg, congenital muscular dystrophy type 1C [MDC1C], limb-girdle muscular dystrophy [LGMD] type 2I), full gene sequence *FOXG1 (forkhead box G1)* (eg, Rett syndrome), full gene sequence *FSHMD1A (facioscapulohumeral muscular dystrophy 1A)* (eg, facioscapulohumeral muscular dystrophy), evaluation to detect abnormal (eg, deleted) alleles	XXX	0.65

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

(e) 81405	AA6	Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons) *CYP21A2 (cytochrome P450, family 21, subfamily A, polypeptide2)* (eg, steroid 21-hydroxylase isoform, congenital adrenal hyperplasia), full gene sequence *FKTN (Fukutin)* (eg, limb-girdle muscular dystrophy [LGMD] type 2M or 2L), full gene sequence *MPZ (myelin protein zero)* (eg, Charcot-Marie-Tooth), full gene sequence *NEFL (neurofilament, light polypeptide)* (eg, Charcot-Marie-Tooth), full gene sequence *RET (ret proto-oncogene)* (eg, multiple endocrine neoplasia, type 2A and familial medullary thyroid carcinoma), targeted sequence analysis (eg, exons 10, 11, 13-16) *SDHB (succinate dehydrogenase complex, subunit B, iron sulfur)* (eg, hereditary paraganglioma), full gene sequence *TGFBR1 (transforming growth factor, beta receptor 1)* (eg, Marfan syndrome), full gene sequence *TGFBR2 (transforming growth factor, beta receptor 2)* (eg, Marfan syndrome), full gene sequence	XXX	0.80

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(e) 81406	AA7	Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia) *CAPN3 (Calpain 3)* (eg, limb-girdle muscular dystrophy [LGMD] type 2A, alpainopathy), full gene sequence Cytogenomic microarray analysis, neoplasia (eg, interrogation of copy number, and loss-of-heterozygosity via single nucleotide polymorphism [SNP]-based comparative genomic hybridization [CGH] microarray analysis) *GALT* (*galactose-1-phosphate uridylyltransferase*) (eg, galactosemia), full gene sequence *HEXA (hexosaminidase A, alpha polypeptide)* (eg, Tay-Sachs disease), full gene sequence *LMNA (lamin A/C)* (eg, Emery-Dreifuss muscular dystrophy [EDMD1, 2 and 3] limb-girdle muscular dystrophy [LGMD] type 1B, dilated cardiomyopathy [CMD1A], familial partial lipodystrophy [FPLD2]), full gene sequence *PAH (phenylalanine hydroxylase)* (eg phenylketonuria), full gene sequence *POLG (polymerase [DNA directed], gamma)* (eg, Alpers-Huttenlocher syndrome, autosomal dominant progressive external ophthalmoplegia), full gene sequence	XXX	1.40
● 81407	AA8	Molecular pathology procedure, Level 8 (eg, analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform) SCN1A (sodium channel, voltage-gated, type 1, alpha subunit) (eg, generalized ~~epilepsy,~~ epilepsy with febrile seizures), full gene sequence	XXX	1.85

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

● 81408	AA9	Molecular pathology procedure, Level 9 (eg, analysis of >50 exons in a single gene by DNA sequence analysis) FBN1 (fibrillin 1) (eg, Marfan syndrome), full gene sequence NF1 (neurofibromin 1) (eg, neurofibromatosis, type 1), full gene sequence RYR1 (ryanodine receptor 1, skeletal) (eg, malignant hyperthermia), full gene sequence VFW (Von Willebrand factor) (Eg, malignant hypertermia), full gene sequence	XXX	2.35

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

CAP/ACMG Rec Summary

ISSUE: Molecular Pathology Tier 2

TAB: 6

	Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	TOTAL-TIME MIN	TOTAL-TIME 25th	TOTAL-TIME MED	TOTAL-TIME 75th	TOTAL-TIME MAX
9	REF	86320	Physician interpret of immunoelectrophoresis; serum		0.022			0.37			17			17		
10	SVY	81400	Molecular pathology procedure, Level 1 (eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis)	94	0.037	0.13	0.32	0.37	0.52	1.83		3	7	10	20	30
11	REC				0.032			0.32			10			10		

	Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	TOTAL-TIME MIN	TOTAL-TIME 25th	TOTAL-TIME MED	TOTAL-TIME 75th	TOTAL-TIME MAX
15	REF	88291	Cytogenetics and molecular cytogenetics, interpretation and report		0.026			0.52			20			20		
16	SVY	81401	Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using non-sequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)	59	0.033	0.25	0.40	0.50	0.68	1.90		5	10	15	22	60
17	REC				0.027			0.40						15		

	Source	CPT	DESC	Resp	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	Total-TIME MIN	Total-TIME 25th	Total-TIME MED	Total-TIME 75th	Total-TIME MAX
21	REF	88291	Cytogenetics and molecular cytogenetics, interpretation and report		0.026			0.52			20			20		
22	SVY	81402	Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon)	61	0.026	0.25	0.50	0.52	0.87	2.50		5	15	20	30	50
23	REC				0.025			0.50						20		

CAP/ACMG Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
7						RVW					Total		TOTAL-TIME				
8	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
24																	
25						RVW					Total		Total-TIME				
26	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
27	REF	88291	Cytogenetics and molecular cytogenetics, interpretation and report		0.026			0.52			20				20		
28	SVY	81403	Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)	47	0.028	0.40	0.52	0.77	1.00	2.50			10	20	28	35	60
29	REC				0.019			0.52							28		
30																	
31						RVW					Total		Total-TIME				
32	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
33	REF	88291	Cytogenetics and molecular cytogenetics, interpretation and report		0.026			0.52			20				20		
34	SVY	81404	Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)	49	0.028	0.50	0.65	0.83	1.15	2.80			7	20	30	45	60
35	REC				0.022			0.65							30		
36																	
37						RVW					Total		Total-TIME				
38	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
39	REF	88112	Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal		0.027			1.18			43				43		
40	SVY	81405	Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)	31	0.031	0.52	0.80	0.94	1.40	4.50			10	20	30	60	80
41	REC				0.027			0.80							30		

CAP/ACMG Rec Summary

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
7						RVW					Total		TOTAL-TIME				
8	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
42																	
43						RVW					Total		total-TIME				
44	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
45	REF	88323	Consult & report on referred material require prep of slides		0.033			1.83			56				56		
46	SVY	81406	Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)	27	0.023	0.70	1.00	1.40	1.84	2.80			15	38	60	83	120
47	REC				0.023			1.40							60		
48																	
49						RVW					Total		total-TIME				
50	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
51	REF	88309	Level VI - Surgical pathology, gross and microscopic examination		0.031			2.80			90				90		
52	SVY	81407	Molecular pathology procedure, Level 8 (eg, analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform)	15	0.031	1.00	1.20	1.85	2.80	5.00			20	30	60	100	180
53	REC				0.031			1.85							60		
54																	
55						RVW					Total		total-TIME				
56	Source	CPT	DESC	Resp	IWPUT	MIN	25th	MED	75th	MAX	Time		MIN	25th	MED	75th	MAX
57	REF	88309	Level VI - Surgical pathology, gross and microscopic examination		0.031			2.80			90				90		
58	SVY	81408	Molecular pathology procedure, Level 9 (eg, analysis of >50 exons in a single gene by DNA sequence analysis)	15	0.035	1.30	2.35	2.80	2.85	3.50			18	45	80	150	215
59	REC				0.029			2.35							80		

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81401 Tracking Number AA2 Original Specialty Recommended RVU: **0.40**
Presented Recommended RVU: **0.40**
Global Period: XXX RUC Recommended RVU: **0.40**

CPT Descriptor: Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)
CCND1/ IGH (BCL1/ IGH, t[(11;14]d) (eg, mantle cell lymphoma) translocation analysis, major breakpoint, qualitative, and quantitative, if performed

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 30-year-old asymptomatic man with a family history of Huntington disease presents to his physician for predictive genetic testing for Huntington disease. A sample of anticoagulated peripheral blood is submitted for HTT mutation testing.

Percentage of Survey Respondents who found Vignette to be Typical: 85%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work:

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to PCR amplification for the CACNA1C gene exon which contains the known familial mutation. The PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using capillary electrophoresis. The pathologist evaluates the sequencing electropherograms for the known familial mutation and any other variants that may be present. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work:

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81401		
Sample Size: 875	**Resp N:** 59	**Response:** 6.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	12.00	50.00	**100.00**	338.00	1500.00
Survey RVW:	0.25	0.40	**0.50**	0.68	1.90
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	10.00	**15.00**	22.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81401	**Recommended Physician Work RVU: 0.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**15.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92250	XXX	0.44	**RUC Time**	2,186,775

CPT Descriptor 1 Fundus photography with interpretation and report

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,371,085

CPT Descriptor 2 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 21 **% of respondents:** 35.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 81401**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	15.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**15.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.43	3.71
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.29	3.48
Urgency of medical decision making	3.38	3.43
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.95	4.19
Physical effort required	3.05	3.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.67	3.67
Outcome depends on the skill and judgment of physician	3.95	4.05
Estimated risk of malpractice suit with poor outcome	4.19	4.10

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	3.86	3.90
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared the physician work of the new code to the key reference code 88291 (Work RVU = 0.52, 20 minutes total time). The expert panel agreed that considering the robust survey results, the median physician time of 15 minutes was typical, and the 25th percentile work RVU of 0.40 appropriately values 81401.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of code 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 0
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81400 Tracking Number AA1 Original Specialty Recommended RVU: **0.32**
Presented Recommended RVU: **0.32**
Global Period: XXX RUC Recommended RVU: **0.32**

CPT Descriptor: Molecular pathology procedure, Level 1 (eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An asymptomatic newborn girl of Northern European descent is suspected to have medium chain acyl dehydrogenase deficiency (MCAD) on the basis of newborn screening. A sample of anticoagulated peripheral blood is submitted for genetic testing for the common ACADM gene K304E variant.

Percentage of Survey Respondents who found Vignette to be Typical: 85%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated. The genomic region containing the site of the K304E variant is amplified by PCR using primers that in the presence of the K304E variant, introduce an additional restriction endonuclease site into the amplicon. The PCR products undergo digestion with a restriction endonuclease, and the resulting fragments are separated using gel electrophoresis. The pathologist evaluates the patterns of the digestion fragments in relation to marker and control lanes to determine the patient's mutation and zygosity status. The pathologist composes a report which specifies the patient's mutation and zygosity status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81400		
Sample Size: 875	**Resp N:** 94	**Response:** 10.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	88.00	**200.00**	500.00	3000.00
Survey RVW:	0.13	0.32	**0.37**	0.52	1.83
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	3.00	7.00	**10.00**	20.00	30.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81400	**Recommended Physician Work RVU: 0.32**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
86320	XXX	0.37	**RUC Time**

CPT Descriptor Immunoelectrophoresis; serum

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
71020	XXX	0.22	**RUC Time**	13,740,080

CPT Descriptor 1 Radiologic examination, chest, 2 views, frontal and lateral;

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,371,085

CPT Descriptor 2 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 41 **% of respondents:** 43.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81400**	**Key Reference CPT Code:** 86320	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	10.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**10.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.34	2.98
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.56	2.83
Urgency of medical decision making	2.78	2.76
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.98	2.93
Physical effort required	2.20	2.37
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.41	3.20
Outcome depends on the skill and judgment of physician	2.88	3.15
Estimated risk of malpractice suit with poor outcome	3.73	3.27

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	2.68	2.83
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert panel reviewed the survey data and compared the physician work of the new code to the key reference code 86320 (Work RVU = 0.37, 17 minutes total time). The expert panel agreed that considering the robust survey results, the median physician time of 10 minutes was typical, and compared to the key reference service the 25th percentile work RVU of 0.32 appropriately values 81400.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 0
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88291

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81402 Tracking Number AA3 Original Specialty Recommended RVU: **0.50**
Presented Recommended RVU: **0.50**
Global Period: XXX RUC Recommended RVU: **0.50**

CPT Descriptor: Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 14-year-old girl of Turkish descent is seen by her physician for her third episode of fever accompanied by pleuritic chest pain, abdominal discomfort, and pain in the lower extremity joints. Her physical examination demonstrates a temperature of 38.5°C and dullness to percussion at the left lung base. Her abdomen is rigid with apparent rebound tenderness and diminished bowel sounds, and her left knee is warm and swollen with pain upon passive motion. Her white blood count, erythrocyte sedimentation rate and fibrinogen level are elevated. Familial Mediterranean fever is suspected, and a sample of anticoagulated peripheral blood is submitted for genetic testing for common variants in the MEFV gene.

Percentage of Survey Respondents who found Vignette to be Typical: 66%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated and subjected to multiplex PCR. Following exonuclease I and shrimp alkaline phosphatase treatment, a second reaction using allele specific primer extension (ASPE) amplifies either the normal or mutant allele sequences for 11 common MEFV variants. The fluorescently-tagged PCR products are separated by capillary electrophoresis. The pathologist evaluates the electropherogram comparing the relative sizes and peak heights of the PCR products to determine mutation and zygosity status. The pathologist composes a report which specifies the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81402		
Sample Size: 875	**Resp N:** 61	**Response:** 6.9 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	40.00	**90.00**	150.00	1200.00
Survey RVW:	0.25	0.50	**0.52**	0.87	2.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	5.00	15.00	**20.00**	30.00	50.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81402	**Recommended Physician Work RVU: 0.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**20.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,371,085

CPT Descriptor 1 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11000	000	0.60	**RUC Time**	105,397

CPT Descriptor 2 Debridement of extensive eczematous or infected skin; up to 10% of body surface

Other Reference CPT Code	Global	Work RVU	Time Source
93924	XXX	0.50	**RUC Time**

CPT Descriptor Noninvasive physiologic studies of lower extremity arteries, at rest and following treadmill stress testing, (ie, bidirectional Doppler waveform or volume plethysmography recording and analysis at rest with ankle/brachial indices immediately after and at timed intervals following performance of a standardized protocol on a motorized treadmill plus recording of time of onset of claudication or other symptoms, maximal walking time, and time to recovery) complete bilateral study

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 26 **% of respondents:** 42.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81402**	**Key Reference CPT Code:** 88291	**Source of Time** RUC Time
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	20.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**20.00**	**20.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.62	3.62
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.65	3.54
Urgency of medical decision making	3.65	3.65
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.88	4.12
Physical effort required	3.12	3.27
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.62	3.65
Outcome depends on the skill and judgment of physician	3.85	3.92
Estimated risk of malpractice suit with poor outcome	3.69	3.62

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	3.69	3.77
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The expert panel agreed that the median physician time of 20 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.50 appropriately values 81402.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 0
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81403 Tracking Number AA4 Original Specialty Recommended RVU: **0.52**
Presented Recommended RVU: **0.52**
Global Period: XXX RUC Recommended RVU: **0.52**

CPT Descriptor: Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 72-year-old man with chronic myelogenous leukemia (CML) of several years duration on maintenance therapy with imatinib mesylate, experiences a greater than 1 log increase in his BCR/ABL1 transcript levels on repeat measurements. He reports adherence to his therapeutic regimen, and his imatinib level was found to be within the therapeutic range. Because of an apparent loss of response to imatinib, a sample of anticoagulated peripheral blood is submitted for ABL1 tyrosine kinase domain sequencing to assess for imatinib resistance mutations.

Percentage of Survey Respondents who found Vignette to be Typical: 89%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality total cellular RNA is isolated and stored under RNase-free conditions. Reverse transcriptase is used to convert RNA to cDNA. PCR amplification using primers for the BCR/ABL1 major breakpoint translocation is performed, followed by nested PCR amplification using internal primers flanking the tyrosine kinase domain region. The nested PCR products undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's ABL1 kinase domain mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81403		
Sample Size: 875	**Resp N:** 47	**Response:** 5.3 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	2.00	20.00	**30.00**	100.00	400.00
Survey RVW:	0.40	0.52	**0.77**	1.00	2.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	20.00	**28.00**	35.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81403	**Recommended Physician Work RVU: 0.52**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**28.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service?

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Cytogenetics and molecular cytogenetics, interpretation and report

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,580,775

CPT Descriptor 1 Visual fieldexamination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11000	000	0.60	**RUC Time**	115,072

CPT Descriptor 2 Debridement of extensive eczematous or infected skin; up to 10% of body surface

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 10 **% of respondents:** 21.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 81403**	**Key Reference CPT Code: 88291**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	28.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**28.00**	**20.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.20	3.90
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.70	3.70
Urgency of medical decision making	3.50	3.60
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.90	4.20
Physical effort required	3.30	3.50
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.10	4.00
Outcome depends on the skill and judgment of physician	3.90	4.20
Estimated risk of malpractice suit with poor outcome	4.10	4.10

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	3.80	4.00
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81403 was less intense and complex than 88291 however it typically took more time. The overall work effort was therefore similar to 88291. The expert panel agreed that the median physician time of 28 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.52 appropriately values 81403.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 0
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency 0 Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81404 Tracking Number AA5 Original Specialty Recommended RVU: **0.65**
Presented Recommended RVU: **0.65**
Global Period: XXX RUC Recommended RVU: **0.65**

CPT Descriptor: Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 30-year-old woman who has relatives with head and neck paragangliomas presents to her physician complaining of an enlarging, otherwise asymptomatic right-sided neck mass. Imaging studies suggest a carotid body paraganglioma. The patient is referred to a surgeon, who suspects a hereditary paraganglioma-pheochromocytoma syndrome. An anticoagulated peripheral blood sample is submitted for SDHD gene sequencing.

Percentage of Survey Respondents who found Vignette to be Typical: 69%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 4 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81404		
Sample Size: 875	**Resp N:** 49	**Response:** 5.6 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	25.00	**50.00**	100.00	1000.00
Survey RVW:	0.50	0.65	**0.83**	1.15	2.80
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	7.00	20.00	**30.00**	45.00	60.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81404	**Recommended Physician Work RVU: 0.65**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88291	XXX	0.52	**RUC Time**

CPT Descriptor Level VI - Surgical pathology, gross and microscopic examination

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11200	010	0.82	**RUC Time**	107,711

CPT Descriptor 1 Removal of skin tags, multiple fibrocutaneous tags, any area; up to and including 15 lesions

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 2 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 14.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 81404**	**Key Reference CPT Code:** 88291	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	20.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**30.00**	**20.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.57	3.71
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.57	3.29
Urgency of medical decision making	3.57	3.57
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.86	3.86
Physical effort required	3.00	2.86
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.57	3.71
Outcome depends on the skill and judgment of physician	3.86	3.71
Estimated risk of malpractice suit with poor outcome	3.57	3.71

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	4.14	3.57
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*
Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88291 (Work RVU = 0.52, 20 minutes). The survey respondents indicated code 81404 is greater or as intense and complex as

88291 and it typically takes more time. Therefore, it was clear that there is more overall work in 81404 than in 88291. The expert panel agreed that the median physician time of 30 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.65 appropriately values 81404.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81405 Tracking Number AA6 Original Specialty Recommended RVU: **0.80**
Presented Recommended RVU: **0.80**
Global Period: XXX RUC Recommended RVU: **0.80**

CPT Descriptor: Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 30-year-old woman with a family history that includes several relatives with chromaffin tumors presents to her physician complaining of episodic headaches, palpitations, sweating, and anxiety. Plasma metanephrines are elevated, and an MRI reveals a mass in the region of the organ of Zuckerkandl, that upon resection is confirmed to be a paraganglioma. A hereditary paraganglioma-pheochromocytoma syndrome is suspected, and an anticoagulated peripheral blood sample is submitted for SDHB gene sequencing.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 8 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's SDHB mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81405		
Sample Size: 875	**Resp N:** 31	**Response:** 3.5 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	20.00	**25.00**	50.00	400.00
Survey RVW:	0.52	0.80	**0.94**	1.40	4.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	20.00	**30.00**	60.00	80.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81405	**Recommended Physician Work RVU: 0.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**30.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88112	XXX	1.18	**RUC Time**

CPT Descriptor Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
77003	XXX	0.60	**RUC Time**	1,938,573

CPT Descriptor 1 Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, subarachnoid, or sacroiliac joint), including neurolytic agent destruction

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92012	XXX	0.92	**RUC Time**	6,568,221

CPT Descriptor 2 92012 Ophthalmological services: medical examination and evaluation, with initiation or continuation of diagnostic and treatment program; intermediate, established patient

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 5 **% of respondents:** 16.1 **%**

TIME ESTIMATES (Median)	**CPT Code: 81405**	**Key Reference CPT Code: 88112**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	30.00	43.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	30.00	43.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	4.20
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.40	4.20
Urgency of medical decision making	3.60	3.60
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.40	4.40
Physical effort required	3.00	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.20	4.00
Outcome depends on the skill and judgment of physician	4.00	3.80
Estimated risk of malpractice suit with poor outcome	4.40	4.40

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	4.20	4.00
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88112 (Work RVU = 1.18, 43 minutes). The survey respondents indicated code 81405 is greater, or as intense and complex, as 88112 and it typically takes more time. The expert panel agreed with the survey respondents based on the fact that there are 11-25 exons to be reviewed. The expert panel agreed that the median physician time of 30 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 0.80 appropriately values 81405.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 2,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81406 Tracking Number AA7 Original Specialty Recommended RVU: **1.40**
Presented Recommended RVU: **1.40**
Global Period: XXX RUC Recommended RVU: **1.40**

CPT Descriptor: Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 10-month-old infant of mixed Ashkenazi Jewish ancestry experiences progressive muscle weakness with a loss of motor skills, decreased attentiveness, and an increased startle response. His pediatrician suspects a diagnosis of Tay-Sachs disease, and the patient is tested for the common Ashkenazi Jewish HEXA gene variants. The patient is found to be heterozygous for the +TATC1278 variant, but no additional common mutations are detected. An anticoagulated peripheral blood sample is submitted for HEXA sequencing to assess the patient for the presence of a second HEXA mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 81%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 14 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's HEXA mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81406		
Sample Size: 875	**Resp N:** 27	**Response:** 3.0 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	6.00	**20.00**	40.00	300.00
Survey RVW:	0.70	1.00	**1.40**	1.84	2.80
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	15.00	38.00	**60.00**	83.00	120.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81406	**Recommended Physician Work RVU: 1.40**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88323	XXX	1.83	**RUC Time**

CPT Descriptor Consultation and report on referred material requiring preparation of slides

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92012	XXX	0.92	**RUC Time**	6,568,221

CPT Descriptor 1 Ophthalmological services: medical examination and evaluation, with initiation or continuation of diagnostic and treatment program; intermediate, established patient

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95819	XXX	1.08	**RUC Time**	303,721

CPT Descriptor 2 Electroencephalogram (EEG); including recording awake and asleep

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 25.9 **%**

TIME ESTIMATES (Median)	**CPT Code: 81406**	**Key Reference CPT Code: 88323**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	60.00	56.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**60.00**	**56.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.57	4.29
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.57	4.43
Urgency of medical decision making	3.57	3.57
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.71	4.71
Physical effort required	4.57	4.29
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.43	4.14
Outcome depends on the skill and judgment of physician	4.86	4.71
Estimated risk of malpractice suit with poor outcome	4.71	4.57

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	5.00	4.86
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88323 (Work RVU = 1.83, 56 minutes). The survey respondents indicated code 81406 is greater, or as intense and complex, as 88323 and it typically takes more time. All intensity and complexity measures indicated a high intensity and complexity. The expert panel agreed with the survey respondents based on the fact that there are 26-50 exons to be reviewed. The expert panel agreed that the median physician time of 60 minutes is typical and compared to the key reference service, the median work RVU of 1.40 appropriately values 81406.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81407 Tracking Number AA8 Original Specialty Recommended RVU: **1.85**
Presented Recommended RVU: **1.85**
Global Period: XXX RUC Recommended RVU: **1.85**

CPT Descriptor: Molecular pathology procedure, Level 8 (eg, analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 10-month-old girl with a family history of epilepsy is taken to her pediatrician after experiencing a febrile seizure in association with a viral infection. An SCN1A-related seizure disorder is suspected. An anticoagulated peripheral blood sample is submitted for SCN1A sequencing to assess the patient for the presence of a SCN1A-related seizure disorder mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 87%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 30 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's SCN1A mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81407		
Sample Size: 875	**Resp N:** 15	**Response:** 1.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	3.00	10.00	**20.00**	31.00	750.00
Survey RVW:	1.00	1.20	**1.85**	2.80	5.00
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	20.00	30.00	**60.00**	100.00	180.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81407	**Recommended Physician Work RVU: 1.85**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88309	XXX	2.80	**RUC Time**

CPT Descriptor Level VI - Surgical pathology, gross and microscopic examination

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
94002	XXX	1.99	**RUC Time**	17,741

CPT Descriptor 1 Ventilation assist and management, initiation of pressure or volume preset ventilators for assisted or controlled breathing; hospital inpatient/observation, initial day

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11640	XXX	1.67	**RUC Time**	16,140

CPT Descriptor 2 Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 0.5 cm or less

Other Reference CPT Code	Global	Work RVU	Time Source
88323	XXX	1.83	**RUC Time**

CPT Descriptor Consultation and report on referred material requiring preparation of slides

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 6 **% of respondents:** 40.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 81407**	**Key Reference CPT Code: 88309**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	60.00	90.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**60.00**	**90.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.67	4.83
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.83	4.67
Urgency of medical decision making	4.33	4.83
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.83	5.00
Physical effort required	4.33	4.50
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	5.00	5.00
Outcome depends on the skill and judgment of physician	5.00	5.00
Estimated risk of malpractice suit with poor outcome	4.83	4.83

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	4.83	4.50
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88309 (Work RVU = 2.80, 90 minutes). The survey respondents indicated code 81407 is greater, or as intense and complex as 88309 in 5 out of 9 measures. All intensity and complexity measures indicated a high intensity and complexity. The expert panel agreed with the survey respondents that 81407 is complex and intense. The expert panel agreed that the median physician time of 60 minutes is typical and compared to the key reference service, the median work RVU of 1.85 appropriately values 81407 within this family of Tier 2 services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and <u>percentage</u> for each specialty. Please explain the rationale for this estimate.

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:81408 Tracking Number AA9 Original Specialty Recommended RVU: **2.35**
Presented Recommended RVU: **2.35**
Global Period: XXX RUC Recommended RVU: **2.35**

CPT Descriptor: Molecular pathology procedure, Level 9 (eg, analysis of >50 exons in a single gene by DNA sequence analysis)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 16-month-old girl is found by her pediatrician to have mild axillary freckling and 2 large café-au-lait macules on routine physical examination. The history and physical examination is otherwise within normal limits. A diagnosis of neurofibromatosis is suspected. An anticoagulated peripheral blood sample is submitted for NF1 sequencing to assess the patient for the presence of a neurofibromatosis-related mutation.

Percentage of Survey Respondents who found Vignette to be Typical: 67%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting?
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting?
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Is moderate sedation inherent in your reference code (Office setting)?
Is moderate sedation inherent in your reference code (Hospital/ASC setting)?

Description of Pre-Service Work: n/a

Description of Intra-Service Work: High quality genomic DNA is isolated from whole blood and subjected to 58 individual PCR amplification reactions. The PCR products from each reaction undergo bidirectional dideoxynucleotide chain termination sequencing using a capillary electrophoresis instrument. The pathologist evaluates the sequencing electropherograms for potential nucleotide sequence variants, insertions, deletions or other changes. The pathologist compares this evaluation with possible variations suggested by computer software to ensure that all abnormalities are identified. The pathologist composes a report specifying the patient's NF1 mutation status. The report is edited, signed and the results are communicated to appropriate caregivers.

Description of Post-Service Work: n/a

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jonathan L. Myles, MD, FCAP, Roger D. Klein, MD, JD, FCAP, Aaron D. Bossler, MD, PhD, and Thomas M. Williams, MD		
Specialty(s):	College of American Pathologists and American College of Medical Genetics		
CPT Code:	81408		
Sample Size: 875	**Resp N:** 15	**Response:** 1.7 %	
Sample Type: Convenience	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	4.00	10.00	**18.00**	25.00	300.00
Survey RVW:	1.30	2.35	**2.80**	2.85	3.50
Pre-Service Evaluation Time:			**0.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	18.00	45.00	**80.00**	150.00	215.00

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	81408	**Recommended Physician Work RVU: 2.35**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**0.00**	**0.00**	**0.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**80.00**		

Immediate Post Service-Time:	**0.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? Yes

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
88309	XXX	2.80	**RUC Time**

CPT Descriptor Level VI - Surgical pathology, gross and microscopic examination

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11424	010	2.48	**RUC Time**	5,832

CPT Descriptor 1 Excision, benign lesion including margins, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; excised diameter 3.1 to 4.0 cm

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99253	XXX	2.27	**RUC Time**	3,265,358

CPT Descriptor 2 Inpatient consultation for a new or established patient, which requires these 3 key components: A detailed history; A detailed examination; and Medical decision making of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 55 minutes at the bedside and on the patient's hospital floor or unit.

Other Reference CPT Code	Global	Work RVU	Time Source
88189	XXX	2.23	**RUC Time**

CPT Descriptor Flow cytometry, interpretation; 16 or more markers

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 10 **% of respondents:** 66.6 **%**

TIME ESTIMATES (Median)	**CPT Code: 81408**	**Key Reference CPT Code: 88309**	**Source of Time RUC Time**
Median Pre-Service Time	0.00	0.00	
Median Intra-Service Time	80.00	90.00	
Median Immediate Post-service Time	0.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	

Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**80.00**	**90.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.30	4.30
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.50	4.00
Urgency of medical decision making	4.00	4.20
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.70	4.50
Physical effort required	3.90	3.80
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.50	4.50
Outcome depends on the skill and judgment of physician	4.60	4.50
Estimated risk of malpractice suit with poor outcome	4.10	4.10

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	0.00	0.00
Intra-Service intensity/complexity	4.70	4.40
Post-Service intensity/complexity	0.00	0.00

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Following the survey, the data were reviewed by an expert panel that included CAP's relative value workgroup, CAP's RUC advisor, the American Society of Cytopathology (ASC) RUC advisor, molecular pathology experts (MDs) and representatives from the general and academic pathology practice settings.

The expert committee reviewed the survey data and compared it to the key reference code 88309 (Work RVU = 2.80, 90 minutes). The survey respondents indicated code 81408 is greater, or as intense and complex as 88309 in 8 out of 9 measures. All intensity and complexity measures indicated a high intensity and complexity. The expert panel agreed with the survey respondents that 81408 is complex and intense. The expert panel agreed that the median physician time of 80 minutes is typical and compared to the key reference service, the 25th percentile work RVU of 2.35 appropriately values 81408 within this family of Tier 2 services.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The molecular stacking codes are currently used for the TC and 83912 for the PC. CAP can not provide absolute frequency data as the previous reporting of these services was methodology based and not analyte specific. The specialty society estimates that the total number of Tier 1 and Tier 2 professional services will fall in the 350,000 range for the Medicare population based on the current volume of 83912.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty College of American Pathologists How often? Sometimes

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,000
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 88182

AMA/Specialty Society RVS Update Committee
Summary of Recommendations
Originated from the RUC Relativity Assessment Workgroup – Codes Reported Together 75% or More Screen

September 2011

Pacemaker or Pacing Cardioverter-Defibrillator

In February 2010, the Pacemaker and Pacing Cardioverter-Defibrillator series of CPT codes (33207, 33208, 33212, 33213, 33240 and 33249) were identified by the Relativity Assessment Workgroup through the Codes Reported Together 75% or More Screen. These insertion codes were commonly billed with the removal codes (33233, 33241 and 71090) or the device evaluation code (93641). In February 2011, the specialties submitted a code change proposal to the CPT Editorial Panel to bundle the services commonly reported together. A total of 12 codes were created or significantly revised, mandating a RUC survey in April 2011. In April 2011, the RUC reviewed the services and determined that the survey data was inconsistent both in the physician time and work values of the removal and replacement codes. In addition, a data error was noted to have caused wide variances in the survey's post-operative visit data. Given the complexity of these services, the RUC recommended interim values at the April 2011 RUC Meeting. The specialty societies resurveyed these codes and presented them to the RUC at the September 2011 RUC Meeting.

Pacemaker Services

33212 *Insertion of pacemaker pulse generator only with existing; single lead*

The RUC reviewed the survey data for CPT code 33212 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC agreed that the 25th percentile work RVU of 5.26 was appropriate for this service. To validate a work RVU of 5.26, the RUC compared 33212 to the key reference service CPT code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05). The Committee noted that the reference service has greater total time compared to the surveyed code, 181 minutes and 129 minutes, respectively and should be valued greater than 33212. Finally, the RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With solid survey data and the comparison to the key reference code, the RUC concurred that 33212 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 5.26 for CPT code 33212.**

33213 *Insertion of pacemaker pulse generator only with existing; dual leads*

The RUC reviewed the survey data for CPT code 33213 and agreed that the median intra-service time accurately reflects the physician time required to perform this service. However, the post-service time was reduced from 22.5 minutes to 20 minutes to maintain continuity between the entire family of services. The RUC agreed that the survey respondents overstated the work RVU at the median level and a consistent work value was established to ensure the physician work required to insert or remove and replace each additional lead is accurate and relative to the family. Therefore, the RUC

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reviewed the survey data and noted that the average increase at the 25th percentile between each additional lead is 0.27 work RVUs for the entire surveyed family. The Committee applied the standard increment of 0.27 work RVUs to the base code, 33212, and agreed that a work RVU of 5.53 accurately reflects the typical physician work for 33213. To validate this work RVU, the RUC compared 33213 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and noted that 61885 has greater total time at 181 minutes compared to 130 minutes and should be valued greater than the surveyed code. Finally, the RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With the comparison to the reference code, the RUC concurred that 33213 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 5.53 for CPT code 33213.**

33221 ***Insertion of pacemaker pulse generator only with existing; multiple leads***
The RUC reviewed the survey data for CPT code 33221 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC applied the standard increment of 0.27 work RVUs to the insertion of dual leads code, 33213, and agreed that a work RVU of 5.80 accurately reflects the typical physician work for 33221. To validate this work RVU, the RUC noted that the recommended work RVU is almost identical to the 25th percentile survey value of 5.79. In addition, the RUC compared 33221 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and noted that 61885 has greater total time at 181 minutes compared to 134 minutes and should be valued greater than the surveyed code.

The RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). Finally, the Committee compared the recommended work value of 33221 compared to 33213 and agreed that the increase of 0.27 work RVUs accurately reflects the added complexity of physician work required with the insertion of more than two leads. With the comparison to the reference code, the RUC concurred that 33221 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 5.80 for CPT code 33221.**

33227 ***Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system***
The RUC reviewed the survey data for CPT code 33227 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC agreed that the 25th percentile work RVU of 5.50 was appropriate for this service. To validate a work RVU of 5.50, the RUC compared 33227 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and noted that 61885 has greater total time at 181 minutes compared to 129 minutes and should be valued greater than the surveyed code. In addition, the Committee reviewed 36570 *Insertion of peripherally inserted central venous access device, with subcutaneous port; younger than 5 years of age* (work RVU= 5.36) and agreed that both services have identical intra-service time, 45 minutes, and should be valued similarly. Finally, the RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work

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related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With solid survey data and the comparison to two reference codes, the RUC concurred that 33227 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 5.50 for CPT code 33227.**

33228 ***Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system***
The RUC reviewed the survey data for CPT code 33228 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC established a consistent work value increment to ensure the physician work required to insert or remove and replace each additional lead is accurate and relative to the family. Therefore, the RUC reviewed the survey data and noted that the average increase at the 25th percentile between each additional lead is 0.27 work RVUs for the entire surveyed family. The Committee applied the standard increment of 0.27 work RVUs to the base code, 33227, and agreed that a work RVU of 5.77 accurately reflects the typical physician work for 33228. To validate this work RVU, the RUC noted that the recommended work RVU is almost identical to the 25th percentile survey value of 5.70. In addition, the RUC compared 33228 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and noted that 61885 has greater total time at 181 minutes compared to 134 minutes and should be valued greater than the surveyed code. The Committee also reviewed 36570 *Insertion of peripherally inserted central venous access device, with subcutaneous port; younger than 5 years of age* (work RVU= 5.36) and agreed that the surveyed code should be valued higher than the reference code due to greater intra-service time, 50 minutes and 45 minutes, respectively. Finally, the RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With the comparison to two reference codes, the RUC concurred that 33228 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 5.77 for CPT code 33228.**

33229 ***Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system***
The RUC reviewed the survey data for CPT code 33229 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC applied the standard increment of 0.27 work RVUs to the dual removal and replacement of a dual lead system code, 33229, and agreed that a work RVU of 6.04 accurately reflects the typical physician work for 33229. To validate this work RVU, the RUC noted that the recommended work RVU is almost identical to the 25th percentile survey value of 6.00. In addition, the RUC compared 33229 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and noted that 61885 has greater total time at 181 minutes compared to 144 minutes and should be valued greater than the surveyed code. The Committee also reviewed 62350 *Implantation, revision or repositioning of tunneled intrathecal or epidural catheter, for long-term medication administration via an external pump or implantable reservoir/infusion pump; without laminectomy* (work RVU= 6.05) and noted that both services have identical intra-service time, 60 minutes. Therefore, 33229 and 62350 should be valued almost identically.

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The RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). Finally, the Committee compared the recommended work value of 33229 compared to 33228 and agreed that the increase of 0.27 work RVUs accurately reflects the added complexity of physician work required with the removal of more than two leads. With the comparison to the reference codes, the RUC concurred that 33229 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.04 for CPT code 33229.**

Cardioverter-Defibrillator Services

33240 ***Insertion of pacing cardioverter-defibrillator pulse generator only with existing; single lead***

The RUC reviewed the survey data for CPT code 33240 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC agreed that the 25th percentile work RVU of 6.05 was appropriate for this service. To validate a work RVU of 6.05, the RUC compared 33240 to reference code 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU= 6.04) and noted that while the surveyed code has greater total time compared to the reference code, 140 minutes and 130 minutes, respectively, the intra-service time for both services is highly comparable with identical time of 45 minutes. Given this, the RUC agreed that the two services should be valued similarly. Finally, the RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With the comparison to the reference code, the RUC concurred that 33240 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.05 for CPT code 33240.**

33230 ***Insertion of pacing cardioverter-defibrillator pulse generator only with existing; dual leads***

The RUC reviewed the survey data for CPT code 33230 and agreed that the median intra-service time accurately reflects the physician time required to perform this service. However, the post-service time was reduced from 25 minutes to 20 minutes to maintain continuity between the entire family of services. The RUC agreed that the survey respondents overstated the work RVU at the median level and a consistent work value was established to ensure the physician work required to insert or remove and replace each additional lead is accurate and relative to the family. The Committee applied the standard increment of 0.27 work RVUs to the base code, 33240, and agreed that a work RVU of 6.32 accurately reflects the typical physician work for 33230. To validate this work RVU, the RUC compared 33230 to reference code 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU= 6.04) and noted that the surveyed code has greater intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively. Therefore, 33230 should be valued greater than the reference code. In addition, the RUC compared 33230 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and agreed that the surveyed code should be valued greater given its higher intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively. Finally, the RUC discussed the

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appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With the comparison to the reference codes, the RUC concurred that 33230 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.32 for CPT code 33230.**

33231 ***Insertion of pacing cardioverter-defibrillator pulse generator only with existing; multiple leads***
The RUC reviewed the survey data for CPT code 33231 and agreed that the median intra-service time accurately reflects the physician time required to perform this service. However, the post-service time was reduced from 25 minutes to 20 minutes to maintain continuity between the entire family of services. The RUC agreed that the survey respondents overstated the work RVU at the median level and a consistent work value was established to ensure the physician work required to insert or remove and replace each additional lead is accurate and relative to the family. The Committee applied the standard increment of 0.27 work RVUs to the insertion of dual leads code, 33230, and agreed that a work RVU of 6.59 accurately reflects the typical physician work for 33231. To validate this work RVU, the RUC first noted that the recommended work RVU is almost identical to the 25th percentile survey value of 6.63. In addition, the RUC compared 33231 to reference code 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU= 6.04) and noted that the surveyed code has greater intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively. Therefore, 33231 should be valued greater than the reference code. In addition, the RUC compared 33231 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and agreed that the surveyed code should be valued greater given its higher intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively.

The RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). Finally, the Committee compared the recommended work value of 33231 compared to 33230 and agreed that the increase of 0.27 work RVUs accurately reflects the added complexity of physician work required with the insertion of more than two leads. With the comparison to the reference codes, the RUC concurred that 33231 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.59 for CPT code 33231.**

33262 ***Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; single lead system***
The RUC reviewed the survey data for CPT code 33262 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC agreed that the 25th percentile work RVU of 6.06 was appropriate for this service. To validate a work RVU of 6.06, the RUC compared 33262 to reference code 62350 *Implantation, revision or repositioning of tunneled intrathecal or epidural catheter, for long-term medication administration via an external pump or implantable reservoir/infusion pump; without laminectomy* (work RVU= 6.05) and noted that both codes have identical intra-service time, 60 minutes and similar total time. Therefore, the surveyed code and reference code should be valued almost identically. Finally, the RUC discussed the

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appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With solid survey data and the comparison to the reference code, the RUC concurred that 33262 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.06 for CPT code 33262.**

33263 ***Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; dual lead system***

The RUC reviewed the survey data for CPT code 33263 and agreed that the median intra-service time accurately reflects the physician time required to perform this service. However, the post-service time was reduced from 25 minutes to 20 minutes to maintain continuity between the entire family of services. The RUC agreed that the survey respondents overstated the work RVU at the median level and a consistent work value was established to ensure the physician work required to insert or remove and replace each additional lead is accurate and relative to the family. The Committee applied the standard increment of 0.27 work RVUs to the base code, 33262, and agreed that a work RVU of 6.33 accurately reflects the typical physician work for 33263. To validate this work RVU, the RUC compared 33263 to reference code 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU= 6.04) and noted that the surveyed code has greater intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively. Therefore, 33263 should be valued greater than the reference code. In addition, the RUC compared 33263 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and agreed that the surveyed code should be valued greater given its higher intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively. Finally, the RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). With the comparison to the reference codes, the RUC concurred that 33263 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.33 for CPT code 33263.**

33264 ***Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; multiple lead system***

The RUC reviewed the survey data for CPT code 33264 and agreed that the median physician time components accurately reflect the physician time required to perform this service. However, the survey respondents overstated the work RVU at the median level and the RUC agreed that a consistent work value increment should be established to ensure the physician work required to insert or remove and replace each additional lead is accurate and relative to the family. The Committee applied the standard increment of 0.27 work RVUs to the removal and replacement of a dual lead system code, 33263, and agreed that a work RVU of 6.60 accurately reflects the typical physician work for 33264. To validate this work RVU, the RUC first noted that the recommended work RVU is almost identical to the 25th percentile survey value of 6.63. In addition, the RUC compared 33264 to reference code 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU= 6.04) and noted that the surveyed code has greater intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively. Therefore,

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33264 should be valued greater than the reference code. In addition, the RUC compared 33264 to reference code 61885 *Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array* (work RVU= 6.05) and agreed that the surveyed code should be valued greater given its higher intra-service time compared to the reference code, 60 minutes and 45 minutes, respectively.

The RUC discussed the appropriate level of post-operative visits for this service. The RUC agreed that the typical physician work related to the management of the wound requires one level three office visit (99213) and a half discharge day management service (99238). Finally, the Committee compared the recommended work value of 33264 compared to 33263 and agreed that the increase of 0.27 work RVUs accurately reflects the added complexity of physician work required with the insertion of more than two leads. With the comparison to the reference codes, the RUC concurred that 33264 is appropriately valued relative to the family of services and other similar services in the RBRVS. **The RUC recommends a work RVU of 6.60 for CPT code 33264.**

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

Practice Expense
The RUC accepted the direct practice expense inputs recommended by the specialty for these procedures performed in the facility setting at the April 2011 RUC Meeting.

CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
Surgery **Cardiovascular System** **Heart and Pericardium** **Pacemaker or Pacing Cardioverter-Defibrillator** A pacemaker system includes a pulse generator containing electronics, a battery, and one or more electrodes (leads). Pulse generators are placed in a subcutaneous "pocket" created in either a subclavicular site or underneath the abdominal muscles just below the ribcage. Electrodes may be inserted through a vein (transvenous) or they may be placed on the surface of the heart (epicardial). The epicardial location of electrodes requires a thoracotomy for electrode insertion. A single chamber pacemaker system includes a pulse generator and one electrode inserted in either the atrium or ventricle. A dual chamber				

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CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
pacemaker system includes a pulse generator and one electrode inserted in the right atrium and one electrode inserted in the right ventricle. In certain circumstances, an additional electrode may be required to achieve pacing of the left ventricle (bi-ventricular pacing). In this event, transvenous (cardiac vein) placement of the electrode should be separately reported using code 33224 or 33225. Epicardial placement of the electrode should be separately reported using 33202-33203. Like a pacemaker system, a pacing cardioverter-defibrillator (ICD) system includes a pulse generator and electrodes, although pacing cardioverter-defibrillators may require multiple leads, even when only a single chamber is being paced. A pacing cardioverter-defibrillator system may be inserted in a single chamber (pacing in the ventricle) or in dual chambers (pacing in atrium and ventricle). These devices use a combination of antitachycardia pacing, low-energy cardioversion or defibrillating shocks to treat ventricular tachycardia or ventricular fibrillation. Pacing cardioverter-defibrillator pulse generators may be implanted in a subcutaneous infraclavicular pocket or in an abdominal pocket. Removal of a pacing cardioverter-defibrillator pulse generator requires opening of the existing subcutaneous pocket and disconnection of the pulse generator from its electrode(s). A thoracotomy (or laparotomy in the case of abdominally placed pulse generators) is not required to remove the pulse generator. The electrodes (leads) of a pacing cardioverter-defibrillator system are positioned in the heart via the venous system (transvenously), in most circumstances. In certain circumstances, an additional electrode may be required to achieve pacing of the left ventricle (bi-ventricular pacing). In this event, transvenous (cardiac vein) placement of the electrode should be separately reported using code 33224 or 33225. Epicardial placement of the electrode should be separately reported using 33202-33203. Electrode positioning on the epicardial surface of the heart requires a thoracotomy, or thoracoscopic placement of the leads. Removal of electrode(s) may first be attempted by transvenous extraction (~~code~~33234, 33235, or 33244). However, if transvenous extraction is unsuccessful, a thoracotomy may be required to remove the electrodes (~~code~~33238 or 33243). Use ~~codes~~ 33212, 33213, 33221, 3324033230, 33231, as appropriate in addition to the thoracotomy or endoscopic epicardial lead placement codes ~~to report the insertion of the generator if done by the same physician during the same session.~~(33202 or 33203) to report the insertion of the generator if done by the same physician during the same session. When the "battery" of a pacemaker or pacing cardioverter-defibrillator is changed, it is actually the pulse generator that is changed. Removal of pacemaker or pacing cardioverter-defibrillator pulse generator only is reported with 33233 or 33241. Removal of a pacemaker or pacing cardioverter-defibrillator pulse generator with insertion of a new pulse generator without any replacement or insertion of a lead(s) is reported with 33227-33229 and 33262-33264. ~~Replacement~~Insertion of a new pulse generator, when existing leads are already in place and when no prior pulse				

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CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
generator ~~should be~~is removed, is reported with 33212, 33213, 33221, 33240, 33230, 33231. When a ~~code~~pulse generator insertion involves the insertion or replacement of one or more lead(s), use the system codes 33206-33208 for pacemaker or 33249 for ~~removal~~pacing cardioverter-defibrillator. Removal of ~~the~~a pulse generator ~~and another code for insertion~~(33233 or 33241) or extraction of transvenous leads (33234, 33235 or 33244) should be reported separately. An exception involves a pacemaker upgrade from single to dual system which includes removal of pulse generator, replacement of new pulse generator, and insertion of new lead, reported with 33214. Repositioning of a pacemaker electrode, pacing cardioverter-defibrillator electrode(s), or a left ventricular pacing electrode is reported using 33215 or 33226~~, as appropriate. Replacement of a pacemaker electrode, pacing cardioverter-defibrillator electrode(s), or a left ventricular pacing electrode is reported using 33206-33208, 33210-33213, or 33224~~, as appropriate. The pacemaker and pacing cardioverter-defibrillator device evaluation codes 93279-93299 may not be reported in conjunction with pulse generator and lead insertion or revision codes 33206-33249. Defibrillator threshold testing (DFT) during pacing cardioverter-defibrillator insertion or replacement may be separately reported using 93640, 93641. Radiological supervision and interpretation related to the pacemaker or pacing cardioverter-defibrillator procedure is included in 33206-33249. To report fluoroscopic guidance for diagnostic lead evaluation without lead insertion, replacement, or revision procedures, use 76000. The following definitions apply to 33206-33249. ***Single lead:*** a pacemaker or pacing cardioverter-defibrillator with pacing and sensing function in only one chamber of the heart. ***Dual lead:*** a pacemaker or pacing cardioverter-defibrillator with pacing and sensing function in only two chambers of the heart. ***Multiple lead:*** a pacemaker or pacing cardioverter-defibrillator with pacing and sensing function in three or more chambers of the heart.				
33202		Insertion of epicardial electrode(s); open incision (eg, thoracotomy, median sternotomy, subxiphoid approach)	090	13.20 (No Change)
33203		endoscopic approach (eg, thoracoscopy, pericardioscopy) (When epicardial lead placement is performed ~~by the same physician at the same session as~~with insertion of the generator, report 33202, 33203 in conjunction with	090	13.97 (No Change)

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CPT Code (●New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
		33212, 33213, 33221, 33240, 33230, 33231 ~~as appropriate~~)		
E ◎33206		Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); atrial	090	7.39 (No Change)
E ◎33207		ventricular	090	8.05 (No Change)
E ◎33208		atrial and ventricular (Codes 33206-33208 include subcutaneous insertion of the pulse generator and transvenous placement of electrode[s]) (For removal and replacement of pacemaker pulse generator and transvenous electrode(s), use 33233 in conjunction with either 33234 or 33235 and 33206-33208) (Do not report 33206-33208 in conjunction with 33227-33229)	090	8.77 (No Change)
◎ ▲33212	U1	Insertion ~~or replacement~~ of pacemaker pulse generator only; with existing single lead ~~chamber, atrial or ventricular~~	090	5.26
◎ ▲33213	U2	with existing dual leads ~~chamber~~	090	5.53
◎ ●33221	U3	with existing multiple leads (Do not report 33212, 33213, 33221 in conjunction with 33233 for removal and replacement of the pacemaker pulse generator. Use 33227-33229, as appropriate, when pulse generator replacement is indicated)	090	5.80

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CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
		(When epicardial lead placement is performed with insertion of generator, report 33202, 33203 in conjunction with 33212, 33213, 33221)		
E ◎33214		Upgrade of implanted pacemaker system, conversion of single chamber system to dual chamber system (includes removal of previously placed pulse generator, testing of existing lead, insertion of new lead, insertion of new pulse generator) (Do not report 33214 in conjunction with 33227-33229) ~~(When epicardial electrode placement is performed, report 33214 in conjunction with 33202, 33203)~~	090	7.84 (No Change)
E ◎33218		Repair of single transvenous electrode ~~for a single chamber~~, permanent pacemaker or ~~single chamber~~ pacing cardioverter-defibrillator (For ~~atrial or ventricular~~repair of single ~~chamber repair of pacemaker~~permanent pacemaker or pacing cardioverter-defibrillator electrode~~[s]~~ with replacement of pulse generator, see ~~33212~~33227-33229 or ~~33213~~33262-33264 and 33218 ~~or 33220~~)	090	6.07 (No Change)
E ◎33220		Repair of 2 transvenous electrodes for ~~a dual chamber~~ permanent pacemaker or ~~dual chamber~~ pacing cardioverter-defibrillator (For repair of 2 transvenous electrodes for permanent pacemaker or pacing cardioverter-defibrillator with replacement of pulse generator, use 33228, 33229 or 33263, 33264 and 33220)	090	6.15 (No Change)
E 33224		Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, with attachment to previously placed pacemaker or pacing cardioverter-defibrillator pulse generator (including revision of pocket, removal, insertion, and/or replacement of existing generator) (When epicardial electrode placement is performed, report 33224 in conjunction with	000	9.04 (No Change)

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CPT Code (●New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
		33202, 33203)		
E 33225		Insertion of pacing electrode, cardiac venous system, for left ventricular pacing, at time of insertion of pacing cardioverter-defibrillator or pacemaker pulse generator (including upgrade to dual chamber system) (List separately in addition to code for primary procedure) (Use 33225 in conjunction with 33206, 33207, 33208, 33212, 33213, 33221, 33214, 33216, 33217, 33222, 33233, 33234, 33235, 33240, 33230, 33231, 33249)	000	8.33 (No Change)
E ◎33233		Removal of permanent pacemaker pulse generator only	090	3.39 (No Change)
#◎●33227	U4	Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system	090	5.50
#◎●33228	U5	dual lead system	090	5.77
#◎●33229	U6	multiple lead system (Do not report 33227-33229 in conjunction with 33233) (For removal and replacement of pacemaker pulse generator and transvenous electrode(s), use 33233 in conjunction with either 33234 or 33235 and 33206-33208)	090	6.04
◎▲33240	U7	Insertion of ~~single or dual chamber~~ pacing cardioverter-defibrillator pulse generator only with; existing single lead *(Use 33240, as appropriate, in addition to the epicardial lead placement codes to report the insertion of the generator when done by the same physician during the same session)*	090	6.05

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CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
#◎●33230	U8	with existing dual leads	090	6.32
#◎●33231	U9	with existing multiple leads (Do not report 33240, 33230, 33231 in conjunction with 33241 for removal and replacement of the pacing cardioverter-defibrillator pulse generator. Use 33262-33264, as appropriate, when pulse generator replacement is indicated) (When epicardial lead placement is performed with insertion of generator, report 33202, 33203 in conjunction with 33240, 33230, 33231)	090	6.59
E ◎33241		~~Subcutaneous r~~Removal of ~~single or dual chamber~~ pacing cardioverter-defibrillator pulse generator only (For removal and replacement of a pacing cardioverter-defibrillator pulse generator and electrode(s), use 33241 in conjunction with either 33243 or 33244 and 33249)	090	3.29 (No Change)
#◎●33262	U10	Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; single lead system	090	6.06
#◎●33263	U11	dual lead system	090	6.33
#◎●33264	U12	multiple lead system (Do not report 33262-33264 in conjunction with 33241) (For removal of electrode[s] by thoracotomy in conjunction with pulse generator removal or replacement, use 33243 in conjunction with 33241, 33262-33264) (For removal of electrode[s] by transvenous extraction in conjunction with pulse generator removal or replacement, use 33244 in conjunction with 33241, 33262-	090	6.60

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CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
		33264) ~~(For removal and reinsertion of a pacing cardioverter-defibrillator system [pulse generator and electrodes], report 33241 and 33243 or 33244 and 33249)~~ (For repair of implantable cardioverter-defibrillator pulse generator and/or leads, see 33218, 33220)		
E ◎33243		Removal of single or dual chamber pacing cardioverter-defibrillator electrode(s); by thoracotomy	090	23.57 (No Change)
E 33244		by transvenous extraction ~~(For subcutaneous removal of the pulse generator, use 33241 in conjunction with 33243 or 33244)~~	090	13.99 (No Change)
E ◎33249		Insertion or ~~repositioning~~replacement of ~~electrode~~permanent pacing cardioverter-defibrillator system with transvenous lead(s)~~ for~~, single or dual chamber~~ pacing cardioverter-defibrillator and insertion of pulse generator~~ (For removal and ~~reinsertion~~replacement of a pacing cardioverter-defibrillator system ~~(~~[pulse generator and electrodes~~)~~], report 33241 ~~and~~in conjunction with either 33243 or 33244 and 33249) (For insertion of implantable cardioverter-defibrillator lead(s), without thoracotomy, use 33216 or 33217)	090	15.17 (No Change)
Radiology **Diagnostic Radiology (Diagnostic Imaging)** **Chest**				
D 71090		~~Insertion pacemaker, fluoroscopy and radiography, radiological supervision and~~	XXX	N/A

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

CPT Code (●New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
		~~interpretation~~ (71090 has been deleted. To report pacemaker or pacing cardioverter-defibrillator lead insertion, replacement, or revision procedures with fluoroscopic guidance, see 33206-33249. To report fluoroscopic guidance for diagnostic lead evaluation without lead insertion, replacement, or revision procedures, use 76000)		

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

ISSUE:	Pacemaker or Pacing Cardioverter-Defibrillator											
TAB:	4											
	2012 CPT Code	Tracking Number	Short Description	Recommended Work Value	Mean Increment	Evaluation Time	Positioning Time	Scrub Dress Wait Time	Intraservice Time	Post time	Follow-up visits	Current
33212	33212	U1	insert 1 lead pm bat	5.26		15	1	6	45	20	1x99213	5.52
33213	33213	U2	insert 2 lead pm battery	5.53	0.27	15	1	6	46	20	1x99213	6.37
3321X	33221	U3	insert 3 lead pm battery	5.80		15	1	6	50	20	1x99213	6.37
3323X1	33227	U4	replace 1 lead pm battery	5.50		15	1	6	45	20	1x99213	7.22
3323X2	33228	U5	replace 2 lead pm battery	5.77	0.27	15	1	6	50	20	1x99213	8.07
3323X3	33229	U6	replace 3 lead pm battery	6.04		15	1	6	60	20	1x99213	8.07
33240	33240	U7	insert 1 lead ICD battery	6.05		15	3	15	45	20	1x99213	7.64
3324X1	33230	U8	insert 2 lead ICD battery	6.32	0.27	15	3	15	60	20	1x99213	7.64
3324Xx	33231	U9	insert 3 lead ICD battery	6.59		15	3	15	60	20	1x99213	7.64
3324XX1	33262	U10	replace 1 lead ICD battery	6.06		15	3	15	60	20	1x99213	9.29
3324XX2	33263	U11	replace 2 lead ICD battery	6.33	0.27	15	3	15	60	20	1x99213	9.29
3324XX3	33264	U12	replace 3 lead ICD battery	6.60		15	3	15	60	20	1x99213	9.29

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33212 Tracking Number U1 Original Specialty Recommended RVU: **5.52**
Presented Recommended RVU: **5.26**
Global Period: 090 RUC Recommended RVU: **5.26**

CPT Descriptor: Insertion of pacemaker pulse generator only with existing; single lead

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68 year old patient presents with complete heart block and existing lead placed during a separate surgical procedure. The patient has no signs of systemic infection and needs implantation of a single chamber pacemaker pulse generator and attachment to existing lead.

Percentage of Survey Respondents who found Vignette to be Typical: 70%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 97% , In the ASC 0%, In the office 3%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 86% , Overnight stay-less than 24 hours 14% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 25%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 83%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 100%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made in the subclavicular region and carried to the pectoralis fascia or the subpectoral region. A pocket for the pacemaker generator is created either in the plane of pectoralis fascia or underneath the pectoral muscles just above the ribcage. The existing lead is dissected free from fibrous tissue. Hemostasis is achieved. The lead is tested for sensing, capture threshold and impedance. The pocket is irrigated. The pacing lead is connected to the new generator. The generator is inserted into the pocket. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33212		
Sample Size: 242	**Resp N:** 30	**Response:** 12.3 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	1.00	**10.00**	25.00	300.00
Survey RVW:	4.00	5.26	**5.85**	6.09	12.00
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	25.00	30.00	**45.00**	60.00	60.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 1b-FAC Straightforw Pat Procedure(w sedate/anes)

CPT Code:	33212	**Recommended Physician Work RVU: 5.26**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**19.00**	**-4.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**5.00**	**1.00**
Intra-Service Time:		**45.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
61885	090	6.05	**RUC Time**

CPT Descriptor Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
64721	090	4.97	**RUC Time**	112,200

CPT Descriptor 1 Neuroplasty and/or transposition; median nerve at carpal tunnel

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49650	090	6.36	**RUC Time**	24,451

CPT Descriptor 2 Laparoscopy, surgical; repair initial inguinal hernia

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 9 **% of respondents:** 30.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 33212**	**Key Reference CPT Code:** 61885	**Source of Time RUC Time**
Median Pre-Service Time	22.00	51.00	
Median Intra-Service Time	45.00	45.00	
Median Immediate Post-service Time	20.00	20.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	19.00	
Median Office Visit Time	23.0	46.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**129.00**	**181.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.44	3.38
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.22	3.25
Urgency of medical decision making	3.11	3.13
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.63	3.71
Physical effort required	3.22	3.38
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.56	3.63
Outcome depends on the skill and judgment of physician	3.67	3.75
Estimated risk of malpractice suit with poor outcome	3.67	3.63

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.22	3.25
Intra-Service intensity/complexity	3.56	3.63
Post-Service intensity/complexity	3.11	3.13

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 33212 will be used to report the insertion of a single lead pacemaker pulse generator without having first removed another pulse generator. This service will be reported uncommonly. After reviewing the data, the physicians noted that the median survey value of 5.85 was higher than the current value of 5.52. The panel did not feel that an argument could be made for compelling evidence to increase the work value for the service.

The panel reviewed the preservice time and selected package 1b, a straightforward patient and a straightforward procedure with sedation. The service is generally performed under conscious sedation which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 19 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, one 99213 and one 99214.

The key reference service is 61885, insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays. Those who selected the key service felt 33212 was more intense/complex than this reference service in some measures and less intense/complex in other measures when compared to this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 33212

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology/electrophysiology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 203
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 99% decrease in utilization. The panel believes 2/3 of the total utilization will be provided to Medicare patients.

Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 135
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 99% decrease in utilization.

Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 33212

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33213 Tracking Number U2 Original Specialty Recommended RVU: **6.05**
Presented Recommended RVU: **5.53**
Global Period: 090 RUC Recommended RVU: **5.53**

CPT Descriptor: Insertion of pacemaker pulse generator only with existing; dual leads

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 82 year-old patient presents with third degree AV block and existing leads placed during a separate surgical procedure. The patient has no signs of systemic infection and needs implantation of a dual chamber pacemaker pulse generator and attachment to existing leads.

Percentage of Survey Respondents who found Vignette to be Typical: 77%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 97% , In the ASC 0%, In the office 3%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 90% , Overnight stay-less than 24 hours 10% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 33%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 82%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 100%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made in the subclavicular region and carried to the pectoralis fascia or the subpectoral region. A pocket for the pacemaker generator is created either in the plane of pectoralis fascia or underneath the pectoral muscles just above the ribcage. The existing leads are dissected free from fibrous tissue. Hemostasis is achieved. The leads are tested for sensing, capture threshold and impedance. The pocket is irrigated. The pacing leads are connected to the new generator. The generator is inserted into the pocket. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33213		
Sample Size: 242	**Resp N:** 30	**Response:** 12.3 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	1.00	**10.00**	25.00	300.00
Survey RVW:	4.50	5.39	**6.05**	6.73	12.00
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**12.50**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	35.00	**46.00**	60.00	90.00

Immediate Post Service-Time:	**22.50**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 1b-FAC Straightforw Pat Procedure(w sedate/anes)

CPT Code:	33213	**Recommended Physician Work RVU: 5.53**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**19.00**	**-4.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**5.00**	**1.00**
Intra-Service Time:		**46.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33217	090	5.84	**RUC Time**

CPT Descriptor Insertion of 2 transvenous electrodes, permanent pacemaker or cardioverter-defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
64721	090	4.97	**RUC Time**	112,200

CPT Descriptor 1 Neuroplasty and/or transposition; median nerve at carpal tunnel

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49650	090	6.36	**RUC Time**	24,451

CPT Descriptor 2 Laparoscopy, surgical; repair initial inguinal hernia

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 9 **% of respondents:** 30.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 33213**	**Key Reference CPT Code: 33217**	**Source of Time RUC Time**
Median Pre-Service Time	22.00	60.00	
Median Intra-Service Time	46.00	120.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	32.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**130.00**	**272.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.11	2.67
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	2.78
Urgency of medical decision making	2.78	2.44
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.11	2.67
Physical effort required	2.89	2.67
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	2.56
Outcome depends on the skill and judgment of physician	3.00	2.56
Estimated risk of malpractice suit with poor outcome	3.11	3.00

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.89	2.56
Intra-Service intensity/complexity	3.11	3.00
Post-Service intensity/complexity	2.56	2.11

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 33213 will be used to report the insertion of a dual lead pacemaker pulse generator without having first removed another pulse generator. This service will be reported uncommonly. After reviewing the data, the panel felt the survey median of 6.05 adequately represents the physician work for the procedure.

The panel reviewed the preservice time and selected package 1b, a straightforward patient and a straightforward procedure with sedation. The service is generally performed under conscious sedation which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 19 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33217, insertion of 2 transvenous electrodes, permanent pacemaker or cardioverter-defibrillator. Those who selected the key service felt 33213 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 33213

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology/electrophysiology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 729

If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 90% decrease in utilization. The panel believes 2/3 of the total utilization will be provided to Medicare patients.

Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %
Specialty	Frequency 0	Percentage 0.00 %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 486
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 90% decrease in utilization.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 33213

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33221 Tracking Number U3 Original Specialty Recommended RVU: **6.25**
Presented Recommended RVU: **5.80**
Global Period: 090 RUC Recommended RVU: **5.80**

CPT Descriptor: Insertion of pacemaker pulse generator only with existing; multiple leads

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 42-year-old patient with congenital heart disease presents with systolic heart failure and left bundle branch block (LBBB). During a prior surgical procedure, pacemaker leads were placed in the right atrium (RA), right ventricle (RV) and left ventricle (LV) in anticipation of need for pacing and tunneled subcutaneously. The patient now meets indications for biventricular pacing.

Percentage of Survey Respondents who found Vignette to be Typical: 72%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 96% , In the ASC 0%, In the office 4%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 96% , Overnight stay-less than 24 hours 4% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 100%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 86%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 100%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made in the subclavicular region and carried to the pectoralis fascia or the subpectoral region. A pocket for the pacemaker generator is created either in the plane of pectoralis fascia or underneath the pectoral muscles just above the ribcage. The existing leads are dissected free from fibrous tissue. Hemostasis is achieved. The leads are tested for sensing, capture threshold and impedance. The pocket is irrigated. The pacing leads are connected to the new generator. The generator is inserted into the pocket. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33221		
Sample Size: 242	**Resp N:** 30	**Response:** 12.3 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**2.00**	10.00	300.00
Survey RVW:	1.20	5.79	**6.25**	7.69	13.58
Pre-Service Evaluation Time:			**20.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	40.00	**50.00**	60.00	90.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**80.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **2.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 1b-FAC Straightforw Pat Procedure(w sedate/anes)

CPT Code:	33221	**Recommended Physician Work RVU: 5.80**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**19.00**	**-4.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**5.00**	**1.00**
Intra-Service Time:		**50.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33235	090	10.15	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); dual lead system

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
64721	090	4.97	**RUC Time**	112,200

CPT Descriptor 1 Neuroplasty and/or transposition; median nerve at carpal tunnel

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49650	090	6.36	**RUC Time**	24,451

CPT Descriptor 2 Laparoscopy, surgical; repair initial inguinal hernia

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 23.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 33221**	**Key Reference CPT Code: 33235**	**Source of Time RUC Time**
Median Pre-Service Time	22.00	60.00	
Median Intra-Service Time	50.00	170.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	110.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**134.00**	**400.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.83
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.29	4.00
Urgency of medical decision making	3.57	3.50
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.43	4.33
Physical effort required	3.86	3.67
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.29	4.17
Outcome depends on the skill and judgment of physician	4.43	4.33
Estimated risk of malpractice suit with poor outcome	4.00	4.00

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.57	3.50
Intra-Service intensity/complexity	4.43	4.33
Post-Service intensity/complexity	3.71	3.50

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 33221 will be used to report the insertion of a multiple lead pacemaker pulse generator without having first removed another pulse generator. This service will be reported uncommonly. After reviewing the data, the panel felt the survey median of 6.25 adequately represents the physician work for the procedure.

The panel reviewed the preservice time and selected package 1b, a straightforward patient and a straightforward procedure with sedation. The service is generally performed under conscious sedation which is included as part of the code.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33235, removal of transvenous pacemaker electrode(s); dual lead system. Those who selected the key service felt 33221 was more intense/complex than this reference service in all but one aspect of comparison.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 33233

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 729
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation

of an estimated 90% decrease in utilization. The panel believes 2/3 of the total utilization will be provided to Medicare patients.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 486
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 90% decrease in utilization.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33227 Tracking Number U4 Original Specialty Recommended RVU: **6.05**
Presented Recommended RVU: **5.50**
Global Period: 090 RUC Recommended RVU: **5.50**

CPT Descriptor: Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; single lead system

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 85-year-old patient presents with a history of complete heart block whose pacemaker generator is at elective replacement indicator. The patient has no evidence of systemic infection or decompensated congestive heart failure (CHF).

Percentage of Survey Respondents who found Vignette to be Typical: 97%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 97% , In the ASC 0%, In the office 3%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 90% , Overnight stay-less than 24 hours 10% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 33%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 84%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 100%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made of the existing generator and carried down to the level of the capsule surrounding the generator. The existing generator is dissected free and the lead is freed from fibrous scar tissue. This must be performed in a manner preventing damage to the lead. Often extensive removal of scar tissue/capsule is required. During the procedure adequate hemostasis and sterility are maintained. The existing lead is tested to assess the adequacy, including capture threshold, sensing and impedance. The pocket may need to be modified to accommodate the shape and size of the new generator. The pocket is copiously irrigated. The new generator is inserted in the pocket and attached to the existing lead. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The

patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33227		
Sample Size: 242	**Resp N:** 33	**Response:** 13.6 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	10.50	**17.50**	25.00	300.00
Survey RVW:	4.00	5.50	**6.05**	8.50	13.00
Pre-Service Evaluation Time:			**16.50**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	36.25	**45.00**	60.00	70.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**63.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **1.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 1b-FAC Straightforw Pat Procedure(w sedate/anes)

CPT Code:	33227	**Recommended Physician Work RVU: 5.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**19.00**	**-4.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**5.00**	**1.00**
Intra-Service Time:		**45.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33222	090	5.10	**RUC Time**

CPT Descriptor Revision or relocation of skin pocket for pacemaker

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
64721	090	4.97	**RUC Time**	112,200

CPT Descriptor 1 Neuroplasty and/or transposition; median nerve at carpal tunnel

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49650	090	6.36	**RUC Time**	24,451

CPT Descriptor 2 Laparoscopy, surgical; repair initial inguinal hernia

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 10 **% of respondents:** 30.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 33227**	**Key Reference CPT Code:** 33222	**Source of Time RUC Time**
Median Pre-Service Time	22.00	60.00	
Median Intra-Service Time	45.00	112.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	48.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**129.00**	**280.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.90	2.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.00	2.80
Urgency of medical decision making	2.90	2.30
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.10	2.80
Physical effort required	2.90	2.70
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.00	2.80
Outcome depends on the skill and judgment of physician	3.00	2.80
Estimated risk of malpractice suit with poor outcome	3.40	3.10

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.90	2.50
Intra-Service intensity/complexity	3.00	3.10
Post-Service intensity/complexity	2.50	2.30

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3323X1 will be used to report the insertion of a single lead pacemaker pulse generator after first removing another pulse generator, typically at the end of its service life. After reviewing the data, the panel felt the survey median of 6.05 adequately represents the physician work for the procedure. It also eliminates redundancies that may exist under the current convention of reporting 33212 with 33233 for this service. The current value of 7.22 was calculated based on a 50% reduction placed on the lesser valued code as part of a multiple procedure edit.

The panel reviewed the preservice time and selected package 1b, a straightforward patient and a straightforward procedure with sedation. The service is generally performed under conscious sedation which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 19 minutes to 16.5 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, one 99213 and one 99214.

The key reference service is 33222, revision or relocation of skin pocket for pacemaker. Those who selected the key service felt 3323X1 was more intense/complex than this reference service in all but one aspect of comparison.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The service was reported with a combination of codes 33212 and 33233. The value for code 33233 was reduced by 50% under Medicare multiple procedure edit.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 28266
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 71% decrease in utilization. The panel believes 2/3 of the total utilization will be provided to Medicare patients.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 18,844 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 71% decrease in utilization.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33228 Tracking Number U5 Original Specialty Recommended RVU: **6.50**
Presented Recommended RVU: **5.77**
Global Period: 090 RUC Recommended RVU: **5.77**

CPT Descriptor: Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; dual lead system

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 82-year-old patient presents with a history of sick sinus syndrome and intermittent paroxysmal atrial fibrillation. The pacemaker is at elective replacement indicator. The patient has no evidence of systemic infection. The patient is complaining of dyspnea felt to be related to a rate or mode change due to the device reaching elective replacement indicator.

Percentage of Survey Respondents who found Vignette to be Typical: 100%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 97% , In the ASC 0%, In the office 3%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 91% , Overnight stay-less than 24 hours 90% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 33%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 84%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 100%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made of the existing generator and carried down to the level of the capsule surrounding the generator. The existing generator is dissected free and the leads are freed from fibrous scar tissue. Often extensive removal of scar tissue/capsule is required. This must be performed in a manner preventing damage to the leads. During the procedure adequate hemostasis and sterility are maintained. The existing leads are tested to assess the adequacy, including capture threshold, sensing and impedance. The pocket may need to be modified to accommodate the shape and size of the new generator. The pocket is copiously irrigated. The new generator is inserted in the pocket and attached to the existing leads. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any

required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33228		
Sample Size: 242	**Resp N:** 33	**Response:** 13.6 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	15.00	**30.00**	50.00	100.00
Survey RVW:	4.50	5.70	**6.50**	9.30	13.30
Pre-Service Evaluation Time:			**18.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	37.50	**50.00**	60.00	75.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 1b-FAC Straightforw Pat Procedure(w sedate/anes)

CPT Code:	33228	**Recommended Physician Work RVU: 5.57**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**19.00**	**-4.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**5.00**	**1.00**
Intra-Service Time:		**50.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33222	090	5.10	**RUC Time**

CPT Descriptor Revision or relocation of skin pocket for pacemaker

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49650	090	6.36	**RUC Time**	24,451

CPT Descriptor 1 Neuroplasty and/or transposition; median nerve at carpal tunnel

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49585	090	6.59	**RUC Time**	23,157

CPT Descriptor 2 Repair umbilical hernia, age 5 years or older; reducible

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 9 **% of respondents:** 27.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 33228**	**Key Reference CPT Code: 33222**	**Source of Time RUC Time**
Median Pre-Service Time	22.00	60.00	
Median Intra-Service Time	50.00	112.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	48.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**134.00**	**280.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	2.67
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.11	2.78
Urgency of medical decision making	3.00	2.44
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.89	2.89
Physical effort required	2.89	2.78
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.11	2.89
Outcome depends on the skill and judgment of physician	3.00	2.89
Estimated risk of malpractice suit with poor outcome	3.44	3.22

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.89	2.67
Intra-Service intensity/complexity	3.11	3.00
Post-Service intensity/complexity	2.33	2.33

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3323X2 will be used to report the insertion of a dual lead pacemaker pulse generator after first removing another pulse generator, typically at the end of its service life. After reviewing the data, the panel felt the survey median of 6.50 adequately represents the physician work for the procedure. It also eliminates redundancies that may exist under the current convention of reporting 33213 with 33233 for this service. The current value of 8.07 was calculated based on a 50% reduction placed on the lesser valued code as part of a multiple procedure edit.

The panel reviewed the preservice time and selected package 1b, a straightforward patient and a straightforward procedure with sedation. The service is generally performed under conscious sedation which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 19 minutes to 18 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33222, revision or relocation of skin pocket for pacemaker. Those who selected the key service felt 3323X2 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) This code was previously reported as a combination of codes 33213 and 33233. The value for 33233 was cut by 50% based on Medicare's multiple procedure reduction.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 672553

If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code combination and expert opinion of physicians. The panel believes 2/3 of the total utilization will be provided to Medicare patients.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 44,835 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. These estimates are based on reviews of the number of claims reported for codes 33213 and 33233 in 2009 and expert opinion on the percentage that would be reported as dual or multiple lead pacemaker.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33229 Tracking Number U6 Original Specialty Recommended RVU: **7.50**
Presented Recommended RVU: **6.04**
Global Period: 090 RUC Recommended RVU: **6.04**

CPT Descriptor: Removal of permanent pacemaker pulse generator with replacement of pacemaker pulse generator; multiple lead system

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 84-year-old patient presents with moderate to severe congestive heart failure (CHF) and left bundle branch block (LBBB) and does not wish to have implantable cardioverter-defibrillator (ICD) therapy. The biventricular pacemaker is at elective replacement indicator. There is no evidence of systemic infection.

Percentage of Survey Respondents who found Vignette to be Typical: 91%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 97% , In the ASC 0%, In the office 3%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 87% , Overnight stay-less than 24 hours 13% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 50%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 81%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 100%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made of the existing generator and carried down to the level of the capsule surrounding the generator. The existing generator is dissected free and the leads are freed from fibrous scar tissue. Often extensive removal of scar tissue/capsule is required. This must be performed in a manner preventing damage to the leads. During the procedure adequate hemostasis and sterility are maintained. The existing leads are tested to assess the adequacy, including capture threshold, sensing and impedance. The pocket may need to be modified to accommodate the shape and size of the new generator. The pocket is copiously irrigated. The new generator is inserted in the pocket and attached to the existing leads. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The

patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33229		
Sample Size: 242	**Resp N:** 33	**Response:** 13.6 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	2.25	**9.00**	15.00	300.00
Survey RVW:	4.92	6.00	**7.50**	10.00	17.18
Pre-Service Evaluation Time:			**20.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	45.00	**60.00**	65.00	90.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**80.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **2.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 1b-FAC Straightforw Pat Procedure(w sedate/anes)

CPT Code:	33229	**Recommended Physician Work RVU: 6.04**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**19.00**	**-4.00**
Pre-Service Positioning Time:		**1.00**	**1.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**6.00**	**5.00**	**1.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33234	090	7.91	**RUC Time**

CPT Descriptor Removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
30520	090	7.01	**RUC Time**	21,357

CPT Descriptor 1 Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
46262	090	7.91	**RUC Time**	245

CPT Descriptor 2 Hemorrhoidectomy, internal and external, 2 or more columns/groups; with fistulectomy, including fissurectomy, when performed

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 8 **% of respondents:** 24.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 33229**	**Key Reference CPT Code: 33234**	**Source of Time RUC Time**
Median Pre-Service Time	22.00	60.00	
Median Intra-Service Time	60.00	150.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	32.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**144.00**	**302.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.75	3.38
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.75	3.50
Urgency of medical decision making	3.38	3.50
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.75	3.38
Physical effort required	3.75	3.38
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.75	3.38
Outcome depends on the skill and judgment of physician	3.75	3.63
Estimated risk of malpractice suit with poor outcome	3.63	3.63

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	3.13	3.13
Intra-Service intensity/complexity	3.75	3.38
Post-Service intensity/complexity	3.25	3.13

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3323X3 will be used to report the insertion of a multiple lead pacemaker pulse generator after first removing another pulse generator, typically at the end of its service life. After reviewing the data, the panel felt the survey median of 7.50 adequately represents the physician work for the procedure. It also eliminates redundancies that may exist under the current convention of reporting 33213 with 33233 for this service. The current value of 8.07 was calculated based on a 50% reduction placed on the lesser valued code as part of a multiple procedure edit.

The panel reviewed the preservice time and selected package 1b, a straightforward patient and a straightforward procedure with sedation. The service is generally performed under conscious sedation which is included as part of the code.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33234, removal of transvenous pacemaker electrode(s); single lead system, atrial or ventricular. Those who selected the key service felt 3323X3 was more intense/complex than this reference service in some measures and similarly intense/complex in other measures when compared to this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) The ACCC and HRS believe that most physiscians would have reported this service with a combination of codes 33213 and 33233 despite code 33213 being specified for a dual lead pacemaker. Since 33213 is closest to this code, it was most likely that which was reported. Multiple lead pacemakers had not been introduced when the code was originally valued.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 1950
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior codes 33213 and 33233 and physician expert opinion on the distribution of dual and multiple lead pacemakers. The panel believes 2/3 of the total utilization will be provided to Medicare patients.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 1,300
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior codes 33213 and 33233 and physician expert opinion on the distribution of dual and multiple lead pacemakers.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33240 Tracking Number U7 Original Specialty Recommended RVU: **6.85**
Presented Recommended RVU: **6.05**
Global Period: 090 RUC Recommended RVU: **6.05**

CPT Descriptor: Insertion of pacing cardioverter-defibrillator pulse generator only with existing; single lead

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 64 year old patient presents with history of coronary artery disease, old myocardial infarction approximately 3-4 years ago with depressed left ventricular function with ejection fraction of 34% and existing lead placed during a separate surgical procedure. The patient has no signs of systemic infection and needs implantation of a single chamber ICD generator and attachment to existing lead to complete a functional system

Percentage of Survey Respondents who found Vignette to be Typical: 72%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 95% , In the ASC 0%, In the office 5%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 89% , Overnight stay-less than 24 hours 11% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 25%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 69%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 67%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made in the subclavicular region and carried to the pectoralis fascia or the subpectoral region. A pocket for the pacemaker generator is created either in the plane of pectoralis fascia or underneath the pectoral muscles just above the ribcage. The existing lead is dissected free from fibrous tissue. Hemostasis is achieved. The lead is tested for sensing, capture threshold and impedance. The pocket is irrigated. The pacing lead is connected to the new generator. The generator is inserted into the pocket. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33240		
Sample Size: 229	**Resp N:** 39	**Response:** 17.0 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**5.00**	20.00	75.00
Survey RVW:	4.00	6.05	**6.85**	8.20	11.75
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	20.00	40.00	**45.00**	60.00	75.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 3 -FAC Straightforward Patient/Difficult Procedure

CPT Code:	33240	**Recommended Physician Work RVU: 6.05**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**33.00**	**-18.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**15.00**	**0.00**
Intra-Service Time:		**45.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33223	090	6.55	**RUC Time**

CPT Descriptor Revision of skin pocket for cardioverter-defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49585	090	6.59	**RUC Time**	23,157

CPT Descriptor 1 Repair umbilical hernia, age 5 years or older; reducible

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
30520	090	7.01	**RUC Time**	21,357

CPT Descriptor 2 Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 11 **% of respondents:** 28.2 **%**

TIME ESTIMATES (Median)	**CPT Code: 33240**	**Key Reference CPT Code:** 33223	**Source of Time RUC Time**
Median Pre-Service Time	33.00	53.00	
Median Intra-Service Time	45.00	90.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	32.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**140.00**	**235.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.00	2.73
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.82	3.36
Urgency of medical decision making	2.91	2.82
Technical Skill/Physical Effort (Mean)		
Technical skill required	3.82	3.64
Physical effort required	3.64	3.36
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.91	3.50
Outcome depends on the skill and judgment of physician	3.73	3.45
Estimated risk of malpractice suit with poor outcome	3.09	3.55

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.82	2.82
Intra-Service intensity/complexity	3.82	3.45
Post-Service intensity/complexity	3.18	3.09

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 33240 will be used to report the insertion of a single lead pacing cardioverter-defibrillator without having first removed another pulse generator. This service will be reported uncommonly. After reviewing the data, the panel felt the survey median of 6.85 adequately represents the physician work for the procedure.

The panel reviewed the preservice time and selected package 3, a straightforward patient and a difficult procedure with sedation. The service is generally performed under IV deep sedation and local anesthesia or under general anesthesia, which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 33 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33223, revision of skin pocket for cardioverter-defibrillator. Those who selected the key service felt 33240 was more intense/complex than this reference service in all but one aspect of comparison.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 33240. That code was split to create 3 codes that are reported based on the number of leads to be consistent with other cardiac device codes.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 426

If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 284
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and expert opinion on the distribution of codes based on the number of leads.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 33240

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33230 Tracking Number U8 Original Specialty Recommended RVU: **7.20**
Presented Recommended RVU: **6.32**
Global Period: 090 RUC Recommended RVU: **6.32**

CPT Descriptor: Insertion of pacing cardioverter-defibrillator pulse generator only with existing; dual leads

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67-year old patient presents with systolic heart failure and existing leads placed during a separate surgical procedure. The patient has no signs of systemic infection and needs implantation of a dual chamber ICD generator and attachment to existing leads to complete a functional system.

Percentage of Survey Respondents who found Vignette to be Typical: 74%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 95% , In the ASC 0%, In the office 5%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 81% , Overnight stay-less than 24 hours 19% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 50%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 66%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 67%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made in the subclavicular region and carried to the pectoralis fascia or the subpectoral region. A pocket for the pacemaker generator is created either in the plane of pectoralis fascia or underneath the pectoral muscles just above the ribcage. The existing leads are dissected free from fibrous tissue. Hemostasis is achieved. The leads are tested for sensing, capture threshold and impedance. The pocket is irrigated. The pacing leads are connected to the new generator. The generator is inserted into the pocket. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33230		
Sample Size: 229	**Resp N:** 39	**Response:** 17.0 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**5.00**	28.75	75.00
Survey RVW:	4.30	6.60	**7.20**	9.39	12.50
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	20.00	45.00	**60.00**	60.00	87.00

Immediate Post Service-Time:	**25.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 3 -FAC Straightforward Patient/Difficult Procedure

CPT Code:	33230	**Recommended Physician Work RVU: 6.32**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**33.00**	**-18.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**15.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
61886	090	9.93	**RUC Time**

CPT Descriptor Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
30520	090	7.01	**RUC Time**	21,357

CPT Descriptor 1 Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
46262	090	7.91	**RUC Time**	245

CPT Descriptor 2 Hemorrhoidectomy, internal and external, 2 or more columns/groups; with fistulectomy, including fissurectomy, when performed

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 15 **% of respondents:** 38.4 **%**

TIME ESTIMATES (Median)	**CPT Code: 33230**	**Key Reference CPT Code:** 61886	**Source of Time** RUC Time
Median Pre-Service Time	33.00	50.00	
Median Intra-Service Time	60.00	100.00	
Median Immediate Post-service Time	20.00	25.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	118.00	
Median Discharge Day Management Time	19.0	92.00	
Median Office Visit Time	23.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	**155.00**	**385.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.80	3.47
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.80	3.60
Urgency of medical decision making	3.73	3.47
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.13	3.93
Physical effort required	3.73	3.47
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.13	3.80
Outcome depends on the skill and judgment of physician	4.27	3.93
Estimated risk of malpractice suit with poor outcome	4.13	3.93

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	3.40	3.20
Intra-Service intensity/complexity	4.07	3.87
Post-Service intensity/complexity	3.50	3.33

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a

pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3324X1 will be used to report the insertion of a dual lead pacing cardioverter-defibrillator without having first removed another pulse generator. This service will be reported uncommonly. After reviewing the data, the panel felt the survey median of 7.20 adequately represents the physician work for the procedure.

The panel reviewed the preservice time and selected package 3, a straightforward patient and a difficult procedure with sedation. The service is generally performed under IV deep sedation and local anesthesia or under general anesthesia, which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 33 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 61886, insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays. Those who selected the key service felt 3324X1 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 33240. This service was split into three codes to report the number of leads to be consistent with other device codes.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 503
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data.Based on 2009 Medicare Part B Claims Data for the prior code and expert opinion on the distribution of services based on the number of leads.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 335
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 99% decrease in utilization.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33231 Tracking Number U9 Original Specialty Recommended RVU: **7.80**
Presented Recommended RVU: **6.59**
Global Period: 090 RUC Recommended RVU: **6.59**

CPT Descriptor: Insertion of pacing cardioverter-defibrillator pulse generator only with existing; multiple leads

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 62 year patient presents with systolic heart failure and LBBB block. During a separate surgical procedure, right atrial (RA), right ventricular (RV) and left ventricular (LV) leads were placed. The patient requires implantation of a biventricular ICD generator with attachment with existing leads to complete the ICD system.

Percentage of Survey Respondents who found Vignette to be Typical: 73%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 95% , In the ASC 0%, In the office 5%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 73% , Overnight stay-less than 24 hours 27% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 60%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 66%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 67%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made in the subclavicular region and carried to the pectoralis fascia or the subpectoral region. A pocket for the pacemaker generator is created either in the plane of pectoralis fascia or underneath the pectoral muscles just above the ribcage. The existing leads are dissected free from fibrous tissue. Hemostasis is achieved. The leads are tested for sensing, capture threshold and impedance. The pocket is irrigated. The pacing leads are connected to the new generator. The generator is inserted into the pocket. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33231		
Sample Size: 229	**Resp N:** 39	**Response:** 17.0 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	0.00	**5.00**	18.75	75.00
Survey RVW:	4.60	6.63	**7.80**	9.73	13.81
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	30.00	45.00	**60.00**	70.00	115.00

Immediate Post Service-Time:	**25.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**80.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **2.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 3 -FAC Straightforward Patient/Difficult Procedure

CPT Code:	33231	**Recommended Physician Work RVU: 6.59**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**33.00**	**-18.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**15.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
61886	090	9.93	**RUC Time**

CPT Descriptor Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
30520	090	7.01	**RUC Time**	21,357

CPT Descriptor 1 Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
46262	090	7.91	**RUC Time**	245

CPT Descriptor 2 Hemorrhoidectomy, internal and external, 2 or more columns/groups; with fistulectomy, including fissurectomy, when performed

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 15 **% of respondents:** 38.4 **%**

TIME ESTIMATES (Median)	**CPT Code: 33231**	**Key Reference CPT Code:** 61886	**Source of Time** RUC Time
Median Pre-Service Time	33.00	50.00	
Median Intra-Service Time	60.00	100.00	
Median Immediate Post-service Time	20.00	25.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	118.00	
Median Discharge Day Management Time	19.0	92.00	
Median Office Visit Time	23.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	155.00	385.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.53
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.07	3.57
Urgency of medical decision making	3.93	3.53
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.33	3.86
Physical effort required	3.93	3.47
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	4.33	3.80
Outcome depends on the skill and judgment of physician	4.40	3.93
Estimated risk of malpractice suit with poor outcome	4.20	3.93

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	3.47	3.27
Intra-Service intensity/complexity	4.20	3.87
Post-Service intensity/complexity	3.60	3.27

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a

pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3324X2 will be used to report the insertion of a multiple lead pacing cardioverter-defibrillator without having first removed another pulse generator. This service will be reported uncommonly. After reviewing the data, the panel felt the survey median of 7.80 adequately represents the physician work for the procedure.

The panel reviewed the preservice time and selected package 3, a straightforward patient and a difficult procedure with sedation. The service is generally performed under IV deep sedation and local anesthesia or under general anesthesia, which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 33 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 61886, insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays. Those who selected the key service felt 3324X2 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 33240. This code was spilt into three codes to reflect the number of leads to be consistent with other device codes

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Rarely

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 503
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and expert opinion on the distribution of services based on the number of leads.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 335
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 99% decrease in utilization.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33262 Tracking Number U10 Original Specialty Recommended RVU: **7.00**
Presented Recommended RVU: **6.06**
Global Period: 090 RUC Recommended RVU: **6.06**

CPT Descriptor: Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; single lead system

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 60-year-old patient presents with systolic congestive heart failure (CHF) from prior myocardial infarction whose implantable cardioverter-defibrillator (ICD) is at elective replacement indicator. The patient has no signs of systemic infection or unstable coronary syndrome.

Percentage of Survey Respondents who found Vignette to be Typical: 93%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 95% , In the ASC 0%, In the office 5%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 83% , Overnight stay-less than 24 hours 17% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 57%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 62%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 67%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made of the existing generator and carried down to the level of the capsule surrounding the generator. The existing generator is dissected free and the lead is freed from fibrous scar tissue. This must be performed in a manner preventing damage to the lead. Often extensive removal of scar tissue/capsule is required. During the procedure adequate hemostasis and sterility are maintained. The existing lead is tested to assess the adequacy, including capture threshold, sensing and impedance. The pocket may need to be modified to accommodate the shape and size of the new generator. The pocket is copiously irrigated. The new generator is inserted in the pocket and attached to the existing lead. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The

patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33262		
Sample Size: 229	**Resp N:** 43	**Response:** 18.7 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	16.25	**25.00**	50.00	75.00
Survey RVW:	4.00	6.06	**7.00**	9.55	13.50
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	10.00	45.00	**60.00**	60.00	125.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 3 -FAC Straightforward Patient/Difficult Procedure

CPT Code:	33262	**Recommended Physician Work RVU: 6.06**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**33.00**	**-18.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**15.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33223	090	6.55	**RUC Time**

CPT Descriptor Revision of skin pocket for cardioverter-defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49585	090	6.59	**RUC Time**	23,157

CPT Descriptor 1 Repair umbilical hernia, age 5 years or older; reducible

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
30520	090	7.01	**RUC Time**	21,357

CPT Descriptor 2 Septoplasty or submucous resection, with or without cartilage scoring, contouring or replacement with graft

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 12 **% of respondents:** 27.9 **%**

TIME ESTIMATES (Median)	**CPT Code: 33262**	**Key Reference CPT Code:** 33223	**Source of Time RUC Time**
Median Pre-Service Time	33.00	53.00	
Median Intra-Service Time	60.00	90.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	32.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**155.00**	**235.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.33	2.75
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.58	3.25
Urgency of medical decision making	3.08	2.83
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.08	3.75
Physical effort required	3.58	3.33
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.83	3.42
Outcome depends on the skill and judgment of physician	4.00	3.58
Estimated risk of malpractice suit with poor outcome	4.17	3.83

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.75	2.50
Intra-Service intensity/complexity	3.92	3.50
Post-Service intensity/complexity	3.09	2.67

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3324XX1 will be used to report the insertion of a single lead pacing cardioverter-defibrillator after first removing another pulse generator, typically at the end of its service life. After reviewing the data, the panel felt the survey median of 7.00 adequately represents the physician work for the procedure. It also eliminates redundancies that may exist under the current convention of reporting 33240 with 33241 for this service. The current value of 9.29 was calculated based on a 50% reduction placed on the lesser valued code as part of a multiple procedure edit.

The panel reviewed the preservice time and selected package 3, a straightforward patient and a difficult procedure with sedation. The service is generally performed under IV deep sedation and local anesthesia or under general anesthesia, which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 33 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33223, revision of skin pocket for cardioverter-defibrillator. Those who selected the key service felt 3324XX1 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Previously reported as a combination of codes 33241 and 33240 but was identified as a service commonly performed together by the Relativity Assssment Workgroup. Codes were split to reflect different work associated with different numbers of leads.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 10063
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 6,709
If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and an extrapolation of an estimated 80% decrease in utilization.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33263 Tracking Number U11 Original Specialty Recommended RVU: **8.00**
Presented Recommended RVU: **6.33**
Global Period: 090 RUC Recommended RVU: **6.33**

CPT Descriptor: Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; dual lead system

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 70-year-old patient with systolic congestive heart failure (CHF) from prior myocardial infarction (MI), who also has bradycardia, presents with an implantable cardioverter-defibrillator (ICD) at elective replacement indicator. The patient has no signs of systemic infection or unstable coronary syndrome.

Percentage of Survey Respondents who found Vignette to be Typical: 95%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 95% , In the ASC 0%, In the office 5%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 85% , Overnight stay-less than 24 hours 15% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 67%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 63%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 67%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made of the existing generator and carried down to the level of the capsule surrounding the generator. The existing generator is dissected free and the leads are freed from fibrous scar tissue. Often extensive removal of scar tissue/capsule is required. This must be performed in a manner preventing damage to the leads. During the procedure adequate hemostasis and sterility are maintained. The existing leads are tested to assess the adequacy, including capture threshold, sensing and impedance. The pocket may need to be modified to accommodate the shape and size of the new generator. The pocket is copiously irrigated. The new generator is inserted in the pocket and attached to the existing leads. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The

patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33263		
Sample Size: 229	**Resp N:** 43	**Response:** 18.7 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	20.00	**27.50**	50.00	100.00
Survey RVW:	4.30	6.58	**8.00**	9.97	14.75
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**15.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	20.00	45.00	**60.00**	75.00	150.00

Immediate Post Service-Time:	**25.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 3 -FAC Straightforward Patient/Difficult Procedure

CPT Code:	33263	**Recommended Physician Work RVU: 6.33**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**33.00**	**-18.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**15.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33223	090	6.55	**RUC Time**

CPT Descriptor Revision of skin pocket for cardioverter-defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
49505	090	7.96	**RUC Time**	81,887

CPT Descriptor 1 Repair initial inguinal hernia, age 5 years or older; reducible

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
14040	090	8.60	**RUC Time**	83,047

CPT Descriptor 2 Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 11 **% of respondents:** 25.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 33263**	**Key Reference CPT Code:** 33223	**Source of Time RUC Time**
Median Pre-Service Time	33.00	53.00	
Median Intra-Service Time	60.00	90.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	0.00	
Median Office Visit Time	23.0	32.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**155.00**	**235.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.18	2.81
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.45	3.18
Urgency of medical decision making	3.00	2.73
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.00	3.64
Physical effort required	3.45	3.18
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.73	3.27
Outcome depends on the skill and judgment of physician	3.82	3.36
Estimated risk of malpractice suit with poor outcome	4.18	3.60

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.73	2.37
Intra-Service intensity/complexity	3.73	3.27
Post-Service intensity/complexity	2.81	2.45

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3324XX2 will be used to report the insertion of a dual lead pacing cardioverter-defibrillator after first removing another pulse generator, typically at the end of its service life. After reviewing the data, the panel felt the survey median of 8.00 adequately represents the physician work for the procedure. It also eliminates redundancies that may exist under the current convention of reporting 33240 with 33241 for this service. The current value of 9.29 was calculated based on a 50% reduction placed on the lesser valued code as part of a multiple procedure edit.

The panel reviewed the preservice time and selected package 3, a straightforward patient and a difficult procedure with sedation. The service is generally performed under IV deep sedation and local anesthesia or under general anesthesia, which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 33 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.
The key reference service is 33223, revision of skin pocket for cardioverter-defibrillator. Those who selected the key service felt 3324XX2 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Previously reported as a combination of codes 33241 and 33240 but was identified as a service commonly performed together by the Relativity Assssment Workgroup.

How often do physicians <u>in your specialty</u> perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 25158
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code and expert opinion on the percentage of codes that will be reported with single, dual, or multiple leads.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 16,772 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code.

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:33264 Tracking Number U12 Original Specialty Recommended RVU: **8.50**
Presented Recommended RVU: **6.60**
Global Period: 090 RUC Recommended RVU: **6.60**

CPT Descriptor: Removal of pacing cardioverter-defibrillator pulse generator with replacement of pacing cardioverter-defibrillator pulse generator; multiple lead system

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 73-year-old patient with systolic congestive heart failure (CHF), Class III symptoms and left bundle branch block (LBBB) who presents with an implantable cardioverter-defibrillator (ICD) at elective replacement indicator. The patient has no signs of systemic infection.

Percentage of Survey Respondents who found Vignette to be Typical: 92%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 95% , In the ASC 0%, In the office 5%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 82% , Overnight stay-less than 24 hours 18% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 71%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 62%

Is moderate sedation inherent to this procedure in the office setting? Yes
Percent of survey respondents who stated moderate sedation is typical in the office setting? 67%

Description of Pre-Service Work: Patient is evaluated for stability with respect to overall cardiovascular status. A history and multi-system physical exam are obtained. The procedure and its risks are discussed in detail with the patient and patient's family, as well as why pacing is needed, the risks, benefits, indications and alternatives. Mark the incision site and obtain informed consent and answer patient and family questions. Scheduling and follow-up issues are discussed. Medications are often adjusted including insulin, diuretics and anti-coagulants. Monitor the patient positioning and draping and assist with positioning as needed. Scrub and gown. Observe and/or assist in insertion of monitoring lines and induction of anesthesia.

Description of Intra-Service Work: The appropriate pectoral region is prepared and draped in a sterile manner. An incision is made of the existing generator and carried down to the level of the capsule surrounding the generator. The existing generator is dissected free and the leads are freed from fibrous scar tissue. Often extensive removal of scar tissue/capsule is required. This must be performed in a manner preventing damage to the leads. During the procedure adequate hemostasis and sterility are maintained. The existing leads are tested to assess the adequacy, including capture threshold, sensing and impedance. The pocket may need to be modified to accommodate the shape and size of the new generator. The pocket is copiously irrigated. The new generator is inserted in the pocket and attached to the existing leads. The pocket is closed with either suture alone or a combination of suture and staples or suture and tissue adhesive. Programming of the device is performed.

Description of Post-Service Work: Report dictated and temporary immediate post-op sheet is completed. Family is found and updated on patient’s status. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed. Orders are written and staff are given instructions. The

patient is then established on a schedule for periodic appropriate Pacemaker Clinic visits, as well as transtelephonic monitoring.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Richard Wright, MD; David Slotwiner, MD		
Specialty(s):	American College of Cardiology, Heart Rhythm Society		
CPT Code:	33264		
Sample Size: 229	**Resp N:** 43	**Response:** 18.7 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	0.00	12.75	**22.50**	40.00	70.00
Survey RVW:	4.60	6.63	**8.50**	10.50	17.31
Pre-Service Evaluation Time:			**15.00**		
Pre-Service Positioning Time:			**10.00**		
Pre-Service Scrub, Dress, Wait Time:			**15.00**		
Intra-Service Time:	20.00	45.00	**60.00**	87.50	175.00

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**46.00**	99211x **0.00** 12x **0.00** 13x **2.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 3 -FAC Straightforward Patient/Difficult Procedure

CPT Code:	33264	**Recommended Physician Work RVU: 6.60**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**15.00**	**33.00**	**-18.00**
Pre-Service Positioning Time:		**3.00**	**3.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**15.00**	**15.00**	**0.00**
Intra-Service Time:		**60.00**		

Immediate Post Service-Time:	**20.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**19.00**	99238x **0.5** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**23.00**	99211x **0.00** 12x **0.00** 13x **1.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
33223	090	6.55	**RUC Time**

CPT Descriptor Revision of skin pocket for cardioverter-defibrillator

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
43269	090	8.20	**RUC Time**	20,220

CPT Descriptor 1 Endoscopic retrograde cholangiopancreatography (ERCP); with endoscopic retrograde removal of foreign body and/or change of tube or stent

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
14040	090	8.60	**RUC Time**	83,047

CPT Descriptor 2 Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 11 **% of respondents:** 25.5 **%**

TIME ESTIMATES (Median)	**CPT Code: 33264**	**Key Reference CPT Code: 33223**	**Source of Time RUC Time**
Median Pre-Service Time	33.00	53.00	
Median Intra-Service Time	60.00	90.00	
Median Immediate Post-service Time	20.00	60.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	19.0	32.00	
Median Office Visit Time	23.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**155.00**	**235.00**	

Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	3.55	2.64
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.73	3.00
Urgency of medical decision making	2.90	2.64
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.09	3.45
Physical effort required	3.64	3.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.82	3.27
Outcome depends on the skill and judgment of physician	3.90	3.27
Estimated risk of malpractice suit with poor outcome	3.82	3.64

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	2.73	2.27
Intra-Service intensity/complexity	3.91	3.27
Post-Service intensity/complexity	2.91	2.36

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The codes related to pacemaker and internal cardioverter-defibrilator (ICD) removal and replacement were identified by the CPT/RUC Joint Workgroup as being commonly reported together in 2009. The American College of Cardiology and the Heart Rhythm Society were instructed to create bundled services that reflected the commonly provided removal and replacement of a pacemaker or ICD pulse generator. As part of this coding proposal, new codes were added to reflect the availability of pacemakers and ICDs with greater than two leads. A total of 12 codes were created or significantly revised, mandating a RUC survey. ACC and

HRS convened a panel of physicians familiar with the services to review the survey data. The survey was robust and was completed by physicians who have experience with each of the services.

Code 3324XX3 will be used to report the insertion of a multiple lead pacing cardioverter-defibrillator after first removing another pulse generator, typically at the end of its service life. After reviewing the data, the panel felt the survey median of 8.50 adequately represents the physician work for the procedure. It also eliminates redundancies that may exist under the current convention of reporting 33240 with 33241 for this service. The current value of 9.29 was calculated based on a 50% reduction placed on the lesser valued code as part of a multiple procedure edit.

The panel reviewed the preservice time and selected package 3, a straightforward patient and a difficult procedure with sedation. The service is generally performed under IV deep sedation and local anesthesia or under general anesthesia, which is included as part of the code. The package was adjusted to reduce the preservice evaluation time from 33 minutes to 15 minutes to reflect the data from the survey.

The panel noted that the survey showed that the service is commonly performed in a hospital but the patient is sent home the same day. Based on the newly established RUC standard, the panel included a half-day hospital discharge as part of the recommendation as well.

Survey respondents identified a median of 2 follow-up visits for this service, both 99213.

The key reference service is 33223, revision of skin pocket for cardioverter-defibrillator. Those who selected the key service felt 3324XX2 was more intense/complex than this reference service.

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) Previously reported as a combination of codes 33241 and 33240 but was identified as a service commonly performed together by the Relativity Assssment Workgroup.

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty cardiology How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period? 15095
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data for the prior code

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 10,063 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. Based on 2009 Medicare Part B Claims Data

Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%
Specialty	Frequency	Percentage	%

Do many physicians perform this service across the United States?

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix. 33223

AMA/Specialty Society RVS Update Committee Summary of Recommendations
Identified as part of the Fourth Five-Year Review

September 2011

Psychoanalysis

Multiple specialty societies submitted public comment to CMS to review code 90845 *Psychoanalysis* as part of the 4th Five-Year Review. In September 2010, recommendations regarding code 90845 were submitted along with 16 additional codes. During that presentation the specialties requested that the entire tab be referred to the CPT Editorial Panel to revised the code descriptors to more accurately describe these services. During the CPT review process, CPT recommended to remove psychoanalysis, as revisions to the descriptor were unnecessary because the work inherent in providing this service was the same regardless of the provider.

In September 2011, the RUC reviewed 90845 and agreed with the specialty society that there is compelling evidence that the patient population has changed and that the technique employed in psychoanalytic practice has changed. Psychoanalysis traditionally treated a wide variety of conditions which included a considerable number of high functioning patients who were treated for relatively minor psychological problems by current standards. Patients with these conditions are now often treated in a variety of newer treatment modalities rather than psychoanalysis. Given this, patients now receiving psychoanalysis are more complex and typically require a more active approach on part of the psychoanalyst due to the increased number of co-morbidities. In addition, in the past psychoanalysts tended to be silent during the treatment, intervening infrequently. Current practice emphasizes the importance of interaction between the psychoanalyst and the patient. As a result of this technical change the psychoanalyst is required to be much more intently focused on the minute to minute interaction during the session and considerably more active during the session. This substantially increases the psychoanalyst's intensity and complexity effort during the session, when compared with the earlier model.

The RUC reviewed CPT code 90845 and agreed with the specialty societies that the typical service is one hour, 5 minute pre-service, 50 minutes intra-service and 5 minutes immediate post-service time. The RUC reviewed the survey results and agreed that the median survey work RVU of 2.10 accurately values the typical physician work involved in the procedure. To justify this value, the RUC compared CPT code 90845 to key reference service 99404 *Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 60 minutes* (work RVU = 1.95, total time = 60 minutes). Although the reference code has greater intra service time compared to the surveyed code, the survey respondents indicated and the RUC agreed that intensity and complexity to perform 90845 is greater in every measure compared to reference service 99404. The RUC also compared 90845 to reference code 99215 *Office or other outpatient visit for the evaluation and management of an established patient* (work RVU = 2.11, total time = 55 minutes). The respondents indicated 90845 was more intense and complex than 99215, specifically the technical skill required to perform 90845 indicated the greatest difference. Finally, the RUC

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compared 90845 to MPC code 99233 *Subsequent hospital care, per day, for the evaluation and management of a patient* (work RVU = 2.00, total time = 55 minutes). The RUC determined that these comparison codes coupled with the median survey results support a recommendation of 2.10 work RVUs for CPT code 90845. **The RUC recommends a work RVU of 2.10 for CPT code 90845.**

CPT Code (•New)	Track-ing Num-ber	CPT Descriptor	Global Period	Work RVU Recommendation
90845		Psychoanalysis	XXX	2.10

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
2010 FIVE YEAR REVIEW SUMMARY OF RECOMMENDATION

CPT Code:90845 Tracking Number Specialty Society Recommended RVU: **2.10**
Global Period: XXX RUC Recommended RVU: **2.10**

CPT Descriptor: Psychoanalysis

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 37-year-old man with dysthymia and narcissistic personality disorder manifested by entitlement, inability to be intimate, and extreme variability of self esteem is seen in the second year of psychoanalysis, just prior to going on a business trip. Argumentative and easily offended, he accuses the analyst of being insensitive and detached, and angrily rejects any effort to explore the basis of his mood or behavior.

Percentage of Survey Respondents who found Vignette to be Typical: 81%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Kept overnight (less than 24 hours) 0% , Admitted (more than 24 hours) 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? No
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting? No
Percent of survey respondents who stated moderate sedation is typical in the office setting? 2%

Is moderate sedation inherent in your reference code (Office setting)? No
Is moderate sedation inherent in your reference code (Hospital/ASC setting)? No

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Description of Pre-Service Work: Preparing to see patient; refreshing memory about recent sessions; assessing and managing one's own psychological reactions to the patient.

Description of Intra-Service Work: In person therapeutic communication with patient; implicitly obtaining information and observing the patient's mental state; evaluating and exploring the intensity of symptoms, feelings, thoughts, conflicts, fantasies, behaviors, and dreams as necessary; exploring the patient's and one's own feelings, fantasies and thoughts about the evolving therapeutic relationship as a model for gaining perspective on significant difficulties in the patient's other relationships (transference and countertransference); introducing the impact of the patient's engagement on the analyst as a data source for grasping the patient's effects on other relationships; providing psychological interpretations regarding defenses, conflicts and tendencies in patient's personality and relationships, including awareness of mental process, self-esteem, self-regulation, and impulse control; addressing impediments to ongoing behavioral change that could reduce distress and promote well-being.

Description of Post-Service Work: Documenting the services provided intra-service including reviewing content and process of session, reflection on the psychoanalyst's reactions to the patient's affects, communications and behavior in the session and identifying issues requiring follow-up at next/future sessions; related consultation with peers and review of literature pertinent to the case.

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Jeremy Musher, MD, James Georgoulakis, PhD; Doris Tomer, LCSW		
Specialty(s):	American Psychiatric Association, American Psychological Association, National Association of Social Workers		
CPT Code:	90845		
Sample Size: 1321	**Resp N:** 53	**Response:** 4.0 %	
Sample Type: Random	**Additional Sample Information:**		

	Low	25th %	Median*	75th %	High
Service Performance Rate	0.00	0.00	**120.00**	300.00	1000.00
Survey RVW:	0.47	1.86	**2.10**	2.65	5.00
Pre-Service Evaluation Time:			**10.00**		
Pre-Service Positioning Time:			**0.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	10.00	45.00	**50.00**	60.00	90.00

Immediate Post Service-Time:	**10.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: XXX Global Code

CPT Code:	90845	**Recommended Physician Work RVU: 2.10**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments to Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**0.00**	**5.00**
Pre-Service Positioning Time:		**0.00**	**0.00**	**0.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**50.00**		

Immediate Post Service-Time:	**5.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99404	XXX	1.95	**RUC Time**

CPT Descriptor Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 60 minutes

KEY MPC COMPARISON CODES:

Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99215	XXX	2.11	**RUC Time**	10,112,992

CPT Descriptor 1 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A comprehensive history; A comprehensive examination; Medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
99233	XXX	2.00	**RUC Time**	21,952,122

CPT Descriptor 2 Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit

Other Reference CPT Code	Global	Work RVU	Time Source
99387	XXX	2.06	**RUC Time**

CPT Descriptor Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; 65 years and older

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 17 **% of respondents:** 32.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 90845**	**Key Reference CPT Code:** 99404	**Source of Time** RUC Time
Median Pre-Service Time	5.00	0.00	
Median Intra-Service Time	50.00	60.00	
Median Immediate Post-service Time	5.00	0.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	

Median Office Visit Time	0.0	0.00
Prolonged Services Time	0.0	0.00
Median Total Time	**60.00**	**60.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		**(of those that selected Key Reference code)**
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	4.12	3.71
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.65	3.59
Urgency of medical decision making	3.53	3.47
Technical Skill/Physical Effort (Mean)		
Technical skill required	4.53	3.65
Physical effort required	2.29	2.35
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	3.53	3.47
Outcome depends on the skill and judgment of physician	4.65	3.76
Estimated risk of malpractice suit with poor outcome	3.41	3.29

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	3.29	3.12
Intra-Service intensity/complexity	4.41	3.82
Post-Service intensity/complexity	3.35	3.12

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

Background

Psychoanalysis, CPT code 90845, was put forward along with a majority of the codes within the psychiatry section of CPT as part of the fourth Five-Year Review process. As noted in the attached letter from the specialty societies, we believe there has been a change in the work required in this service. Our letter to CMS highlights the changes in the patient population with references substantiating the increased complexity of the patients. We have also provided additional information under the section on compelling evidence for changes in technique since this code was last reviewed by the RUC in 1995.

Recommendations regarding this code were originally submitted for the September 2010 RUC meeting along with 16 additional codes that were identified as being misvalued. During that presentation the specialties requested that entire tab be referred to the CPT Editorial Panel to more accurately describe the service. The RUC supported the referral to CPT and a CPT Workgroup was established to address these issues.

During the review process, a recommendation was made to remove psychoanalysis from the CPT Workgroup process and forward it on to the RUC for review. It was the opinion of all of the provider groups that the work inherent in providing psychoanalysis was the same regardless of who was performing the procedure and there was no need to further refine the descriptor for that service. A request was made and granted by the AMA RUC staff to add this to code to the RUC's September agenda using the data from our original survey.

Survey Process and Data

The following three groups surveyed 90845: the American Psychiatric Association (Psychiatry), the American Psychological Association (Psychology) and the National Association of Social Workers (Social Work). The survey included two separate reference service lists (RSL), one used by the psychiatry, and one used by the psychology and social work. The separate RSL's were reviewed and approved by the RUC Research Subcommittee. Together the societies convened a joint society expert panel ("expert panel") to review the survey data and make recommendations.

Analysis and recommendations from the expert panel

Time: The survey median results regarding time are 10 minutes pre, 50 minutes intra, and 10 minutes post service. The expert panel supported the median time of 50 minutes for the intra-service time however thought that the median values for the pre and post service times were an overestimation. According to the experts, the patient is typically seen face to face for 50 minutes and the total encounter lasts approximately 60 minutes. The panel reviewed the 25th percentile of 5 minutes of pre and 5 minutes for post service work and agreed these times were more representative of what typically occurs. The 5 minutes of pre and post time combined with the intra-service time of 50 minutes results in a total time of 60 minutes. **Therefore we recommend 5 minutes pre, 50 minutes intra and 5 minutes post service time for a total time of 60 minutes.**

RVW: As noted above, two separate reference service lists were used for this survey effort resulting in two different codes being selected as the key reference service. Responses by psychologists and social workers who were using a common reference service list outnumbered the responses by psychiatrists which impacted the selection of the key reference service. The expert panel reviewed the number of times each specialty billed this code using the RUC database and compared it to the response rate by specialty to the RUC survey. They found that psychiatry was under-represented and psychology and social work over-represented in the results.

Specialty	2010 Medicare Claims (Frequency)		Percentage of Responses by Specialty	RVW Median	Median Time			
	%	# Claims			Pre	Intra	Post	Total Time
Psychiatry	50%	2709	36%	2.50	5	50	10	65
Psychology	36%	1950	43%	2.10	10	55	10	75
Social Work	0.12%	7	21%	1.95	15	50	15	80

The key reference service for the combined survey results was 99404, *Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 60 minutes* (RVW of 1.95 with time of 0, 60, 0, pre, intra and post respectively and a total time of 60 minutes) which was selected by 17 of the 34 psychologists and social workers completing the survey.

An analysis of the intensity and complexity measures shows that respondents thought the intensity and complexity of the work of psychoanalysis was greater in every measure – in particular technical skill (4.53 for 90845 and 3.65 for 99404) and

outcome (4.65 for 90845 and 3.76 for 99404) -- than the key reference service except one, physical effort, validating the median value of 2.10.

Six of the 19 psychiatrists responding to the survey chose CPT code 99215, *Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A comprehensive history; A comprehensive examination; Medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family* (RVW of 2.11, with times of 5, 35, 15 pre, intra and post respectively and a total time of 55 minutes) as the key reference service.

Again, an analysis of the intensity and complexity measures show that respondents indicated that the work was more intense and/or complex in a majority of the categories, again with the greatest difference in the area of technical skill required (4.83 for 90845 and 3.83 for 99215) and outcome dependent on the skill and judgment of the physician (4.50 for 90845 and 3.50 for 99215), further substantiating the median RVW of 2.10.

The expert panel concurred with the survey median RVW of 2.10, agreeing that psychoanalysis was more intense, required greater technical effort and relied more heavily on the skill and judgment of the clinician than the key reference services cited.

The current RVW for 90845 is 1.79, we guide you to the compelling evidence section for details regarding two compelling evidence criteria which the expert panel believed were met - changes in physician work due to patient population and technique. In addition to the reference service codes identified above, the following service is provided for comparison to support our recommended RVW and times:

CPT 99233, *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit*, with a work RVW of 2.00 and 55 minutes of total time (10 pre, 30 intra, 15 post service).

This comparison code, coupled with the median survey results, supports our recommendation of the median value of 2.10 for 90845, Psychoanalysis. **Therefore we recommend the median RVW of 2.10 with times of 5 pre, 50 intra and 5 post service for a total time of 60 minutes.**

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: No

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.
   - ☐ Other reason (please explain)

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

Professional Liability Insurance Information (PLI)

Does the reference CPT code selected for physician work serve as a reasonable reference for PLI crosswalk? (ie. similar work RVU, and specialty) No

If no, please select another crosswalk and provide a brief rationale. 90845

Indicate what risk factor the new/revised code should be assigned to determine PLI relative value. Non-Surgical

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Compelling Evidence

The RUC operates with the initial presumption that the current values assigned to the codes under review are correct. The argument for a change must be substantial and meet the RUC's compelling evidence standards listed in the Instructions Document. Please list your compelling evidence below (if appropriate).

As noted in the letter to CMS, psychoanalysis and the other codes within the psychiatry section were identified by the specialty societies as being misvalued predominately because of changes in the patient population and in the case of psychoanalysis, due to changes to the technique since the code was originally valued in 1995 as described below. The following outlines those changes in addition to the original arguments in the letter to CMS as part of the five-year review process.

(1) Change in the patient population: Psychoanalysts traditionally treated a wide variety of conditions which included a considerable number of high functioning patients who came to treatment for what might be regarded today as relatively minor psychological problems. Patients with such conditions are now often treated in a variety of newer treatment modalities (such as short term cognitive-behavioral and psychodynamic psychotherapies, CPT 90806 or 90807) rather than psychoanalysis. As a result there has been a change in the overall severity of the clinical population engaged in full psychoanalytic treatment (CPT 90845) with an increased number of patients suffering from narcissistic and borderline conditions, as well as patients with dual diagnoses, including bipolar disorder and some forms of substance abuse. Such patients tend to be more unstable both within and outside the treatment setting, and may require a much more active approach on the part of the psychoanalyst. This change in the overall composition of the patient population has resulted in a greater degree of work effort on the part of psychoanalysts, as well as increased stress borne out of concern for possible transitory negative effects (including transitory increases in suicidal ideation) which may occur as an effect of such intensive treatment and which must be carefully managed.

(2) Change in the technique employed in psychoanalytic practice: Traditionally, psychoanalytic treatment (CPT 90845) had been based in a model originated in theoretical writings of Freud and carried into actual practice by psychoanalysts during the mid-20th century. In this model the analyst tended to be silent a great deal of the time, listening closely to the patient's associations and intervening sparsely with interpretations with the aim of augmenting the patient's self-understanding. As a result of growing understanding of the actual role of the psychoanalyst's presence in the session the focus has shifted to a greater emphasis on the interaction between the psychoanalyst and the patient as the data for gaining understanding of the patient's internal dynamics. Technically, this focus on the interpersonal process between them is a further development of the fundamental concepts of transference, counter-transference, and therapeutic change. This technical change had already started to become evident in the 1990's but is now a widely regarded important feature of psychoanalytic treatment. As a result of this technical change the psychoanalyst is required to be much more intently focused on the minute to minute interaction during the session, considerably more active during the session, and much more focused on his or her internal feeling states both within and between the analytic sessions. This substantially increases the psychoanalyst's intensity and complexity effort during the session, when compared with the earlier model.

Five-Year Review Specific Questions

Please indicate the number of survey respondent percentages responding to each of the following questions (for example 0.05 = 5%).

Has the work of performing this service changed in the past 5 years? Yes 40% No 60%

A. This service represents new technology? Yes 33% No 67%

Of survey respondents, who said yes, the new technology affected the work:

Less Work: 0% Same Work: 0% More Work: 100%

B. This service reflects new technology that has become more familiar: Yes 14% No 86%

C. Patients requiring this service are now:
More complex (more work) 90% Less complex (less work) 0% No change in complexity 10%
D. The typical site-of-service has changed:
From outpatient to inpatient 10% From inpatient to outpatient 10% No change 80%

December 22, 2009

Charlene M. Frizzera
Acting Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services
Attention: CMS-1413-FC
P.O. Box 8013
Baltimore, MD, 21244-8013

Submitted electronically at http://www.regulations.gov

Dear Ms. Frizzera:

The American Psychological Association (APA), the National Association of Social Workers (NASW), the American Nurses Association (ANA), and the American Psychiatric Nurses Association (APNA) are writing in response to the final rule with comment period on "Medicare Program; Payment Policies under the Physician Fee Schedule and Other Revisions to Part B for CY 2010," as published in the *Federal Register* on November 25, 2009. Specifically, we are writing to request that the Centers for Medicare and Medicaid Services (CMS) review the work relative value units (RVUs) of the following codes within the Psychiatry section of CPT®[i] during the Five-Year Review of the Medicare Fee Schedule:

Psychiatric Diagnostic or Evaluative Interview Procedures
90801, 90802

Office or Other Outpatient Facility Psychotherapy
90804, 90806, 90808, 90810, 90812, 90814

Inpatient Hospital, Partial Hospital or Residential Care Facility Psychotherapy
90816, 90818, 90821, 90823, 90826, 90828

Other Psychotherapy
90845, 90846, 90847, 90849, 90853, 90857

Other Psychiatric Services or Procedures
90875, 90876, 90880

The descriptors for these codes are provided in Attachment A. The American Psychiatric Association (Psychiatry), American Academy of Child & Adolescent Psychiatry (Child Psychiatry) and ANA will address having the codes for psychotherapy with evaluation and management (E/M) included in the Five-Year Review in a separate letter.

Compelling evidence demonstrating the need to review the psychotherapy codes

The professional work for these services has changed significantly since the codes were last reviewed. In addition, rank order anomalies exist among the codes, and the codes were originally valued using problematic assumptions. For these reasons and as discussed below, the codes are now undervalued relative to other services in the physician fee schedule and should be reviewed. Lastly, the Omnibus Reconciliation Act of 1990 requires a comprehensive review of all CPT codes at least every five years in order to make any needed adjustments. The psychotherapy codes should be part of the Five-Year Review as they have not been evaluated since last surveyed over ten years ago.

I. Changes in the work involved in providing psychotherapy

The professional work involved in providing psychotherapy has changed significantly since the codes were last valued in 1998. We begin discussion with a short common understanding of psychotherapy and psychotherapeutic practice techniques and then demonstrate how this work has changed based on factors suggested by the AMA/ Specialty Society Relative Value Scale Update Committee (RUC) as evidence of this change.

As defined in the CPT® manual, psychotherapy is the treatment for mental illness and behavioral disturbances in which the clinician establishes a professional contract with the patient and, through definitive therapeutic communication, attempts to alleviate the emotional disturbances, reverse or change maladaptive patterns of behavior, and encourage personality growth and development.[ii]

There are many different modalities of psychotherapy with the following among the most common. *Psychodynamic orientations* place a premium on self-understanding, with the assumption that increased self-understanding will produce salutary changes in the patient. *Humanistic orientations* are also designed to increase self-understanding but use treatment techniques that often are much more active than those likely employed by the psychodynamic clinician. *Behavioral orientations* are geared toward action, with a clear attempt to mobilize the resources of the patient in the direction of change, whether or not there is any understanding of the etiology of the problem. C*ognitive-behavioral therapy* is an integrated approach that focuses on changing the patient's thoughts and beliefs to promote adaptive behavior.[iii] *Interpersonal psychotherapy* is a short term therapy used most often to treat depression. It focuses on the interpersonal events (such as interpersonal disputes / conflicts, interpersonal role transitions, complicated grief that goes beyond the normal bereavement period) that seem to be most important in the onset and / or maintenance of the disorder. [iv]

Knowledge /Technology

Furnishing psychotherapy involves more work now than when the codes were first valued as psychologists, psychiatrists, clinical social workers, psychiatric/mental health advanced practice registered nurses (APRNs), and other mental health care professionals must have a greater awareness of the needs of patients with comorbid conditions. The term "comorbid

conditions" means having more than one mental or physical disorder, including substance abuse.

According to a National Comorbidity Survey, 56% of those with any disorder had two or more. Of these, 27% had two disorders, while 29% had three or more.[v] Comorbidity also implies interactions between the disorders that affect the course and prognosis of each one.[vi] Psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals must be aware of the potential interactions when providing psychotherapy to patients with comorbid conditions.

The work in treating patients with comorbid conditions is further complicated by the fact that most researched treatment protocols were designed for single disorders. While many randomized controlled trials for research purposes have focused on patients with a single, specific disorder, community and clinical samples indicate that comorbidity is the norm rather than the exception. Therefore, simple extrapolation from research studies is insufficient. Data suggests that psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals using a variety of different theoretical orientations attend to their patients' comorbid symptoms and adjust their intervention strategies accordingly.[vii]

The American Psychological Association Practice Organization (APAPO) represents psychologists in clinical practice. In a November 2008 APAPO survey, 4,843 psychologists practicing for at least ten years were asked to take part in a survey about changes in their practice patterns since 1998.[viii] The survey process employed the standard sampling strategies that APA uses for all data collection resulting in a random pool of members being invited to participate. APAPO received surveys from 1,040 psychologists for a response rate of 21%.

Seventy-nine percent of psychologists responding to the survey said that care is more complex now due to patients' existing comorbid mental health disorders or a mental health disorder and a major / chronic physical disorder. Fifty percent of the respondents reported that at least a quarter of their patients have major or chronic physical health disorders. Forty-two percent reported an increase in the number of patients with comorbid physical and mental health disorders. Respondents also indicated that on average forty percent of their patients had comorbid mental health disorders.

Treating patients with comorbid mental health and substance abuse conditions

A high prevalence of comorbid mental disorders and substance abuse has been documented in multiple national population surveys. Data show that persons diagnosed with mood, anxiety, or antisocial personality disorders, were about twice as likely to also have drug problems. Similarly, persons diagnosed with drug disorders were roughly twice as likely to also suffer from mood and anxiety disorders.[ix]

The Substance Abuse and Mental Health Services Administration (SAMHSA) has recorded the increase in comorbid conditions. According to SAMHSA's Treatment Episode Data Set,

admissions for patients with comorbid substance abuse and mental disorders rose from 12% in 1995 to 16% in 2001.[x]

SAMHSA's 2002 National Survey on Drug Use and Health (NSDUH) found that 17.5 million adults aged 18 or older were estimated to have a serious mental illness in the past year. About 4 million of these seriously mentally ill adults also were dependent on or abused alcohol or an illicit drug.[xi] The 2005 NSDUH found that 24.5 million adults aged 18 or older had a serious mental illness in the past year and that 5.2 million adults suffered from both a mental illness and substance dependence or abuse.[xii]

Because of this high rate of comorbidity, a psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN, or other mental health care professional assessing a patient must incorporate into the decision-making knowledge of both types of conditions to determine if a patient presenting with a mental disorder also has a substance abuse disorder and vice versa. They also need to educate themselves about the most effective behavioral techniques for treating substance abuse. Patients with both a substance abuse disorder and a mental illness often exhibit symptoms that are more persistent, severe, and resistant to treatment compared with patients who have either disorder alone. [xiii]

Treating patients with comorbid mental and physical health conditions

The co-occurrence of chronic physical illness such as diabetes and cardiovascular disease with mental illness is well documented in terms of increased treatment complexity and more adverse outcomes.[xiv] Mental and emotional challenges often compromise medical care when it is provided, and adherence to treatment protocols is likely diminished as well. Psychological interventions also address the side effects of medications and ameliorate the potential for cognitive challenges and unhealthy lifestyle choices in order to improve overall physical and emotional wellbeing.

The existence of comorbid conditions complicates the decision-making involved in providing psychotherapy because it increases the number of different factors the psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or other mental health care professional must take into consideration and necessitates more communication with other health care professionals about the patient's condition and progress.

Based on the 2008 APAPO survey data, psychologists are more likely to be treating patients who have chronic, comorbid physical disorders than they were ten years ago and therefore must have a greater awareness of how these disorders impact the patient's mental health. Examples of the work involved when treating patients suffering from diabetes, cardiovascular disease, and cancer with psychotherapy are provided below.

Diabetes

Research shows that depression is more prevalent in patients with diabetes than in the general population, and diabetic patients with depression are more than twice as likely to report self-care problems.[xv] Having diabetes and depression is also associated with a 1.3-fold increased

risk of death from all causes compared with people with only diabetes, a 2-fold increased risk of death from all causes compared to people with only depression and a 2.5-fold increased risk of death compared with people with neither diabetes nor depression.[xvi, xvii]

A psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or other mental health care professional providing psychotherapy to treat depression in a patient with diabetes must factor in the patient's level of cognitive functioning. Because cognitive changes associated with diabetes include impaired attention and processing speed the patient may have difficulty learning new information. To make an accurate diagnosis in the assessment phase, the psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or other mental health care professional must take into consideration that mood symptoms may be a byproduct of the disease process or treatment for diabetes. When managing the patient's mood, the psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or other mental health care professional incorporates the importance of integrating health-related self-care (e.g. taking medications, insulin, eating and sleeping properly, managing pain).

Cardiovascular (heart) disease

Psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals using psychotherapy to treat depression in patients with heart disease must consider more factors than if treating physically healthy patients. They also must communicate with other health care professionals, including patients' treating physicians, nurses, and cardiac rehabilitation specialists, about such issues as medication side effects and interactions, treatment adherence, and mental health progress. Depression predicts poor adherence to prescribed treatment for patients with many medical problems, including coronary artery disease, and non-adherence is associated with decreased survival for these patients.[xviii]

When evaluating the patient the psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or and other mental health care professional will have to consider a depressive syndrome frequently referred to as "vascular depression." Vascular depression is thought to be a direct result of damage to brain cells. Medications for heart problems can lower energy level, increase irritability, impede sexual functioning, and/or disrupt sleep, all of which are also symptoms of depression. The psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN, or other mental health care professional needs to decide whether the best approach is to start psychotherapy, refer for psychotropic medication, or, if the patient's somatic complaints warrant it, refer for medical assessment. [xix]

Cancer

The process of dealing with the diagnosis and treatment of cancer represents one of the greatest medical and emotional challenges that many individuals will face. Research indicates that psychological services play an essential role in supporting patients', and their

families', journey from the time of diagnosis, through treatment, and at various outcome points (e.g., remission, recurrence, and end of life).[xx]

In concert with assessing multiple aspects of cancer patients' functioning, psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals provide these patients with psychotherapy and other intervention services. Most typically, initial interventions will focus on several goals that require knowledge of medical aspects of cancer as well as psychological factors.

Collaborations with physicians can also be beneficial in situations where physicians engage the aid of psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals in the delivery of distressing news. In many cases, immediate psychological interventions to address a patient's acute anxiety, anger, and distress can help bolster his/her ability to cope, and can help maintain a positive relationship between the physician and the patient.

The importance of cultural competency

Due to the changing U.S. demographics, psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals are increasingly encountering patients who differ from them in terms of race, ethnicity, and culture. Guidelines issued by APA in 2002 note that patients' worldviews and life experiences may affect how they present symptoms, the meaning that illness has in their lives, motivation and willingness to seek treatment, social support networks, and perseverance in treatment. In addition to educating themselves about their patients' experiences and cultural beliefs, psychologists need to examine the appropriateness of traditional interventions and when necessary, replace or supplement them with more culturally-specific strategies. [xxi]

Cultural competence is a relatively new construct to help psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals improve service delivery by increasing their understanding of cultural factors. They must educate themselves about cultural differences and alter their techniques to accommodate such differences. To illustrate, one model used to explore patients' socio-cultural identities is the ADDRESSING framework. This extensive framework requires taking into account ten influences on patients: Age and generation, Developmental or acquired Disability, Religion and spirituality, Ethnicity, Socio-economic status, Sexual orientation, Indigenous heritage, National origin, and Gender.[xxii]

Reducing the stigma against mental health has made psychotherapy a viable option for many more people and in turn has led to greater diversity among the patient population. This heterogeneity increases the complexity and decision-making when providing psychotherapy services.

Increased Complexity in Data to Be Evaluated / Care to Be Managed

Because psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals are seeing more complex patients than

they did ten years ago, providing psychotherapy requires greater integration of more data about the patient. This is so in large part because they have more frequent interactions with physicians and other health care professionals. The work involved in providing psychotherapy services has changed due to the increasing number of patients who have severe disorders, comorbid conditions and/or are taking medication. As discussed under Physician / Mental Health Care Professional Time (immediately below), providing psychotherapy to complex patients requires more pre-and post-service work than it does in treating patients with fewer complicating factors.

Physician / Mental Health Care Professional Time

As we have discussed under Knowledge / Technology on pages two and three, psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs and other mental health care professionals now treat more patients with comorbid conditions. Providing psychotherapy services to patients with comorbid conditions is more time-consuming than it is for patients without comorbid conditions because of the additional information that must be gathered and shared. For example, before making recommendations about physical activities for a patient with diabetes safety issues based on the patient's problems with vision, mobility and pain must be considered. All of this adds to the pre-and post-service time that is spent talking with the patient's physician about the patient's compliance, needs, and progress.

A psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or other mental health care professional treating patients with depression related to heart disease may also need to discuss the increased risk of exacerbating their heart disease, and assess patients for the presence of other risk factors, including obesity, a high-fat diet, smoking, and a sedentary lifestyle. In the inpatient setting, psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs and other mental health care professionals work and communicate with a treatment team. In the outpatient setting, more time and effort may be needed to gather and provide information to physicians and other health care professionals treating the patient.

Consultation and communication with other health care professionals, occurring from the time of diagnosis and throughout treatment and follow-up, are essential components of psychological services provided to cancer patients. As part of providing psychotherapy services, psychologists often collaborate with physicians on decisions regarding psychotropic medications to address emotional distress. (S. Reid-Arndt, Ph.D., personal communication, October 8, 2009)

Psychologists providing psychotherapy to patients taking psychotropic medications also devote considerable time to communicating with physicians. In a study published in 2000, practicing psychologists on average estimated that 43% of their current patients were using psychotropic medications, 94% reported they had consulted with physicians about changing medications, and 87% indicated they had been involved in medication decision-making for some portion of their case load. The study involved one thousand licensed psychologists and had a response rate of 60%.[xxiii]

The likelihood of psychotherapy patients being on psychotropic medication is increasing over time. This is especially true for children and adolescents. According to a national study, the estimated number of outpatient office visits by children and adolescents that included antipsychotic medication soared between 1993 and 2002, increasing from 201,000 to over 1.2 million.[xxiv]

In the 2008 APAPO survey discussed on page two, 97% of the respondents said they are treating patients who are taking psychotropic medications and 69% reported that the number of patients taking such medications has increased from ten years ago. Fifty-four percent said they spend more patient time now discussing issues related to the efficacy of those medications.

Patient Population

Fifty one percent of respondents in the APAPO survey indicated that the severity of patients' presenting problems has increased over the last ten years. Increased patient severity presents more complex circumstances when treating the patient and increases the stress and level of decision-making by the psychologist, psychiatrist, clinical social worker, psychiatric/mental health APRN or other mental health care professional.

Patient severity is related to several factors including comorbidity, aging, and use of psychotropic medication. A National Comorbidity Survey Replication found that 14% of the population surveyed between 2001 and 2003 had mental health disorders that were moderate to serious. Severity was strongly related to comorbidity as 25% of those with two diagnoses and almost 50% of those with three or more diagnoses were classified as severe.[xxv]

According to a report prepared for SAMHSA, individuals age 65 and older will comprise 20% of the country's population by the year 2030. There will be increased demand for mental health treatment as the number of older adults with mental disorders, including depression, anxiety, and dementia, grows from 7 to 15 million. Treatment for these individuals will be more complicated because mental disorders in older persons are associated with adverse outcomes such as poorer functioning, increased morbidity and mortality, and a higher risk of institutionalization.[xxvi]

While not all older adults will require the services of geriatric specialists, psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals furnishing mental health services to seniors must have knowledge of aging-related issues such as development across the lifespan. Because many have little training in gerontology, they must educate themselves about the biological, social, and psychological aspects of aging, as well as the ethical and legal considerations involved in treating older adults.[xxvii]

Site-of-Service/Length of Hospital Stay

The site of service for mental health treatment shifted dramatically between 1970 and 2000 as the number of psychiatric beds dropped by more than 60% while outpatient mental health care grew.[xxviii] From 1986 to 2003, inpatient spending on inpatient mental health treatment services fell from 41% of total mental health expenditures down to 24%. Conversely, spending on outpatient mental health services increased by 7.9% annually to physicians and 6% to non-physician mental health professionals.[xxix]

Data from the National Hospital Discharge Survey indicates that from 1995 through 2002 average lengths of stay for patients with mental illness decreased by almost 10 percent. Of those patients whose care involved serious mental illness, the stays decreased by 34.7%, or 12.8 days in 1995 compared to 9.7 days in 2002.[xxx] As a result, psychologists, psychiatrists, clinical social workers, psychiatric/mental health APRNs, and other mental health care professionals are now treating, on an outpatient basis, individuals with problems formerly severe enough to require hospitalization. When making decisions about psychotherapy for these patients, they must take into account the lack of structure and support that the patients would otherwise have received if placed in an inpatient facility.

II. Rank Order Anomalies

While this letter focuses on the changes involving individual psychotherapy services it is essential that the codes for services such as group therapy, family therapy and medication management be included in the Five-Year Review to prevent rank-order anomalies within the family of codes. Because the untimed codes for these services contain work that is very similar in nature to the individual psychotherapy codes, failing to re-assess all of the codes risks creating rank-order anomalies across the family of codes.

We believe there is already an anomalous relationship between at least two of the codes. There may be others, and for this reason as well, the code values require reexamination. According to the RUC database[xxxi], code 90806 is valued higher than 90845 even though their work is similar and the latter has 11 more minutes of total service time. Code 90806 is valued at 1.86 while 90845 is valued at only 1.79. Normally if two codes have similar work but one has more service time the code for the longer service is valued higher.

Lack of Relativity across Services

The way the psychotherapy codes were valued in 1998 would likely not be acceptable to the RUC today because the basis for valuing the codes was not relative to other codes in the Resource-Based Relative Value Scale (RBRVS). Instead of being compared to other codes in the RBRVS, the final recommended work value of 1.30 for base code 90804 was derived from a blend of data including the 1.11 work value assigned by the former Health Care Financing Administration, the survey median value of 1.25, the regression analysis recommendation of 1.40, and a work neutrality adjustment.

Over time the RUC has increasingly looked for relativity in the process of valuing codes. In a comment letter to CMS about the proposed rule on the 2010 fee schedule, the RUC objects to the use of any methodology that ignores relativity under RBRVS. [xxxii] According to the letter, the RUC determines what is a reasonable code value after reviewing the survey data and making comparisons to other codes within the RBRVS. In contrast, the psychotherapy codes lack this relativity because they have not been compared to other codes within the RBRVS.

Including the psychotherapy codes as part of the Five-Year Review will ensure they are valued relative to other services in the Medicare fee schedule, thereby meeting the standard that the RUC now requires for other codes.

III. Evidence of Problematic Assumptions Made in Previous Valuation

The majority of timed psychotherapy codes have not been reviewed since their initial valuation in 1998, and virtually all of the untimed codes have not been reviewed since 1995. As we have demonstrated, a substantial body of compelling evidence now exists to merit review of these codes.

It is well understood that the survey data used to initially establish the psychotherapy code values in 1998 was substantially flawed. A regression analysis was employed at that time to make the survey data usable for purposes of valuing the codes. Our organizations offered this regression and the RUC accepted it in order to value the codes.

In light of the timeliness for review, our organizations have recently reassessed the survey data and have reexamined the regression analysis employed in 1998. We find that the regression analysis contains assumptions about the survey data that merit reconsideration. In addition, we note that the RUC database contains some discrepancies regarding psychotherapy code valuation. According to information compiled from the RUC database, pre-and post-service time is identified for the codes reviewed by the RUC in 1995 but not for the codes reviewed in 1998 (See Attachment B). In view of the weak survey data, a questionable regression analysis, and RUC database discrepancies, psychotherapy work values in our opinion do not accurately reflect the services involved.

Survey Data

During the first Five-Year Review, CMS did not accept the RUC's recommendations for the existing psychotherapy codes but instead developed 24 new codes to better differentiate among various modalities for providing psychotherapy. CMS distinguished psychotherapy through four factors:

- whether E/M services are provided with psychotherapy,
- the approximate length of the psychotherapy session,
- the type of psychotherapy provided, and
- the setting in which the psychotherapy is provided.

In order to assign relative work values to the new codes, it was necessary to determine the incremental work values of these four factors. If an incremental value for each factor was established, then it would be possible to create a psychotherapy relative value scale among all the codes by adding the increments in a logical sequence to a base value.

The RUC subsequently surveyed a range of clinicians, practicing in various settings, on the 24 new codes. Psychiatry, Child Psychiatry, and ANA had their members survey all 24 codes. Members of APA and NASW surveyed only the 12 codes for psychotherapy without E/M.

At the April 1997 RUC meeting, the five organizations presented the RUC with a joint proposal based on the survey data from all health care professionals, employing a work neutral regression technique to eliminate inconsistencies among practice patterns. Even with the use of the regression technique the survey data was still unworkable. After reviewing the proposal the RUC could not reach a conclusion about values for the codes, in part because there was no type of rank order among the codes in the proposal. Following the RUC's suggestion, the five organizations contracted with The Lewin Group (Lewin) for assistance on the data collection and statistical analysis.

Lewin analyzed the survey results and found that the estimates of the four factors were not consistent across the codes. Differentials between the codes for the four factors (each differential being the difference between a given code's median RVU and the median RVU of the equivalent code without the factor) showed high variability across the codes. In some instances the differentials were negative, where for example the factor would have been expected to increase a value but instead decreased a value.

The survey data was substantially flawed, which Lewin attributed to several factors. First, practitioners surveyed appeared to misunderstand the logical associations among the codes. These codes, after all, were new to practitioners, who may have misunderstood their meaning in providing survey responses. In addition, differential practice patterns, variance in standards of care and diversity in patient populations appeared to have impacted survey responses.

Regression Analysis

Lewin applied a correction to the regression technique to adjust for inconsistencies among practice patterns and to maintain budget neutrality, so that the Medicare program's payment allocated for the work values for the 24 new psychotherapy codes would not differ from payment under the previous psychotherapy codes. The RUC adopted Lewin's approach to compute the final work values, and this valuation is explained in the RUC database:

> The base code is 90804, individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient. 90804 is currently valued by HCFA at 1.11 RVUs. The survey found a median work RVU of 1.25 and the regression analysis indicated a work RVU of 1.40. The work neutrality

> analysis comparing the total pool of survey RVUs to the pool of regression derived RVUs showed that the base RVU from the regression should be reduced by 0.10 work RVUs to 1.30. Therefore, the organizations recommended and the RUC has accepted 1.30 work RVUs for 90804. This recommendation is further supported by the current HCFA RVU for 90805 of 1.47. The only difference between 90804 and 90805 is the provision of E/M. If the estimated work effect for E/M (0.17) is removed from 90805 the result is 1.30: the recommended work RVU for 90804.
>
> The RUC's recommendation is for an acceptance of 1.30 work RVUs for 90804 as the base and the additive methodology derived from the regression analysis. The addition of the estimated work effect to the base code allows the creation of a consistent work scale across all 24 psychotherapy codes.

The intent of linear regression, and as employed by Lewin in this instance, is to model the relationship between a dependent variable, in this case the work RVU for 90804, and independent variables related to the four factors. As noted, our organizations fully accepted the Lewin analysis, which was necessary for the initial valuation of the new psychotherapy codes at the time. Our recent reexamination of the analysis reveals some shortcomings that merit review.

First, the linear regression analysis model employed by Lewin contained a limited number of predictor variables, namely the four factors identified above. For example, when applied to the codes for 45-50 and 75-80 minutes of outpatient psychotherapy, the regression analysis failed to consider the additional stress and intensity that occurs during longer psychotherapy sessions. Therefore, employing an increased number of factors could have provided for more accurate code values.

Second, linear regression models also assume that the data are normally distributed, that the variance of errors are equal across all levels of the independent variables, and that the relationship between the dependent and independent variables (here, the work value for 90804 and the four factors respectively) is linear in nature. Because these assumptions may not be correct in this case there may have been anomalies caused by the model that affected the values.

RUC Database Discrepancies Regarding Psychotherapy Code Valuation

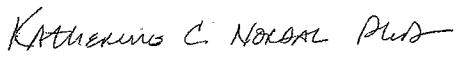
The RUC database contains discrepancies in how the psychotherapy codes are valued. These discrepancies may have occurred when the original values were set in 1998. To illustrate, the intra-service times for all outpatient services show the *maximum* number of face-to-face minutes that are noted in the code descriptor while some of the inpatient codes reflect lesser amounts of time (See Attachment B). For example, code 90804 has 30 intra-service minutes for 20-30 minutes of outpatient psychotherapy but 90816 has only 28.5 minutes of intra-service time for 20-30 minutes of inpatient psychotherapy. This same discrepancy is found in the 75-80 minute psychotherapy with E/M codes with 90809 (outpatient) having 80 minutes of intra-service time while 90822 (inpatient) has 78.5 minutes of intra-service time.

Conclusion

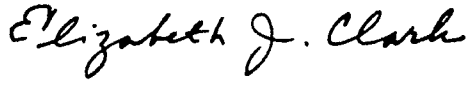
We believe that the services noted above warrant inclusion in the upcoming Five-Year Review because (1) the work involved in providing psychotherapy has become more complex since the last time these codes were reviewed, (2) reviewing all of the codes will address existing and potential rank-order anomalies, and (3) weak survey data led to inaccurate code values in the previous valuation of the psychotherapy services.

We urge CMS to include the psychotherapy codes in the 2010 Five-Year Review. If there are any questions regarding this request please contact APA's Director of Regulatory Affairs, Diane M. Pedulla, J.D., by telephone at 202-336-5889 or by email at dpedulla@apa.org.

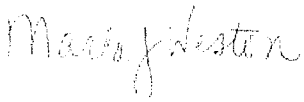
Sincerely,



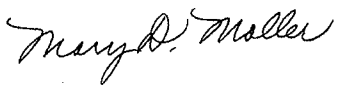
Katherine C. Nordal, PhD
Executive Director for Professional Practice



Elizabeth J. Clark, PhD, ACSW, MPH
NASW, Executive Director



Marla J Weston, PhD, RN
Chief Executive Officer
American Nurses Association



Mary D. Moller, DNP, ARNP, APRN, PMHCNS-BC, CPRP, FAAN
President, American Psychiatric Nurses Association

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Attachment A

Psychiatric Diagnostic or Evaluative Interview

90801 Psychiatric diagnostic interview examination

90802 Interactive psychiatric diagnostic interview examination using play equipment, physical devices, language interpreter, or other mechanisms of communication

Psychiatric Therapeutic Procedures

Office or Outpatient Facility

90804 Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient;

90806 Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient;

90808 Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient;

90810 Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient;

90812 Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient;

90814 Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient;

Inpatient Hospital, Partial Hospital or Residential Care Facility

90816 Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient;

90818 Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient;

90821 Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient;

90823 Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient;

90826 Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient;

90828 Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient;

Other Psychotherapy

90845 Psychoanalysis

90846 Family psychotherapy (without the patient present)

90847 Family psychotherapy (conjoint psychotherapy) (with patient present)

90849 Multiple-family group psychotherapy

90853 Group psychotherapy (other than of a multiple-family group)

90857 Interactive group psychotherapy

Other Psychiatric Services or Procedures

90875 Individual psychophysiological therapy incorporating biofeedback training by any modality (face-to-face with the patient), with psychotherapy (e.g., insight oriented, behavior modifying or supportive psychotherapy); approximately 20-30 minutes

90876 Individual psychophysiological therapy incorporating biofeedback training by any modality (face-to-face with the patient), with psychotherapy (e.g., insight oriented, behavior modifying or supportive psychotherapy); approximately 45-50 minutes

90880 Hypnotherapy

Attachment B

Breakdown of Pre, Intra, and Post-Service Times per the 2009 RUC Database

CPT Code	Descriptor	Source of Time Data	Pre-Service Time	Intra-Service Time	Post-Service Time	Total Time	Date of last RUC meeting review
90801	Psychiatric diagnostic interview examination	RUC	10	60	55	125	Aug95
90802	Interactive psychiatric diagnostic interview examination	RUC	15	75	80	170	Feb96
90804	Individual psychotherapy, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient	RUC		30		30	Feb98
90805	Individual psychotherapy, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services	RUC		30		30	Feb98
90806	Individual psychotherapy, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient	RUC		50		50	Feb98
90807	Individual psychotherapy, 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services	RUC		50		50	Feb98
90808	Individual psychotherapy,in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient	RUC		80		80	Feb98
90809	Individual psychotherapy, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services	RUC		80		80	Feb98
90810	Individual psychotherapy, interactive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient	RUC		30		30	Feb98

Breakdown of Pre, Intra, and Post-Service Times per the 2009 RUC Database

CPT Code	Descriptor	Source of Time Data	Pre-Service Time	Intra-Service Time	Post-Service Time	Total Time	Date of last RUC meeting review
90811	Individual psychotherapy, interactive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services	RUC		30		30	Feb98
90812	Individual psychotherapy, interactive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient	RUC		50		50	Feb98
90813	Individual psychotherapy, interactive, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services	RUC		50			Feb98
90814	Individual psychotherapy, interactive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient	RUC		80		80	Feb98
90815	Individual psychotherapy, interactive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services	RUC		80		80	Feb98
90816	Individual psychotherapy, in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient	RUC		28.5		28.5	Feb98
90817	Individual psychotherapy,in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management	RUC		25		25	Feb98

Breakdown of Pre, Intra, and Post-Service Times per the 2009 RUC Database

CPT Code	Descriptor	Source of Time Data	Pre-Service Time	Intra-Service Time	Post-Service Time	Total Time	Date of last RUC meeting review
90818	Individual psychotherapy, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient	RUC		47		47	Feb98
90819	Individual psychotherapy, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management	RUC		45		45	Feb98
90821	Individual psychotherapy, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient;	RUC		80		80	Feb98
90822	Individual psychotherapy, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management	RUC		78.5		78.5	Feb98
90823	Individual psychotherapy, interactive,in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes facae-to-face with the patient	RUC		30		30	Feb98
90824	Individual psychotherapy, interactive, in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient;	RUC		25		25	Feb98
90826	Individual psychotherapy, interactive, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes fa	RUC		50		50	Feb98

Breakdown of Pre, Intra, and Post-Service Times per the 2009 RUC Database

CPT Code	Descriptor	Source of Time Data	Pre-Service Time	Intra-Service Time	Post-Service Time	Total Time	Date of last RUC meeting review
90827	Individual psychotherapy, interactive, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient	RUC		50		50	Feb98
90828	Individual psychotherapy, interactive, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient	RUC		80		80	Feb98
90829	Individual psychotherapy, interactive, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient	RUC		80		80	Feb98
90845	Psychoanalysis	RUC Time	5	45	11	61	Aug95
90846	Family psychotherapy (without the patient present)	CMS/Other		50		50	Aug95
90847	Family psychotherapy (conjoint psychotherapy) (with patient present)	RUC Time	5	50	21	76	Aug95
90849	Multiple-family group psychotherapy	RUC Time	11	84	14	109	May94
90849	Multiple-family group psychotherapy	Harvard	8	83	13	104	May94
90853	Group psychotherapy (other than of a multiple-family group)	RUC Time	10	80	44	134	Aug95
90857	Interactive group psychotherapy	RUC Time	15	50	58	123	Aug95
90862	Pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy	RUC Time	5	25	23	53	Aug95
90865	Narcosynthesis for psychiatric diagnostic and therapeutic purposes (eg, sodium amobarbital (Amytal) interview)	Harvard		90		90	

Breakdown of Pre, Intra, and Post-Service Times per the 2009 RUC Database

CPT Code	Descriptor	Source of Time Data	Pre-Service Time	Intra-Service Time	Post-Service Time	Total Time	Date of last RUC meeting review
90870	Electroconvulsive therapy (includes necessary monitoring)	Harvard		23		23	Aug95
90875	Individual psychophysiological therapy incorporating biofeedback training by any modality (face-to-face with the patient), with psychotherapy (eg, insight oriented, behavior modifying or supportive psychotherapy); approximately 20-30 minutes	RUC Time	10	25	10	45	Feb97 (HCPAC)
90876	Individual psychophysiological therapy incorporating biofeedback training by any modality (face-to-face with the patient), with psychotherapy (eg, insight oriented, behavior modifying or supportive psychotherapy); approximately 45-50 minutes	RUC Time	10	50	10	70	Feb97 (HCPAC)
90880	Hypnotherapy	RUC	8	50	40	98	Aug95
90882	Environmental intervention for medical management purposes on a psychiatric patient's behalf with agencies, employers, or institutions	No Data					Aug96
90885	Psychiatric evaluation of hospital records, other psychiatric reports, psychometric and/or projective tests, and other accumulated data for medical diagnostic purposes	CMS/Other				60	Aug97
90887	Interpretation or explanation of results of psychiatric, other medical examinations and procedures, or other accumulated data to family or other responsible persons, or advising them how to assist patient	RUC Time	10	50	28	88	Aug95

August 30, 2011

Walter Larimore, MD
Chair, Relativity Assessment Workgroup
AMA RBRVS Update Committee
515 N. State St
Chicago IL 60611

Subject: Analysis of Closed Fracture Without Manipulation Treatment Codes

Dear Dr. Larimore:

The American Academy of Orthopaedic Surgeons (AAOS) is writing in regards to the recent request from the RUC Relativity Assessment Workgroup to review all existing closed fracture without manipulation treatment codes to determine whether patient positioning time had been included in the valuation of the services.

This request was based on a comment from the Centers for Medicare and Medicaid Services (CMS) in their Five-Year Review Proposed Rule, published in the *Federal Register* on June 6, 2011. CMS wrote, "Additionally, we recommend that the AMA RUC examine all of the non-manipulation fracture codes to determine if positioning time was incorporated into the work RVU for the codes and, if so, whether the need for positioning time was documented."

In response to the Workgroup's request, the AAOS reviewed the pre-service data for all 50 closed fracture without manipulation treatment codes in the CPT manual. Most of these codes are performed regularly by orthopaedic surgeons, although some are rarely performed by orthopaedic surgeons (eg, 21310, *Closed treatment of nasal bone fracture without manipulation*). Of these 50 codes, only five have been reviewed by the RUC. The table below shows the relevant pre-time data for these five codes.

RUC review	CPT	LONG DESC	eval	posit	s,d,w
2005	**26600**	Closed treatment of metacarpal fracture, single; without manipulation, each bone	7	2	0
2007	**27267**	Closed treatment of femoral fracture, proximal end, head; without manipulation	7	2	0
2007	**27767**	Closed treatment of posterior malleolus fracture; without manipulation	0	5	0
2010	**25600**	Closed treatment of distal radial fracture (eg, Colles or Smith type) or epiphyseal separation, includes closed treatment of fracture of ulnar styloid, when performed; without manipulation	5	2	0
2010	**27530**	Closed treatment of tibial fracture, proximal (plateau); without manipulation	7	2	0

Pre-service times for 26600 are based on survey median times as there were no pre-time packages in 2005. The service description includes "assist with extremity positioning" in the pre-service description.

Pre-service times for 27267 are based cross-walk to code 26600 as there were no pre-time packages in 2007 and the survey data was flawed because of the survey instrument asked for skin-to-skin time instead of manipulation time. This resulted in respondents putting manipulation time into the pre and post-service categories.

Pre-service times for 27767 are based on survey median times as there were no pre-time packages in 2007. The service description includes positioning the patient.

Pre-service times for 25600 are based on pre-time package 5 with 2 minutes subtracted to account for typical E/M service and 2 minutes added for patient positioning. The service description includes “assist with extremity positioning” in the pre-service description.

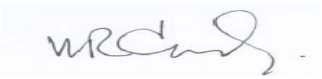
Pre-service times for 27530 are based on pre-time package 5 with 2 minutes added for patient positioning. The service description includes “assist with extremity positioning” in the pre-service description.

None of the 45 Harvard-based codes includes positioning time. The Harvard study rarely included time for positioning – and only for extraordinary positioning. Of the remaining Harvard-based codes with a global period, approximately 10% have positioning time, and those are complex 90-day inpatient only codes.

For all five codes, the RUC recommended work RVUs were based on magnitude estimation of total work and comparison to other similar procedures. None of the work RVUs for these five codes were developed using a building block method.

Thank you for allowing us to provide this information.

Sincerely,



William R. Creevy, MD
AAOS RUC Advisor

CC: Barbara Levy, MD, Chair AMA/Multi-Specialty Relative Value Update Committee
Sherry Smith, Director AMA/Multi-Specialty Relative Value Update Committee

AMA
AMERICAN MEDICAL ASSOCIATION

American Medical Association
515 N. State Street
Chicago, Illinois 60654

ama-assn.org
312.464.5000

October 3, 2011

Donald Berwick, MD
Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services
Attn: CMS-1524-P
Mail Stop C4-26-05
7500 Security Blvd
Baltimore, MD 21244-1850

Subject: Additional HCPAC Recommendations for Consideration for Final Rule on the 2012 Medicare Physician Payment Schedule

The American Medical Association (AMA) Health Care Professionals Advisory Committee (HCPAC) Review Board met September 22, 2011 to review specialty society data and develop relative value recommendations for individual services. Given the immediate urgency for items related to 2012, we are submitting these recommendations at this time. The HCPAC submission includes an update on review of the Multi-Specialty Points of Comparison Codes issues for consideration by the Centers for Medicare and Medicaid Services (CMS).

In the *Final Rule* for the 2011 Medicare Physician Payment Schedule, CMS requested that the RUC and HCPAC review high volume services included on the RUC's Multi-Specialty Points of Comparison (MPC). The RUC has engaged in a more comprehensive review of the MPC List, reconstructing the document to ensure that it includes true cross-specialty services. Four specific codes identified by CMS were scheduled for review at the September 2011 HCPAC meeting, with specialty society data submitted. The HCPAC recommendation for CPT code 11056 *Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions* is attached. Additionally, the HCPAC reviewed three *Debridement of Nail Services*, CPT codes 11719-11721, and recommends that 11719 be re-surveyed for January 2012 and that the recommendations for 11720 and 11721 be considered interim until the January 2012 HCPAC meeting, where they will be reviewed again to ensure rank order with the new survey data and recommendations for 11719.

The HCPAC appreciates the opportunity to provide recommendations related to the 2012 Medicare Physician Payment Schedule. If you have any questions regarding this submission. Please contact Susan Clark (202) 789-7495 or Susan.Clark@ama-assn.org at the AMA for clarification regarding these recommendations.

Sincerely,

Arthur Traugott, MD
HCPAC Chair

Anthony W. Hamm, D.C.

Anthony Hamm, DC
HCPAC Co-Chair

cc: HCPAC Participants

Attachments

AMA/Health Care Professionals Advisory Committee Review Board
Summary of Recommendations
MPC List Screen

September 2011

Debridement of Nail

CPT code 11721 *Debridement of nail(s) by any method(s); 6 or more* was identified by CMS as part of the MPC List screen. In February 2011, the RUC recommended 11721 be resurveyed as it had not been reviewed in the last 6 years, and that the family of services, CPT codes 11719 and 11720, be resurveyed as well.

11719 *Trimming of nondystrophic nails, any number*
The HCPAC reviewed the survey data for CPT code 11719 *Trimming of nondystrophic nails, any number*. The specialty society indicated that they would benefit from re-surveying this code as they agreed that the survey data was not reflective of the service. **The specialty society will re-survey CPT code 11719 for the January 2012 HCPAC Meeting. The HCPAC recommended values for 11720 and 11721 will be interim so that they can be reviewed with 11719 to ensure appropriate relativity within the family.**

11720 *Debridement of nail(s) by any method(s); 1 to 5*.
The HCPAC reviewed the survey data for CPT code 11720 and agreed it accurately reflected the service. The specialty society discussed the proposed valuation for the service and agreed that although the survey indicated a 25th percentile of 0.35 work RVUs, the specialty society did not have any compelling evidence to change the current value of the code. Therefore, the HCPAC agreed with the specialty society that the survey data supports the current value, 0.32 RVUs. The HCPAC compared the surveyed code to reference code 99212 *Office or other outpatient visit for the evaluation and management of an established patient* (work RVU=0.48). The HCPAC noted that the intra-service time for the surveyed code is less than the reference code, 5 minutes and 10 minutes, respectively. Further, the HCPAC noted that the reference code overall is a more intense service to perform in comparison to the surveyed code. **Therefore, based on this comparison to the reference code, the HCPAC recommends 0.32 work RVUs, the current work RVU for CPT code 11720.**

11721 *Debridement of nail(s) by any method(s); 6 or more*.
The HCPAC reviewed the survey data for CPT code 11721 and agreed it accurately reflected the service. The specialty society discussed the proposed valuation for the service and agreed that although the survey indicated a median value of 0.65 work RVUs, the specialty society did not have any compelling evidence to change the current value of the code. Therefore, the HCPAC agreed with the specialty society that the survey data supports the current value, 0.54 RVUs. The HCPAC compared the surveyed code to reference code 99212 *Office or other outpatient visit for*

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

the evaluation and management of an established patient, (work RVU=0.48). The HCPAC noted that the total-service time for the surveyed code is more than the reference code, 19 minutes and 16 minutes, respectively. Further, the HCPAC noted that the surveyed code requires more physical effort to perform in comparison to the surveyed code. **Therefore, based on this comparison to the reference code, the HCPAC recommends 0.54 work RVUs, the current work RVU for CPT code 11721.**

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
11719	Trimming of nondystrophic nails, any number	000	Resurvey for January 2012
11720	Debridement of nail(s) by any method(s); 1 to 5	000	0.32 (No Change) Interim Recommendation
11721	Debridement of nail(s) by any method(s); 6 or more	000	0.54 (No Change) Interim Recommendation
G0127	Trimming of dystrophic nails, any number	000	Direct Crosswalk to 11719, which is being resurveyed for January 2012

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:11720 Tracking Number Original Specialty Recommended RVU: **0.32**
Presented Recommended RVU: **0.32**
Global Period: 000 RUC Recommended RVU: **0.32**

CPT Descriptor: Debridement of nail(s) by any method(s); 1 to 5

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67-year-old female presents with four painful toenails. The problem began to develop 10 years ago and has progressively worsened so that these nails are thickened, dystrophic, and painful. There is yellowish discoloration of each deformed nail plate with subungual debris. The patient has difficulty wearing normal shoes and walking. Four nails are debrided.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? No
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting? No
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: The chart is reviewed with general medical and surgical history update including current medications and allergies. Physical examination is performed. The physician discusses the procedure with the patient and verifies that all required instruments and supplies are available in the treatment room. The patient is positioned and the foot is prepped.

Description of Intra-Service Work: Using a combination of surgical hand instruments and power rotating burr, the nails are débrided to reduce the size and girth of the abnormal nail plates, short of avulsion.

Description of Post-Service Work: Application of the appropriate topical medication and dressing as necessary. Instruct patient and/or care giver on appropriate home care. Discuss future management of the condition. Instuct on proper selection and sizing of footwear. Instruct on importance of controlling concomitant medical conditions. Complete medical record; Communicate with primary care physician

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Seth Rubenstein,DPM; Tim Tillo, DPM		
Specialty(s):	podiatry		
CPT Code:	11720		
Sample Size: 100	**Resp N:** 30	**Response:** 30.0 %	
Sample Type: Panel	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	63.00	**200.00**	300.00	1500.00
Survey RVW:	0.30	0.35	**0.45**	0.69	1.00
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**2.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	5.00	**5.00**	10.00	10.00

Immediate Post Service-Time:	**2.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 5 - NF Procedure without sedation/anesthesia care

CPT Code:	11720	**Recommended Physician Work RVU: 0.32**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**7.00**	**-2.00**
Pre-Service Positioning Time:		**2.00**	**0.00**	**2.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**5.00**		

Immediate Post Service-Time:	**2.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99212	XXX	0.48	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A problem focused history; A problem focused examination; Straightforward medical decision making. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
71020	XXX	0.22	**RUC Time**	13,560,976

CPT Descriptor 1 Radiologic examination, chest, 2 views, frontal and lateral;

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
95900	XXX	0.42	**RUC Time**	1,374,620

CPT Descriptor 2 Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 10 **% of respondents:** 33.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 11720**	**Key Reference CPT Code: 99212**	**Source of Time RUC Time**
Median Pre-Service Time	7.00	2.00	
Median Intra-Service Time	5.00	10.00	
Median Immediate Post-service Time	2.00	4.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	

Median Total Time	14.00	16.00
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	1.80	2.11
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.00	2.33
Urgency of medical decision making	1.90	2.22
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.50	2.67
Physical effort required	2.00	2.11
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	1.70	1.89
Outcome depends on the skill and judgment of physician	2.30	2.44
Estimated risk of malpractice suit with poor outcome	2.00	2.22

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	1.90	2.30
Intra-Service intensity/complexity	2.30	2.50
Post-Service intensity/complexity	1.50	1.70

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

The RUC recommended that 11720 be surveyed as a family code when CPT 11721 was identified by the MPC List screen. Code 11720 was last reviewed in 1997 when codes 11700 *(Debridement of nails, manual; five or less)* (RVW=0.32) and 11710 *(Debridement of nails, electric grinder; five or less)* (RVW=0.32) were deleted. The RUC recommended the survey

median work RVU of 0.45 to account for the fact that an E/M was not typically performed with this service. CMS rejected this recommendation based on the fact that these were new and revised codes, the work had not changed, and the deleted codes were not presented for refinement or review during the 1995 Five-Year-Review process. CMS assigned the work RVU of 0.32 for 11720.

The APMA conducted a RUC survey and received 30 surveys. The work performing this service has not changed. The current survey data updates the procedure time and takes into account that an E/M is not typically reported with this service. **The APMA recommends maintaining the current work RVU of 0.32 for 11720.**

Code 11720 is not typically billed with an E/M service. Pre-time package 5 (Procedure without sedation/anesthesia care) is appropriate with 5 minutes for evaluation and 2 minutes for positioning and preparing the foot for the procedure.

Code 99212 was chosen as the key reference. The complexity/intensity measures above correctly indicate that 99212 requires more mental effort and judgment in comparison to 11720. Overall pre/intra/post intensity/complexity measures are slightly greater for 99212. Because an E/M is not typically billed with 11720, the work for this service includes necessary evaluation work for patients who are typically compromised.

	CPT	DESC	STAT	GLOB	RVW	Total Time	eval	posit	s,d,w	INTRA	sd-im
Key Ref	99212	Office/outpatient visit, established	A	XXX	0.48	16	2			10	4
	11720	Debridement of nail(s) by any method(s); 1 to 5	A	000	0.32	14	5	2		5	2

Code 11720 is also appropriately placed relative to MPC codes 71020 and 95900.

	CPT	DESC	STAT	GLOB	RVW	Total Time	eval	posit	s,d,w	INTRA	sd-im
MPC	71020	Radiologic examination, chest, 2 views, frontal and lateral;	A	XXX	0.22	5	1			3	1
	11720	Debridement of nail(s) by any method(s); 1 to 5	A	000	0.32	14	5	2		5	2
MPC	95900	Nerve conduction, amplitude and latency/velocity study, each nerve; motor, without F-wave study	A	XXX	0.42	14	4			6	4

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   ☐ Multiple codes are used to maintain consistency with similar codes.
   ☐ Historical precedents.
   ☒ Other reason (please explain) Other foot care services may be reported in addition to 11056, however, there is no single typical code reported.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 11720

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty podiatry How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. national frequency not available

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
2,166,784 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. RUC database 2010 Medicare utilization

Specialty podiatry Frequency 2131000 Percentage 98.34 %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States? Yes

Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 11720

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:11721 Tracking Number Original Specialty Recommended RVU: **0.54**
Presented Recommended RVU: **0.54**
Global Period: 000 RUC Recommended RVU: **0.54**

CPT Descriptor: Debridement of nail(s) by any method(s); 6 or more

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CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 67-year-old female presents with eight painful toenails. The problem began to develop 10 years ago and has progressively worsened so that these nails are thickened, dystrophic, and painful. There is yellowish discoloration of each deformed nail plate with subungual debris. The patient has difficulty wearing normal shoes and walking. Eight nails are debrided.

Percentage of Survey Respondents who found Vignette to be Typical: 90%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? No
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting? No
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: The chart is reviewed with general medical and surgical history update including current medications and allergies. Physical examination is performed. The physician discusses the procedure with the patient and verifies that all required instruments and supplies are available in the treatment room. The patient is positioned and the foot is prepped.

Description of Intra-Service Work: Using a combination of surgical hand instruments and power rotating burr the nails are débrided to reduce the size and girth of the abnormal nail plates, short of avulsion.

Description of Post-Service Work: Application of the appropriate topical medication and dressing as necessary. Instruct patient and/or care giver on appropriate home care. Discuss future management of the condition. Instuct on proper selection and sizing of footwear. Instruct on importance of controlling concomitant medical conditions. Complete medical record; Communicate with primary care physician

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Seth Rubenstein,DPM; Tim Tillo, DPM		
Specialty(s):	podiatry		
CPT Code:	11721		
Sample Size: 100	**Resp N:** 30	**Response:** 30.0 %	
Sample Type: Panel	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	10.00	81.00	**200.00**	400.00	1650.00
Survey RVW:	0.35	0.49	**0.65**	0.88	1.20
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**2.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	8.00	**10.00**	10.00	20.00

Immediate Post Service-Time:	**2.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 5 - NF Procedure without sedation/anesthesia care

CPT Code:	11721	**Recommended Physician Work RVU: 0.54**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**7.00**	**-2.00**
Pre-Service Positioning Time:		**2.00**	**0.00**	**2.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Immediate Post Service-Time:	**2.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
99212	XXX	0.48	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A problem focused history; A problem focused examination; Straightforward medical decision making. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
92083	XXX	0.50	**RUC Time**	2,651,934

CPT Descriptor 1 Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 degrees, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11000	000	0.60	**RUC Time**	105,397

CPT Descriptor 2 Debridement of extensive eczematous or infected skin; up to 10% of body surface

Other Reference CPT Code	Global	Work RVU	Time Source
99213	XXX	0.97	**RUC Time**

CPT Descriptor Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: An expanded problem focused history; An expanded problem focused examination; Medical decision making of low complexity. Counseling and coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity. Physicians typically spend 15 minutes face-to-face with the patient and/or family.

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 6 **% of respondents:** 20.0 **%**

TIME ESTIMATES (Median)	**CPT Code: 11721**	**Key Reference CPT Code: 99212**	**Source of Time RUC Time**
Median Pre-Service Time	7.00	2.00	
Median Intra-Service Time	10.00	10.00	

Median Immediate Post-service Time	2.00	4.00
Median Critical Care Time	0.0	0.00
Median Other Hospital Visit Time	0.0	0.00
Median Discharge Day Management Time	0.0	0.00
Median Office Visit Time	0.0	0.00
Prolonged Services Time	0.0	0.00
Median Subsequent Observation Care Time	0.0	0.00
Median Total Time	**19.00**	**16.00**
Other time if appropriate		

INTENSITY/COMPLEXITY MEASURES (Mean)	**(of those that selected Key Reference code)**	
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	1.83	2.17
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.00	2.33
Urgency of medical decision making	1.83	2.20
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.67	2.67
Physical effort required	2.50	2.00
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	1.67	2.00
Outcome depends on the skill and judgment of physician	2.67	2.67
Estimated risk of malpractice suit with poor outcome	1.83	2.00

INTENSITY/COMPLEXITY MEASURES	**CPT Code**	**Reference Service 1**
Time Segments (Mean)		
Pre-Service intensity/complexity	2.00	2.33
Intra-Service intensity/complexity	2.50	2.67
Post-Service intensity/complexity	1.83	2.17

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

CPT 11721 was identified by the MPC List screen. Code 11721 was last reviewed in 1997 when codes 11701 *(Debridement of nails, manual; each additional, five or less)* (RVW=0.23, ZZZ global) and 11711 *(Debridement of nails, electric grinder; each additional, five or less)* (RVW=0.20, ZZZ global) were deleted and the new code 11721 with a 0-day global was created. The RUC recommended the survey median work RVU of 0.60 to account for the fact that the new code bundled the primary and add-on codes (11700-11711) into a stand-alone code (11721). The RUC also considered that an E/M was not typically performed with this service. CMS rejected this recommendation based on the fact that these were new and revised codes, the work had not changed, and the deleted codes were not presented for refinement or review during the 1995 Five-Year-Review process. CMS assigned a work RVU of 0.54, which was a weighted average of the sum of the work RVUs of the codes used to report the debridement of six or more nails in the past.

The APMA conducted a RUC survey and received 30 surveys. The work performing this service has not changed. The current survey data updates the procedure time and takes into account that an E/M is not typically reported with this service. **The APMA recommends maintaining the current work RVU of 0.54 for 11721.**

Code 11721 is not typically billed with an E/M service. Pre-time package 5 (Procedure without sedation/anesthesia care) is appropriate with 5 minutes for evaluation and 2 minutes for positioning and preparing the foot for the procedure.

Code 99212 and 99213 were chosen equally by the respondents. Because an E/M is not typically billed with 11721, the work for this service includes necessary evaluation work for patients who are typically compromised. The recommended work RVU of 0.54 fits well between these two reference codes.

	CPT	DESC	STAT	GLOB	RVW	Total Time	eval	posit	s,d,w	INTRA	sd-im
REF	99212	Office/outpatient visit, established	A	XXX	**0.48**	16	2			10	4
	11721	Debridement of nail(s) by any method(s); 6 or more	A	000	**0.54**	19	5	2		10	2
REF	99213	Office/outpatient visit, established	A	XXX	**0.97**	23	3			15	5

Code 11721 is also appropriately placed relative to MPC codes 92083 and 11000.

	CPT	DESC	STAT	GLOB	RVW	Total Time	eval	posit	s,d,w	INTRA	sd-im
MPC	92083	Visual field examination, unilateral or bilateral, with interpretation and report; extended examination	A	XXX	**0.50**	13				10	3
	11721	Debridement of nail(s) by any method(s); 6 or more	A	000	**0.54**	19	5	2		10	2
MPC	11000	Debridement of extensive eczematous or infected skin; up to 10% of body surface	A	000	**0.60**	20	5			10	5

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   - ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   - ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   - ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   - ☐ Multiple codes are used to maintain consistency with similar codes.
   - ☐ Historical precedents.

☒ Other reason (please explain) Other foot care services may be reported in addition to 11056, however, there is no single typical code reported.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 11721

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty podiatry How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. national frequency not available

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period? 7,622,371 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. RUC database 2010 Medicare utilization

Specialty podiatry Frequency 7540800 Percentage 98.92 %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 11721

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

CPT Code: 11721

SS SUMMARY REC

ISSUE: **Debridement of Nail**
TAB: **52**

Source	CPT	DESC	Resp	Glob	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST	SURVEY EXPERIENCE MIN	SURVEY EXPERIENCE 25th	SURVEY EXPERIENCE MED	SURVEY EXPERIENCE 75th	SURVEY EXPERIENCE MAX
REF	99212	Office or other outpatient visit for the evaluati	33%	XXX	0.035			0.48			16	2					10			4					
HVD	11720	Debridement of nail(s) by any method(s); 1 to		000	0.012			0.32			18	5					8			5					
SVY	11720	Debridement of nail(s) by any method(s); 1 to	30	000	0.050	0.30	0.35	0.45	0.69	1.00	14	5	2	0	2	5	5	10	10	2	5	63	200	300	1500
REC		*current rvw*			0.024			0.32			14	5	2	0			5			2					
REF	99212	Office or other outpatient visit for the evaluati	20%	XXX	0.035			0.48			16	2					10			4					
REF	99213	Office or other outpatient visit for the evaluati	20%	XXX	0.053			0.97			23	3					15			5					
HVD	11721	Debridement of nail(s) by any method(s); 6 or		000	0.040			0.54			18	5					8			5					
SVY	11721	Debridement of nail(s) by any method(s); 6 or	30	000	0.045	0.35	0.49	0.65	0.88	1.20	19	5	2	0	2	8	10	10	20	2	10	81	200	400	1650
REC		*current rvw*			0.034			0.54			19	5	2	0			10			2					

AMA/Health Care Professionals Advisory Committee
Summary of Recommendations
MPC List Screen

September 2011

Trim Skin Lesions

CPT code 11056 *Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions* was identified by CMS as part of the MPC List Screen. In February 2011, the RUC recommended this service be resurveyed as it had not been reviewed in the last 6 years.

The HCPAC reviewed the survey data for CPT code 11056 and agreed with the specialty society that it accurately reflected the service. The specialty society discussed the proposed valuation for the service, 0.61, the current value. The HCPAC expressed concern that this value was not appropriate and recommends the survey 25th percentile, a decrease to the existing value, 0.50 work RVUs. After a lengthy discussion, the HCPAC compared the surveyed code to reference code 99212 *Office or other outpatient visit for the evaluation and management of an established patient,* (work RVU=0.48). The HCPAC noted that the intra-service times for these services are the same (10 minutes). Further, the HCPAC noted that these services require similar work to perform. In addition, the HCPAC compared the surveyed code to 29580 *Strapping; Unna boot* (work RVU=0.55). The HCPAC noted that the surveyed code has less total-service time as compared to the reference code, 19 minutes and 27 minutes, respectively. **Therefore, based on this comparison to the reference code, the HCPAC recommends 0.50 work RVUs, the survey 25th percentile, for CPT code 11056.**

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
11056	Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions	000	0.50

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code:11056 Tracking Number Original Specialty Recommended RVU: **0.61**
Presented Recommended RVU: **0.61**
Global Period: 000 RUC Recommended RVU: **0.50**

CPT Descriptor: Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 69-year-old rheumatoid arthritic diabetic female presents with chronic recurring hyperkeratotic lesions on the dorsolateral aspect of both 5th toes and a hyperkeratotic lesion beneath her 2nd metatarsal head on her right foot. The patient has unsuccessfully self-treated the lesions with an emery board and over-the-counter foot remedies. The hyperkeratotic lesions are pared, and 1/8th inch felt aperture pads are cut and applied to the toes, and a 1/4 inch felt aperture pad is applied to the bottom of the right foot.

Percentage of Survey Respondents who found Vignette to be Typical: 94%

Site of Service (Complete for 010 and 090 Globals Only)

Percent of survey respondents who stated they perform the procedure; In the hospital 0% , In the ASC 0%, In the office 0%

Percent of survey respondents who stated they typically perform this procedure in the hospital, stated the patient is; Discharged the same day 0% , Overnight stay-less than 24 hours 0% , Overnight stay-more than 24 hours 0%

Percent of survey respondents who stated that if the patient is typically kept overnight also stated that they perform an E&M service later on the same day 0%

Moderate Sedation

Is moderate sedation inherent to this procedure in the Hospital/ASC setting? No
Percent of survey respondents who stated moderate sedation is typical in the Hospital/ASC setting? 0%

Is moderate sedation inherent to this procedure in the office setting? No
Percent of survey respondents who stated moderate sedation is typical in the office setting? 0%

Description of Pre-Service Work: The chart is reviewed with general medical and surgical history update including current medications and allergies. Physical examination is performed. The physician discusses the procedure with the patient and verifies that all required instruments and supplies are available in the treatment room. The patient is positioned and the foot is prepped.

Description of Intra-Service Work: Inspect and palpate lesion for size, location, functional risks, depth; Pare lesion; Apply antiseptic to skin; Determine type of padding and specific material needed to shield the toe; Cut pad to fit toe and properly remove pressure point

Description of Post-Service Work: Instruct patient and/or care giver on appropriate home care. Discuss future management of the condition. Instuct on proper selection and sizing of footwear. Instruct on importance of controlling concomitant medical conditions. Complete medical record; Communicate with primary care physician

SURVEY DATA

RUC Meeting Date (mm/yyyy)	09/2011		
Presenter(s):	Seth Rubenstein,DPM; Tim Tillo, DPM		
Specialty(s):	podiatry		
CPT Code:	11056		
Sample Size: 100	**Resp N:** 31	**Response:** 31.0 %	
Sample Type: Panel	**Additional Sample Information:**		

	Low	25th pctl	Median*	75th pctl	High
Service Performance Rate	5.00	100.00	**200.00**	300.00	1500.00
Survey RVW:	0.25	0.50	**0.75**	0.82	1.60
Pre-Service Evaluation Time:			**5.00**		
Pre-Service Positioning Time:			**2.00**		
Pre-Service Scrub, Dress, Wait Time:			**0.00**		
Intra-Service Time:	2.00	7.00	**10.00**	10.00	15.00

Immediate Post Service-Time:	**2.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.00** 99239x **0.00** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

**Physician standard total minutes per E/M visit: 99291 (70); 99292 (30); 99231 (20); 99232 (40); 99233 (55); 99238(38); 99239 (55); 99217 (38); 99211 (7); 99212 (16); 99213 (23); 99214 (40); 99215 (55); 99224 (20); 99225 (40); 99226 (55); 99354 (60); 99355 (30); 99356 (60); 99357 (30)

Specialty Society Recommended Data

Please, pick the pre-service time package that best corresponds to the data which was collected in the survey process: 5 - NF Procedure without sedation/anesthesia care

CPT Code:	11056	**Recommended Physician Work RVU: 0.50**		
		Specialty Recommended Pre-Service Time	**Specialty Recommended Pre Time Package**	**Adjustments/Recommended Pre-Service Time**
Pre-Service Evaluation Time:		**5.00**	**7.00**	**-2.00**
Pre-Service Positioning Time:		**2.00**	**0.00**	**2.00**
Pre-Service Scrub, Dress, Wait Time:		**0.00**	**0.00**	**0.00**
Intra-Service Time:		**10.00**		

Immediate Post Service-Time:	**2.00**	
Post Operative Visits	**Total Min****	**CPT Code and Number of Visits**
Critical Care time/visit(s):	**0.00**	99291x **0.00** 99292x **0.00**
Other Hospital time/visit(s):	**0.00**	99231x **0.00** 99232x **0.00** 99233x **0.00**
Discharge Day Mgmt:	**0.00**	99238x **0.0** 99239x **0.0** 99217x **0.00**
Office time/visit(s):	**0.00**	99211x **0.00** 12x **0.00** 13x **0.00** 14x **0.00** 15x **0.00**
Prolonged Services:	**0.00**	99354x **0.00** 55x **0.00** 56x **0.00** 57x **0.00**
Sub Obs Care:	**0.00**	99224x **0.00** 99225x **0.00** 99226x **0.00**

Modifier -51 Exempt Status
Is the recommended value for the new/revised procedure based on its modifier -51 exempt status? No

New Technology/Service:
Is this new/revised procedure considered to be a new technology or service? No

KEY REFERENCE SERVICE:

Key CPT Code	Global	Work RVU	Time Source
11042	000	0.80	**RUC Time**

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

KEY MPC COMPARISON CODES:
Compare the surveyed code to codes on the RUC's MPC List. Reference codes from the MPC list should be chosen, if appropriate that have relative values higher and lower than the requested relative values for the code under review.

MPC CPT Code 1	Global	Work RVU	Time Source	Most Recent Medicare Utilization
11000	000	0.60	**RUC Time**	105,397

CPT Descriptor 1 Debridement of extensive eczematous or infected skin; up to 10% of body surface

MPC CPT Code 2	Global	Work RVU	Time Source	Most Recent Medicare Utilization
65205	000	0.71	**RUC Time**	35,304

CPT Descriptor 2 Removal of foreign body, external eye; conjunctival superficial

Other Reference CPT Code	Global	Work RVU	Time Source
		0.00	

CPT Descriptor

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):
Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including existing time data (RUC if available, Harvard if no RUC time available) for the reference code listed below.**

Number of respondents who choose Key Reference Code: 7 **% of respondents:** 23.3 **%**

TIME ESTIMATES (Median)	**CPT Code: 11056**	**Key Reference CPT Code:** 11042	**Source of Time RUC Time**
Median Pre-Service Time	7.00	11.00	
Median Intra-Service Time	10.00	15.00	
Median Immediate Post-service Time	2.00	10.00	
Median Critical Care Time	0.0	0.00	
Median Other Hospital Visit Time	0.0	0.00	
Median Discharge Day Management Time	0.0	0.00	
Median Office Visit Time	0.0	0.00	
Prolonged Services Time	0.0	0.00	
Median Subsequent Observation Care Time	0.0	0.00	
Median Total Time	**19.00**	**36.00**	
Other time if appropriate			

INTENSITY/COMPLEXITY MEASURES (Mean)		(of those that selected Key Reference code)
Mental Effort and Judgment (Mean)		
The number of possible diagnosis and/or the number of management options that must be considered	2.43	2.17
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.43	2.17
Urgency of medical decision making	1.71	2.17
Technical Skill/Physical Effort (Mean)		
Technical skill required	2.71	2.67
Physical effort required	2.43	2.17
Psychological Stress (Mean)		
The risk of significant complications, morbidity and/or mortality	2.14	2.00
Outcome depends on the skill and judgment of physician	2.57	2.50
Estimated risk of malpractice suit with poor outcome	2.14	2.17

INTENSITY/COMPLEXITY MEASURES	CPT Code	Reference Service 1
Time Segments (Mean)		
Pre-Service intensity/complexity	2.29	2.17
Intra-Service intensity/complexity	2.00	2.67
Post-Service intensity/complexity	1.57	1.83

Additional Rationale and Comments

Describe the process by which your specialty society reached your final recommendation. *If your society has used an IWPUT analysis, please refer to the Instructions for Specialty Societies Developing Work Relative Value Recommendations for the appropriate formula and format.*

CPT 11056 was identified by the MPC List screen. This code was last reviewed in 1997 when code 11051 *(Paring or curettement of benign hyperkeratotic skin lesion with or without chemical cauterization (such as verrucae or clavi) not extending therough the stratum corneum (eg, callus or wart) with or without local anesthesia; two to four lesions)* (RVW = 0.66) was deleted.

The APMA conducted a RUC survey and received 31 surveys. The work performing this service has not changed. The current survey data updates the procedure time and takes into account that an E/M is not typically reported with this service.

Code 11056 is not typically billed with an E/M service. Pre-time package 5 (Procedure without sedation/anesthesia care) is appropriate with 5 minutes for evaluation and 2 minutes for positioning and preparing the foot for the procedure.

Code 11042 was chosen as the key reference. Our consensus committee believes the recommended RVW and times for 11056 are appropriately less than 11042.

	CPT	DESC	STAT	GLOB	RVW	Total Time	eval	posit	s,d,w	INTRA	sd-im
Key Ref	**11042**	Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less	A	000	**0.80**	36	9	1	1	15	10
	11056	Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions	R	000	**0.50**	19	5	2		10	2

Code 11056 is also appropriately placed relative to MPC codes 11000 and 65205.

	CPT	DESC	STAT	GLOB	RVW	Total Time	eval	posit	s,d,w	INTRA	sd-im
MPC	**11000**	Debridement of extensive eczematous or infected skin; up to 10% of body surface	A	000	**0.60**	20	5			10	5
	11056	Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); 2 to 4 lesions	R	000	**0.50**	19	5	2		10	2
MPC	**65205**	Removal of foreign body, external eye; conjunctival superficial	A	000	**0.71**	15	5			5	5

SERVICES REPORTED WITH MULTIPLE CPT CODES

1. Is this code typically reported on the same date with other CPT codes? If yes, please respond to the following questions: Yes

   Why is the procedure reported using multiple codes instead of just one code? (Check all that apply.)

   ☐ The surveyed code is an add-on code or a base code expected to be reported with an add-on code.
   ☐ Different specialties work together to accomplish the procedure; each specialty codes its part of the physician work using different codes.
   ☐ Multiple codes allow flexibility to describe exactly what components the procedure included.
   ☐ Multiple codes are used to maintain consistency with similar codes.
   ☐ Historical precedents.
   ☒ Other reason (please explain) Other foot care services may be reported in addition to 11056, however, there is no single typical code reported.

2. Please provide a table listing the typical scenario where this code is reported with multiple codes. Include the CPT codes, global period, work RVUs, pre, intra, and post-time for each, summing all of these data and accounting for relevant multiple procedure reduction policies. If more than one physician is involved in the provision of the total service, please indicate which physician is performing and reporting each CPT code in your scenario.

FREQUENCY INFORMATION

How was this service previously reported? (if unlisted code, please ensure that the Medicare frequency for this unlisted code is reviewed) 11056

How often do physicians in your specialty perform this service? (ie. commonly, sometimes, rarely)
If the recommendation is from multiple specialties, please provide information for each specialty.

Specialty podiatry How often? Commonly

Specialty How often?

Specialty How often?

Estimate the number of times this service might be provided nationally in a one-year period?
If the recommendation is from multiple specialties, please provide the frequency and percentage for each specialty. Please explain the rationale for this estimate. national frequency not available

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Estimate the number of times this service might be **provided to Medicare patients** nationally in a one-year period?
1,752,199 If this is a recommendation from multiple specialties please estimate frequency and percentage for each specialty. Please explain the rationale for this estimate. RUC database 2010 Medicare utilization

Specialty podiatry Frequency 1740000 Percentage 99.30 %

Specialty Frequency Percentage %

Specialty Frequency Percentage %

Do many physicians perform this service across the United States? Yes

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Professional Liability Insurance Information (PLI)

If the surveyed code is an existing code and the specialty believes the specialty utilization mix will not change, enter the surveyed existing CPT code number 11056

If this code is a new/revised code or an existing code in which the specialty utilization mix will change, please select another crosswalk based on a similar specialty mix.

SS SUMMARY REC

ISSUE: **Trim Skin Lesions**
TAB: **52**

Source	CPT	DESC	Resp	Glob	IWPUT	RVW MIN	RVW 25th	RVW MED	RVW 75th	RVW MAX	Total Time	PRE-TIME EVAL	PRE-TIME POSIT	PRE-TIME SDW	INTRA-TIME MIN	INTRA-TIME 25th	INTRA-TIME MED	INTRA-TIME 75th	INTRA-TIME MAX	IMMD POST
REF	11042	Debridement, subcutaneous tissue (includes	23%	000	0.023			0.80			36	9	1	1			15			10
HVD	11056	Paring or cutting of benign hyperkeratotic les		000	0.057			0.61			15	2					8			5
SVY	11056	Paring or cutting of benign hyperkeratotic les	31	000	0.055	0.25	0.50	0.75	0.82	1.60	19	5	2	0	2	7	10	10	15	2
REC		*25th percentile*			0.030			0.50			19	5	2	0			10			2

AMA/Specialty Society RVS Update Committee Recommendations

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Tab 20 - revised 9/12/02		**FAMILY 1**						**Family 2**					
2			**CPT Code**		**CPT Code**		**CPT Code**		**CPT Code**		**CPT Code**		**CPT Code**	
3		**CMS STAFF TYPE, MEDICAL SUPPLY, OR EQUIPMENT CODE**	**11000 - Debridement of extensive eczematous or infected skin; up to 10% of body surface**		**11001 - each additional 10% of the body surface (List separately in addition to code for primary procedure.)**		**Code Descriptor**		**11055 - Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); single lesion**		**11056 - Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); two to four lesions**		**11057 - Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); more than four lesions**	
4	**LOCATION**		**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**
5	**GLOBAL PERIOD**		**0**	**0**	ZZZ	ZZZ			**0**	**0**	**0**	**0**	**0**	**0**
6	**TOTAL CLINICAL LABOR TIME**	**1130**	**35.0**	**0.0**	**7.0**	**0.0**	**0.0**	**0.0**	**28.0**	**0.0**	**35.0**	**0.0**	**35.0**	**0.0**
7	**TOTAL PRE-SERV CLINICAL LABOR TIME**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
8	**TOTAL SERVICE PERIOD CLINICAL LABOR TIME**		**32.0**	**0.0**	**7.0**	**0.0**	**0.0**	**0.0**	**28.0**	**0.0**	**35.0**	**0.0**	**35.0**	**0.0**
9	**TOTAL POST-SERV CLINICAL LABOR TIME**		**3.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
10	**PRE-SERVICE**													
11	**Start: Following visit when decision for surgery or procedure made**													
12	Complete pre-service diagnostic & referral forms													
13	Coordinate pre-surgery services													
14	Schedule space and equipment in facility													
15	Office visit before surgery/procedure: Review test and exam results													
16	Provide pre-service education/obtain consent													
17	Follow-up phone calls & prescriptions													
18	Other Clinical Activity (please specify)													
19	**End:When patient enters office/facility for surgery/procedure**													
20	**SERVICE PERIOD**													
21	**Start: When patient enters office/facility for surgery/procedure**													
22	**Pre-service services**													
23	Review charts		**2**						**3**		**3**		**3**	
24	Greet patient and provide gowning		**3**						**3**		**3**		**3**	
25	Obtain vital signs		**3**						**3**		**3**		**3**	
26	Provide pre-service education/obtain consent		**3**						**4**		**4**		**4**	
27	Prepare room, equipment,supplies		**3**						**3**		**3**		**3**	
28	Prepare and position patient/ monitor patient/ set up IV		**3**						**3**		**3**		**3**	
29	Sedate/apply anesthesia													
30	**Intra-service**													
31	Assist physician in performing procedure		**7**		7				**3**		**10**		**10**	
32	**Post-Service**													
33	Monitor pt. following service/check tubes, monitors, drains													
34	Clean room/equipment by physician staff		**3**						**3**		**3**		**3**	
35	Complete diagnostic forms, lab & X-ray requisitions		**2**											
36	Review/read X-ray, lab, and pathology reports													
37	Check dressings & wound/ home care instructions /coordinate office visits /prescriptions		**3**						**3**		**3**		**3**	
38	Phone call													
39	Coordination of Care													
40	Discharge day management 99238 --12 minutes 99239 --15 minutes													
41	Other Clinical Activity (please specify)													
42	**End: Patient leaves office**													
43	**POST-SERVICE Period**													
44	**Start: Patient leaves office/facility**													
45	Conduct phone calls/call in prescriptions		**3**											
46	*Office visits:* Greet patient,escort to room; provide gowning; interval history & vital signs and chart; assemble previous test reports/results;assist physician during exam; assist with dressings, wound care, suture removal; prepare dx test, prescription forms; post service education, instruction, counseling; clean room/equip, check supplies; coordinate home or outpatient care													
47	*List Number and Level of Office Visits*													
48	99211 16 minutes	16												
49	99212 27 minutes	27												
50	99213 36 minutes	36												
51	99214 53 minutes	53												
52	99215 63 minutes	63												
53	Other													
54														
55	*Total Office Visit Time*		0	0	0	0	0	0	0	0	0	0	0	0
56	Other Activity (please specify)													
57	**End: with last office visit before end of global period**													

AMA/Specialty Society RVS Update Committee Recommendations

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
2			CPT Code		CPT Code		CPT Code		CPT Code		CPT Code		CPT Code	
3		CMS STAFF TYPE, MEDICAL SUPPLY, OR EQUIPMENT CODE	11000 - Debridement of extensive eczematous or infected skin; up to 10% of body surface		11001 - each additional 10% of the body surface (List separately in addition to code for primary procedure.)		Code Descriptor		11055 - Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); single lesion		11056 - Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); two to four lesions		11057 - Paring or cutting of benign hyperkeratotic lesion (eg, corn or callus); more than four lesions	
4	**LOCATION**		**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**	**In Office**	**Out Office**
58	**MEDICAL SUPPLIES**													
59	gown, staff, impervious	11304	**1**											
60	mask, surgical with shield	11306	**1**											
61	disposable scalpel # 11, 15, 20 blade	11504	**1**		1				**1**		**1**		**1**	
62	sterile drape, 22" x 25"	14001	**1**											
63	gloves, sterile	14005	**1**						**1**		**1**		**1**	
64	swab, alcohol	31101	**0**						**2**		**2**		**2**	
65	gauze, sterile 4x4	31505	**3**		3									
66	gauze, sterile 3x3	31507	**3**		3									
67	gauze, sterile 4x4 (10 pack)	31508												
68	kling roller bandage 2x131	31509	**1**		1									
69	adaptic (Gill Podiatry) @ .55/each	NEW	**1**		1									
70	xylocaine w/epinephrine 1%, 20 ml	51504												
71	ethyl chloride	51305												
72	betadine	52301	**10**		10									
73	hydrogen peroxide	52303	**10**		10									
74	lumicaine (Gill Podiatry) @ .13/cc	NEW	**1 cc**		1 cc									
75	syringe, 10 cc or 12 cc	91407												
76	needle, 18 to 24 gauge	91402												
77	needle 30 g	91427												
78	patient gown, disposable	11107												
79	exam table paper	11111	**7 feet**						**7 feet**		**7 feet**		**7 feet**	
80	pillow case	11112	**1**						**1**		**1**		**1**	
81	gloves, non-sterile	11302	**2**						**2**		**2**		**2**	
82	slippers, disposable (pair)	11105	**1**						**1**		**1**		**1**	
83	thermometer probe cover, disposable	11509	**1**											
84	Pedi pre-tape spray (Gill Podiatry) @ 1.08/ounce	NEW							**1 ounce**		**1 ounce**		**1 ounce**	
85	Elastoplast elastic tape (Gill Podiatry) @ .35/ft	NEW							**6"**		**6"**		**6"**	
86	Adhesive foam 1/8" (Gill Podiatry) @ 1.25/ft	NEW							**4"**		**6"**		**8"**	
87	Fabco 2" (Gill Podiatry) @ 2.28/roll	NEW							**6"**		**6"**		**6"**	
88	Semmes-Weinstein monofilament (Medical Monofilament Manufacturing, LLC) @ .23/monofilament	NEW							**1**		**1**		**1**	
89														
90														
91														
92														
93														
94	**Equipment**													
95	Power table	E11003	**35**		7				**28**		**35**		**35**	
96	Exam lamp	E30006	**35**		7				**28**		**35**		**35**	
97														
98														
99														
100														
101														
102														
103														