AMA/Specialty Society RVS Update Committee
Renaissance Hotel, Chicago, IL
April 24-27, 2019

Meeting Minutes

I. Welcome and Call to Order

Doctor Peter Smith called the meeting to order on Friday, April 26, 2019 at 8:00 a.m. The following RUC Members were in attendance:

Peter K. Smith, MD
Jennifer Aloff, MD
Allan Anderson, MD
Margie C. Andreae, MD
Michael D. Bishop, MD
James Blankenship, MD
Robert Dale Blasier, MD
Jimmy Clark, MD
Scott Collins, MD
Gregory DeMeo, MD
Verdi J. DiSesa, MD
Jeffrey P. Edelstein, MD
Matthew J. Grierson, MD
David F. Hitzeman, DO
Omar S. Hussain, DO
Walter Larimore, MD
Alan Lazaroff, MD
M. Douglas Leahy, MD, MACP
Bradley Marple, MD
Daniel McQuillen, MD
Dee Adams Nikjeh, PhD
Jordan Pritzker, MD
John H. Proctor, MD, MBA
Marc Raphaelson, MD
Christopher K. Senkowski, MD, FACS
Ezequiel Silva III, MD
Norman Smith, MD
Stanley W. Stead, MD, MBA
G. Edward Vates, MD
James C. Waldorf, MD

Gregory L. Barkley, MD*
Eileen Brewer, MD*
Joseph Cleveland, MD*
William D. Donovan, MD, MPH*
William F. Gee, MD*
Gregory Harris, MD*
John Heiner, MD*
Peter Hollmann, MD*
Gwenn V. Jackson, MD*
Thomas Kintanar, MD*
Gregory Kwasny, MD*
John Lanza, MD*
Mollie MacCormack, MD*
Scott D. Oates, MD*
Joseph Schlecht, DO*
Steven Schmitt, MD*
M. Eugene Sherman, MD*
Michael J. Sutherland, MD*
Donna Sweet, MD*
Timothy H. Tillo, DPM*
Thomas J. Weida, MD*
David Wilkinson, MD, PhD*

*Alternate

II. Chair's Report

- Doctor Smith welcomed everyone to the RUC Meeting.

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

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

- Doctor Smith welcomed the following Observer:
  - Brian DeBusk, PhD – Medicare Payment Advisory Commission (MedPAC)

- Doctor Smith welcomed the following Member of the CPT Editorial Panel:
  - Jordan Pritzker, MD – CPT Editorial Panel RUC Member

- Doctor Smith congratulated the following new RUC Members:
  - Matthew J. Grierson, MD – American Academy of Physical Medicine & Rehabilitation (AAPM&R)
  - Omar S. Hussain, DO – American Thoracic Society (ATS)

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

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

- Doctor Smith conveyed the Lobbying Policy:
  - "Lobbying" means unsolicited communications of any kind made at any time for the purpose of attempting to improperly influence voting by members of the RUC on valuation of CPT® codes or any other item that comes before the RUC, one of its workgroups or one of its subcommittees.
  - Any communication that can reasonably be interpreted as inducement, coercion, intimidation or harassment is strictly prohibited. Violation of the prohibition on lobbying may result in sanctions, such as being suspended or barred from further participation in the RUC process.
  - Complaints about lobbying should be reported promptly in writing to the Director, Physician Payment Policy and Systems.
  - Full lobbying policy found on Collaboration site (Structure and Functions) and the RUC App.

- Doctor Smith shared the following procedural rules for RUC members:
  - Before a presentation, any RUC member with a conflict will state their conflict. That RUC member will not discuss or vote on the issue and it will be reflected in the minutes.
  - RUC members or alternates sitting at the table may not present or debate for their society.

- Expert Panel – RUC members exercise their independent judgment and are not advocates for their specialty.
- RUC members should address the Chair directly throughout the meeting.

- Doctor Smith conveyed the following procedural guidelines to the Facilitation Committee process:
  - Ideal Composition:
    - Knowledgeable regarding the issues at hand
      - Primary and Secondary Reviewers
      - Alternates who serve in the seat during presentation
    - Representative of the RUC as a whole
    - Without conflict of interest
  - RUC alternate members may participate in substitution of a RUC member during facilitations but should not serve in addition to the RUC member.
  - RUC members should attend facilitations for tabs in which he/she is the primary reviewer and serve as a vice-chair of that facilitation.
  - RUC members or alternates should not serve on facilitation for an issue in which their specialty society has a primary interest (surveyed). If assigned to that facilitation, speak with RUC staff. This did not apply to the April 2019 Tab 9 Office Visits issue.

- Doctor Smith conveyed the following procedural guidelines related to RUC Ballots:
  - If a tab fails, all RUC Members/Alternates must complete a ballot to aid the facilitation committee.
  - Alternates should identify themselves on the ballots, and may be asked to serve on the facilitation committee.
  - The RUC will suspend deliberation to allow sufficient time to ensure that all 28 ballots are completed. The function of the facilitation committee will be enhanced greatly by the small amount of time and work as each member carefully considers their estimation of appropriate work value(s).

- Doctor Smith laid out the following procedural guidelines related to specialty society staff/consultants:
  - Specialty Society Staff or Consultants should not present/speak to issues at the RUC Subcommittee, Workgroup or Facilitation meetings – other than providing a point of clarification.

- Doctor Smith conveyed the following procedural guidelines related to commenting specialty societies:
  - In October 2013, the RUC determined which members may be "conflicted" to speak to an issue before the RUC:
    1. a specialty surveyed (LOI=1) or
    2. a specialty submitted written comments (LOI=2).

    RUC members from these specialties are not assigned to review those tabs.

  - The RUC also recommended that the RUC Chair welcome the RUC Advisor for any specialty society that submitted written comments (LOI=2), to come to the table to verbally address their written comments. It is the discretion of that society if they wish to sit at the table and provide further verbal comments.

- Doctor Smith relayed the following procedural guideline related to presentations:
  - If RUC Advisors/presenters need time to review new resources/data brought up during discussion of a tab, they should notify the RUC Chair.

- Doctor Smith shared the following procedural guidelines related to voting:
  - RUC votes are published annually on the AMA RBRVS website each July for the previous CPT cycle.
  - The RUC votes on every work RVU, including facilitation reports.
  - If members are going to abstain from voting because of a conflict or otherwise, please notify AMA staff so we may account for all 28 votes.
  - Please share voting remote with your alternate if you step away from the table to ensure 28 votes.

- Doctor Smith announced that all meetings are recorded for AMA staff to accurately summarize recommendations to CMS.

III. Director's Report

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

- The new RUC database with the 2018 preliminary Medicare claims data is available from the Collaboration site; please download this version. Kurt Gillis, AMA Principal Economist, will provide an analysis of the data at this meeting.

- Be sure to check the Handouts at the Meeting folder available on the RUC Collaboration site. RUC staff have posted everything that was submitted.

IV. Approval of Minutes from January 2019 RUC Meeting

- The RUC approved the January 2019 RUC meeting minutes as submitted.

- The past chair of the Multi-Specialty Points of Comparison (MPC) Workgroup informed the RUC that since the last meeting, sixteen codes that had not been reviewed by the RUC in more than fifteen years were proposed for deletion from the MPC list. There was no objection from any society, so those sixteen codes have been removed.

V. CPT Editorial Panel Update (Informational)

Doctor Pritzker provided the following CPT Editorial Panel update:

- The Panel last met in February 2019. Here are some items of interest to the RUC:
  - Office/Other Outpatient and Prolonged E&M Services

    The Panel considered and approved with modifications the two code change applications submitted by the CPT/RUC Joint Workgroup on Evaluation and Management (E/M) services. The first of the two proposals was for the deletion of code 99201 and revision of the remainder of the office and other outpatient E/M codes 99202-99215. Among the many changes that were approved are the removal of history and exam as key components and the added requirement that a medically appropriate history and/or exam must be performed. The basis for code selection will be either the level of medical decision-making or the amount of time spent performing the service on the day of the encounter.

    The second proposal was for the establishment of a new code for prolonged office or other outpatient services with or without direct patient contact. This code is only to be reported for prolonged services with the highest level new and established office or other outpatient codes, 99205 and 99215. Existing prolonged services codes 99354 through 99356 were revised to clarify the settings for which they are intended to be reported (eg, inpatient, observation, etc.).
  - RUC-referred issues that were addressed at the February 2019 meeting were**:**
    - The bundling of imaging services code 77012 with percutaneous lung biopsy code 32405. The Panel approved the deletion of code 32405 and the addition of a new code that includes the biopsy and imaging guidance when performed.
    - Addition of a new code for vestibular evoked myogenic potentials and the replacement of limited and comprehensive auditory evoked potentials codes 92585 and 92586 with four new codes that better define limited and comprehensive. The Panel approved three new codes for vestibular evoked myogenic potential (VEMP) which distinguish between performance of cervical VEMP, ocular VEMP, and cervical and ocular VEMP performed together.
    - Deletion of cardiovascular device interrogation code 93299. The Panel approved deletion of 93299.
- May Panel meeting
  - The next Panel meeting is May 9-11, 2019 in Chicago at the Loews Chicago Hotel.
  - There are 45 Code Change Applications (CCA) on the May meeting agenda.
  - RUC member Ezequiel Silva, III, MD, will attend the meeting as the RUC representative.
  - SmartApp

    May is the first Panel meeting that the SmartApp electronic code change application went "live". Applicants had the choice of submitting code change requests on the usual paper application or on the SmartApp for the May meeting. This option will also be offered for submissions for the September 2019 Panel meeting. There will be SmartApp demonstrations running all day at the May Panel meeting on Thursday and Friday, May 9 and 10.

- RUC-referred issues
  - A CCA to address ortho voltage radiation treatment code 77401 was submitted for consideration at the May meeting but was withdrawn by the societies. The societies indicated they would refine the CCA and submit it for consideration at the September 2019 Panel meeting.
  - There is one RUC-referred issue on the May agenda, which is Tab 12. The RAW identified lung cancer screening code G0297 for estimated utilization over 30,000 in 2017. The RUC referred the code to the Panel for establishment of a permanent CPT code. Tab 12 is a request for the new code.
  - The Panel is also reviewing Appendix E – Modifier 51 Exempt codes. This work originated as part of a RAW screen and the Panel is collecting feedback from Advisors as to the appropriateness of the current list.

- The next application submission deadline is June 25, 2019, for the September 2019 Panel meeting, which will be in Seattle, WA.
- As a point of information, the Panel will be monitoring codes that are approved and subsequently cannot be surveyed due to an insufficient number of surveyees. This is a concern because a procedure must be performed by many providers across the United States or the procedure or service must be performed with frequency consistent with the intended clinical use (i.e., a service for a common condition should have high volume, whereas a service commonly performed for a rare condition may have low volume) in order to receive a Category I CPT code.

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

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

- Introduced staff from CMS attending this meeting:
  - Pamela Fox Villanyi, MD, MS – Medical Officer, Center for Program Integrity
  - Karen Nakano, MD – Medical Officer
  - Marge Watchorn – Deputy Director, Division of Practitioner Services

- The Inpatient Prospective Payment System Rule went on display on April 23rd and will be published on May 3, 2019.

- CMS is working on the NPRM for the Medicare Physicians' Payment Schedule for CY2020. Please reach out to CMS *as soon as possible* about any issues regarding codes or policy proposals.

- No personnel changes for the Division of Practitioner Services and Management. However, the Acting Deputy for the Division of Outpatient Care is Michael Treitel.

VII. Contractor Medical Director Update (Informational)

Doctor Richard W. Whitten, Medicare Contractor Medical Director, provided the Contractor Medical Director update:

- Highlighted the consolidation that has occurred in Medicare Administrative Contractors (MACs) across the country:
  - Medicare Part A/B MACs – From over 100 contractors, there are now 12 contracts and seven contractors.
  - Durable Medical Equipment (DME) MAC jurisdictions –There are four contracts and only two contractors.
  - Home Health & Hospice (HH+H) MAC jurisdictions – There are four contracts and three contractors.

- The 21st Century Cures Act has dramatically changed the Local Coverage Determinations (LCD) process including the establishment of Contractor Advisory Committees (CACs) for consultation of a proposed LCD or revision. [See the following Medicare Learning Network (MLN) Matters article: https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM10901.pdf].
  - For DME, the first multi-jurisdictional CAC was held on 03/06/2019: https://med.noridianmedicare.com/web/jddme/policies/lcd/contractor-advisory-committee
  - Open Public Meeting is scheduled for 06/24/2019: https://med.noridianmedicare.com/web/jadme/policies/lcd/open-meeting
  - For Parts A/B, the first multi-jurisdictional CAC was held on 03/20/2019: https://med.noridianmedicare.com/web/jeb/article-detail/-/view/10525/vertebral-augmentation-cac-voting-results
  - Open Meeting is scheduled for June 24, 2019. (Further schedule materials posted soon on websites).

- CMD Recommendation:
  The CMS/RUC process does not generally create relative value units for Category III codes; however, it would assist the contractors in uniformity, if the RUC considered and CMS would value Category III codes that exceed some utilization threshold *(See Other Business)*.

VIII. Medicare Physician Spending and Utilization Growth Update (Informational)

Dr. Kurt Gillis, AMA Principal Economist, provided an update on Medicare Physician Spending Growth for 2018: Early Estimates. A presentation was given to review the analysis of an early version of the Medicare Physician/ Supplier Procedure Summary files (PSPS) for 2018.

- Medicare Physician Fee Schedule (MFS) Services
  - Defined as all "active" codes plus "anesthesia" and certain "carrier-priced" and "restricted" codes
  - Provided to Part B fee-for-service enrollees (33 million in 2018)
  - Account for 23% of Medicare Part B spending
  - Account for 10% of total Medicare spending

- Data & Methods
  - Comparing early version of the PSPS for 2018 to final PSPS data for 2017

- Estimates are based on claims for 2018 processed through December 31, 2018 (>90% complete)
- Adjust 2018 spending to account for missing claims (those processed after Dec 31, 2018)
- Use allowed charge as measure of spending
- Estimate changes in spending due to changes in pay, utilization, and site of service
- Summarize by BETOS category (old version)

- Medicare Physician Spending by Type of Service 2018 (estimated)
  $93.4 billion in Allowed Charges
  - E/M 51%
  - Procedures 32%
  - Imaging 10%
  - Tests 6%
  - Other 1%

- Results for 2018 – Overall
  - Medicare physician spending increased 1.2% due to:
    - Increase in pay (0.3%)
    - Increase in utilization per enrollee (1.7%)
    - Decrease in fee-for-service enrollment (-0.9%)
  - Not much variation in pay or utilization changes by BETOS

- Results for 2018 – Imaging
  - 2% increase in spending
    - 0% increase in pay
    - 2% increase in utilization per enrollee
  - Notable utilization changes:
    - 5% decrease for Nuclear Medicine
    - 6% increase for PET

- Results for 2018 – Evaluation and Management (E/M)
  - 1% increase in spending
    - 1% increase in pay
    - 1% increase in utilization per enrollee
  - Notable utilization changes:
    - 10% increase in Wellness Visits (9.1 million provided in 2018)
    - 20% increase in "Care Planning and Management"
    - 2% decrease in Emergency Room Visits
  - "Wellness Visit" includes:
    - Initial and subsequent annual wellness visits
    - "Welcome to Medicare visit"
  - "Care Planning and Management" includes:
    - Transitional care management (13% growth in utilization)
    - Chronic care management (24% growth in utilization)
    - Advance care planning (32% growth in utilization)

- Results for 2018 – Procedures
  - 2% increase in spending
    - 0% increase in pay
    - 2% increase in utilization per enrollee

- Notable utilization changes:
  - 9% increase for Physical Therapy
- Continuing shift in site of service for Major Cardiovascular Procedures
  - Shifting to non-facility (e.g., CPT 37225, 37227)

- Results for 2018 – Tests and Other
  - 1% increase in spending
    - 1% decrease in pay
    - 3% increase in utilization per enrollee
  - Notable utilization changes:
    - 18% increase for EKG Monitoring

- Utilization Growth for 2018 by Major BETOS
  - Imaging 2.3%
  - E&M 1.2%
  - Procedures 2.2%
  - Tests 2.9%

- Summary
  - Low (1.2%) spending growth for 2018 that was partly due to a decline in FFS enrollment
  - Near zero average change in pay (0.3%)
  - Utilization growth averaged 1.7%. High growth categories:
    - Wellness visits (10% growth)
    - Care Planning and Management (20% growth)
    - Physical Therapy (9% growth)
  - 2018 estimates will be revised when final data is received in the Fall.

IX. Relative Value Recommendations for *CPT 2021*

Breast Reconstruction (Tab 4)
Jeff Kozlow, MD (ASPS); Mark Villa, MD (ASPS)

In February 2019, the CPT Editorial Panel approved the deletion of two codes and editorial revision of seventeen codes to provide descriptor clarification of any overlap in physician work for breast reconstruction services. In the CPT coding changes application, the specialty stated that this change is editorial and does not involve a change in work. The RUC reviewed whether the changes are editorial in nature or if these services should be surveyed.

At the April 2019 RUC meeting, the RUC agreed that the seventeen breast reconstruction services should be surveyed for the October 2019 RUC meeting. Codes 11960, 19316, 19350, 19355, and 19396 were also included as being part of the same code family. Based on the change in the typical patient for CPT code 11971 and multiple Harvard valued codes, the RUC agreed that all twenty-two of these services be surveyed, contrary to the specialties initial recommendation that these changes are editorial only and do not require surveying. **The RUC recommends surveying all twenty-two codes for the October 2019 RUC meeting.**

Lung Biopsy-CT Guidance Bundle (Tab 5)
Kurt Schoppe, MD (ACR); Curtis Anderson, MD (SIR); Michael Hall, MD (SIR); Minhajuddin Khaja, MD (SIR); Lauren Golding, MD (ACR); Andrew Moriarity, MD (ACR)

In October 2017, maintaining the consistency with previous iterations, AMA staff used the 2016 estimated Medicare 5% sample claims data to determine when a code pair is reported on the same day, same patient and same NPI number at or more than 75% of the time. Only groups that totaled allowed charges of $5 million or more were included in this screen. As with previous iterations, any code pairs in which one of the codes was either below 1,000 in Medicare claims data and/or contained at least one ZZZ global service were removed. Based on these criteria, CPT codes 32405 and 77012 were identified. In January 2018, the RUC recommended to refer to CPT to bundle with 77012. In February 2019, the CPT Editorial Panel approved the replacement of CPT code 32405 with a new code to describe lung needle biopsy, including imaging guidance. Following the April 2019 RUC meeting, the specialty society will submit a request to the Research Subcommittee to modify the vignette for CPT code 77012 to reflect a typical patient that is not a lung biopsy patient.

Compelling Evidence
The specialty society presented compelling evidence for CPT code 32408 based on a change in technology/ technique. Since the deleted lung biopsy code 32405 was last RUC valued in 2010, cancer treatment protocols have evolved significantly to require more definitive tissue diagnosis including biomolecular marker profiles. Radiologists must now acquire larger or a higher number of tissue samples for biomarker profiles that will guide initial or ongoing treatment decisions in these patients. Currently, radiologists typically obtain 3 or more core biopsy samples compared to 1-3 passes when this code was previously valued. The increased tissue requirement (either in size or number) increases the risk for pneumothorax and other procedural complications. This requirement is similar for other organ masses as well (e.g. liver and hepatocellular carcinoma) as molecular based diagnoses influence treatment options.

In addition, lung cancer screening CT now identifies smaller-sized nodules requiring biopsy, typically in patients with emphysema and history of tobacco abuse. Advances in chemotherapy agents and treatment protocols in the past 5-8 years now require specific tissue diagnoses, which has impacted the risk/benefit ratio for sicker, more complex patients in whom a biopsy may have been deferred in the past when the results would not have effected management of the patient's treatment. These factors have resulted in more requests to biopsy smaller and/or increasingly challenging lung lesions. The RUC approved the societies' compelling evidence based on changes in technology/technique.

32408 ***Core needle biopsy, lung or mediastinum, percutaneous, including imaging guidance, when performed***
The RUC reviewed the survey results from 33 radiologists and interventional radiologists and agreed on the following physician time components: 30 minutes of pre-service evaluation, 5 minutes of pre-service positioning, 6 minutes of pre-service scrub/dress/wait, 40 minutes of intra-service time, and 20 minutes of post-service time. CPT code 32408 is not reported with an E/M, the entire clinical evaluation of the patient is performed during the pre-service evaluation time.

The RUC reviewed the median work RVU of 4.00 and agreed that this value appropriately captures the typical amount of physician work involved when performing this service. To justify a work RVU of 4.00, the RUC compared the survey code to MPC code 49405 *Image-guided fluid collection drainage by catheter (eg, abscess, hematoma, seroma, lymphocele, cyst); visceral (eg, kidney, liver, spleen, lung/mediastinum), percutaneous* (work RVU= 4.00, intra-service time of 40 minutes and total time of 95 minutes) and noted that both services involve identical intra-service time, similar total time and should be valued identically. The RUC also compared the survey code to CPT code 31288 *Nasal/sinus endoscopy, surgical, with sphenoidotomy; with removal of tissue from the sphenoid sinus* (work RVU= 4.10, intra-

service time of 40 minutes and total time of 96 minutes) and noted that both services involve identical intra-service time, similar total time and should be valued similarly.

To further support the recommended work RVU of 4.00, the RUC compared the survey code to the second key reference service (KRS) code 32550 *Insertion of indwelling tunneled pleural catheter with cuff* (work RVU= 3.92, intra-service time of 30 minutes and total time of 85 minutes) and noted that the survey code has 10 minutes more of intra-service time and 16 minutes more of total time than code 32550, supporting the recommended work value for the survey code. The RUC also discussed how CT guided lung biopsy is more technically challenging and riskier than insertion of indwelling tunneled pleural catheter with cuff and the risk of pneumothorax is significantly higher. The RUC agreed that the survey code is more intense/complex than the second KRS code 32550. **The RUC recommends a work RVU of 4.00 for CPT code 32408.**

Practice Expense (PE)
For ED053, Professional PACS Workstation the specialty used the equipment time formula for therapeutic imaging services, which is equal to half the pre-service physician work time and half the post-service physician work time, as specified by CMS in the proposed rule for 2017. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Auditory Evoked Potentials (Tab 6)
Andrew Moriarity, MD (AAA); Kevin Kerber, MD (AAN); Peter Manes, MD (AAO-HNS); Marc Nuwer, MD (ACNS); Leisha Eiten, AuD (ASHA); Devin McCaslin, PhD (ASHA); Stuart Trembath, MA (ASHA)

In October 2017, the Relativity Assessment Workgroup (RAW) requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT code 92585 was identified. In January 2018, the RUC recommended to refer code 92585 and family code 92586 to the February 2019 CPT meeting to clarify the code descriptors and better define limited/comprehensive auditory evoked potentials. In February 2019, the CPT Editorial Panel deleted two codes and replaced them with four new codes to report auditory evoked potentials. The deleted codes, 92585 and 92586, are almost never reported alone, however there is no single code that the services are typically reported with. For the new codes, the RUC was concerned about possible duplication in pre-service work especially because the service is almost always performed with another service. The specialty societies noted that the pre-service work includes placement of electrodes that does not typically exist in the pre-service work of other services that may be reported on the same day.

Compelling Evidence
Compelling evidence for increased work to perform auditory evoked potentials services (92584, 92651-92653) is evidence that incorrect assumptions were made in the previous valuation of the service. Specifically, a flawed mechanism or methodology was used in the previous valuation. CPT codes 92584, 92585, and 92586 have never been surveyed for professional work and the time source for code 92585 is "CMS-Other". Additionally, audiologists can report Medicare services independently, which was not true when these services were last surveyed and as a result the audiologist work of these services is moving from the practice expense to the work component of the RBRVS. **The RUC agrees that there is compelling evidence of flawed methodology used in the previous valuation.**

A representative of CMS asked if the services in this family of codes is ever reported "incident to" and the specialty societies clarified that audiologists are the dominant provider and audiologists cannot bill "incident to" a physician's services. If a physician is reporting the service, they perform the work of the service themselves and would not have a clinical staff type in their office that would be able to perform the service independently. Providers of the service anticipate that the number of physicians performing

the service will continue to decrease and the number of audiologists performing the service will continue to increase. Additionally, the specialty societies explained that all services in the family include pre-service work. During this time the physician or qualified health care professional applies surface electrodes to the skin. This involves cleaning the electrode site and abrading the site to the degree that allows requisite impedance to obtain the amplitude and waveforms latencies necessary for accurate findings. This requires skill especially when the patient is an infant, baby or young child.

92584 ***Electrocochleography***
The RUC reviewed the survey results from 131 audiologists and otolaryngologists and determined that the survey median work RVU of 1.00 accurately reflects the typical physician and qualified health care professional work necessary for this service. The RUC recommends 10 minutes pre-service time, 30 minutes intra-service time and 5 minutes post-service time. Both the pre-service and intra-service work descriptions include placement of electrodes. The specialty societies clarified that during the pre-service work, the surface electrodes are placed on the patients' head and during the intra-service work the tympanic electrode is placed in the ear canal. The survey indicated a median post-service work time of 15 minutes, however the specialty societies recommended reducing this time to 5 minutes, to account for those times 92584 is completed in conjunction with other audiologic or vestibular tests.

The RUC compared the survey code to the top key reference service, CPT code 95907 *Nerve conduction studies; 1-2 studies* (work RVU = 1.00 and 35 minutes total time), noting that the survey respondents indicated that CPT code 95907 is very similar in intensity and complexity to the survey code and should be valued similarly. The RUC also compared the survey code to second key reference service CPT code 95816 *Electroencephalogram (EEG); including recording awake and drowsy* (work RVU = 1.08 and 26 minutes total time). **The RUC recommends a work RVU of 1.00 for CPT code 92584.**

92650 ***Auditory evoked potentials; screening of auditory potential with broadband stimuli, automated analysis***
CPT code 92650 is the first of four new codes that will replace codes 92585 (auditory evoked potentials, comprehensive) and 92586 (auditory evoked potentials, limited). This code captures the work of newborn hearing screening that is completed either in the hospital or outpatient clinic settings.

The RUC reviewed the survey results from 129 audiologists and otolaryngologists and determined that the survey 25th percentile work RVU of 0.25 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 5 minutes pre-service time, 15 minutes intra-service time and 5 minutes post-service time. The RUC compared the survey code to CPT code 97032 *Application of a modality to 1 or more areas; electrical stimulation (manual), each 15 minutes* (work RVU = 0.25and intra-service time of 15 minutes), noting that the comparison code has identical intra-service time and should be valued identically. The RUC also compared the survey code to second key reference service, CPT code 92587 *Distortion product evoked otoacoustic emissions; limited evaluation (to confirm the presence or absence of hearing disorder, 3-6 frequencies) or transient evoked otoacoustic emissions, with interpretation and report* (work RVU = 0.35 and 18 minutes total time). **The RUC recommends a work RVU of 0.25 for CPT code 92650.**

92651 ***Auditory evoked potentials; screening of auditory potential with broadband stimuli, automated analysis***
CPT code 92651 is the second of four new codes that will replace codes 92585 (auditory evoked potentials, comprehensive) and 92586 (auditory evoked potentials, limited). This code is intended for post-screening follow up, during which responses to broadband-evoked auditory brainstem responses (ABRs) are obtained at moderate-to-high level click stimuli to rule out severe-to-profound hearing loss and auditory neuropathy/dys-synchrony. Additionally, responses to broadband stimuli are obtained at low stimulus levels to identify substantive hearing loss or to verify the need for additional threshold testing.

The RUC reviewed the survey results from 145 audiologists and otolaryngologists and determined that the survey median work RVU of 1.00 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 10 minutes pre-service time, 30 minutes intra-service time and 10 minutes post-service time. The RUC was concerned about possible duplication in pre-service work especially because the service is almost always performed with another service, although no one code rises to the level of typical.

The survey indicated a median post-service work time of 15 minutes, however the specialty societies recommended reducing this time to 10 minutes, to account for those times when 92651 is completed in conjunction with other audiologic tests. The RUC noted that family CPT code 92584, was reduced to 5 minutes for the same reason, to account for overlap with other testing, however CPT code 92651 was reduced to 10 minutes because additional post-service activities are required such as mandated reporting of test results to state programs, which is not required for 92584. The specialty explained that although this code has more post-service time it has similar physician and qualified health care professional work to 92584 and should be valued similarly. The RUC compared the survey code to CPT code 76818 *Fetal biophysical profile; with non-stress testing (*work RVU = 1.05 and 30 minutes intra-service time and 48 minutes total time), noting that although the comparison requires slightly less post-service time, the code is more intense and complex to perform, justifying the greater value. The RUC also compared the survey code to second key reference service, CPT code 95907 *Nerve conduction studies; 1-2 studies* (work RVU = 1.00 and 35 minutes total time). **The RUC recommends a work RVU of 1.00 for CPT code 92651.**

92652 ***Auditory evoked potentials; for threshold estimation at multiple frequencies, with interpretation and report***
CPT code 92652 is the third of four new codes that will replace codes 92585 (auditory evoked potentials, comprehensive) and 92586 (auditory evoked potentials, limited). This code describes threshold estimation and is intended for more extensive electrophysiologic estimation of behavioral hearing thresholds.

The RUC reviewed the survey results from 146 audiologists and otolaryngologists and determined that the survey median work RVU of 1.50 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 12 minutes pre-service time, 60 minutes intra-service time and 20 minutes post-service time. The RUC compared the survey code to the top key reference service, CPT code 92540 *Basic vestibular evaluation, includes spontaneous nystagmus test with eccentric gaze fixation nystagmus, with recording, positional nystagmus test, minimum of 4 positions, with recording, optokinetic nystagmus test, bidirectional foveal and peripheral stimulation, with recording, and oscillating tracking test, with recording* (work RVU = 1.50 and 60 minutes intra-service time), noting that both codes have identical intra-service time and should be valued identically. The RUC also compared the survey code to second key reference service, CPT code 92640 *Diagnostic analysis with programming of auditory brainstem implant, per hour* (work RVU = 1.76 and 60 minutes intra-service time). **The RUC recommends a work RVU of 1.50 for CPT code 92652.**

92653 ***Auditory evoked potentials; neurodiagnostic, with interpretation and report***
CPT code 92653 is the final of four new codes that will replace codes 92585 (auditory evoked potentials, comprehensive) and 92586 (auditory evoked potentials, limited). This code is intended to identify site of lesion of the auditory nerve and/or brainstem nuclei using broadband-evoked auditory potential responses (AEPs) at moderate-to-high levels to evaluate neural conduction.

The RUC reviewed the survey results from 187 audiologists, otolaryngologists and neurologists and determined that the survey median work RVU of 1.05 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 10 minutes pre-service time, 30 minutes intra-service time and 10 minutes post-service time. The RUC agreed with the specialty

that although this service requires the same work time components as 92651 it is a slightly more complex service which evaluates neural conduction rather than hearing loss. The RUC compared the survey code to the top key reference service, CPT code 95907 *Nerve conduction studies; 1-2 studies* (work RVU = 1.00 and 35 minutes total time), noting that the survey respondents indicated that CPT code 92653 is somewhat more intense and complex than the reference code, justifying the slightly higher work value.

The RUC also compared the survey code to second key reference service, CPT code 95816 *Electroencephalogram (EEG); including recording awake and drowsy* (work RVU = 1.08 and 26 minutes total time). **The RUC recommends a work RVU of 1.05 for CPT code 92653.**

Practice Expense
Clinical staff time was removed from CPT codes 92584 and 92653 because audiologists are the primary specialty performing all five codes and they typically do not employ clinical staff. The audiologist is performing the professional component of the service, so equipment time was adjusted to match the work intra-service time. The equipment item was changed from EF008 *chair with headrest, exam, reclining* to EF009 *chair, medical recliner* for codes 92651 and 92652 as the typical patient is an infant and the parent or caregiver will need to sit as they hold the infant receiving the test, but they will not need the more expensive chair with headrest. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Vestibular Evoked Myogenic Potential Testing (Tab 7)
Paul Pessis, AuD (AAA); Kevin Kerber, MD (AAN); Leisha Eiten, AuD (ASHA); Peter Manes, MD (AAO-HNS); Devin McCaslin, PhD (ASHA); Stuart Trembath, MA (ASHA); Lance Manning, MD (AAO-HNS)

In October 2017, the Relativity Assessment Workgroup (RAW) requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT code 92585 was identified. In January 2018, the RUC recommended to refer code 92585 and family code 92586 to the February 2019 CPT meeting to clarify the code descriptors and better define limited/comprehensive auditory evoked potentials. The specialty societies also indicated that a new related procedure, Vestibular Evoked Myogenic Potentials (VEMP), had recently been approved by the FDA and a new VEMP specific code should be developed. In February 2019, the CPT Editorial Panel created three new codes to report Vestibular Evoked Myogenic Potential (VEMP) testing. A VEMP is an electromyogenic potential of the vestibular system evoked by high-intensity acoustic or vibration stimulation, recorded from the sternocleidomastoid muscle and reflecting the integrity of the saccule of the vestibular labyrinth and inferior branch of the vestibular nerve (cervical or cVEMP) or from the extraocular muscles and reflecting the integrity of the utricle of the vestibular labyrinth and superior branch of the vestibular nerve (ocular or oVEMP).

A representative of CMS asked if the services in this family of codes is ever reported "incident to" and the specialty societies clarified that audiologists are the dominant provider and audiologists cannot report "incident to" a physician's services. The physician specialties explained that if a neurologist orders the test, a tech would perform the test and the neurologists would supervise. This is different than otolaryngologists, whom perform the service themselves. The specialties reiterated that audiologists are expected to be the dominant provider. Additionally, the specialty societies explained that all services in the family include pre-service work. During this time the physician or qualified health care professional applies surface electrodes to the skin. This involves cleaning the electrode site and abrading the site to the degree that allows requisite impedance to obtain the amplitude and waveforms latencies necessary for accurate findings. This requires skill because precise electrode placement and patient positioning is necessary for appropriate activation of the muscles on which the electrodes are placed. These services were previously billed with 92700 *Unlisted otorhinolaryngological service or procedure*. A reviewer

asked the specialty societies to compare the complexity of these services with the auditory evoked potentials services also reviewed at this meeting. The specialty societies explained that it is challenging to compare the two types of services because the patient population for the auditory evoked potentials is a more intense and complex patient population, however the test administration and monitoring of VEMP services are more complex. Overall the range and variance of values across the two families places these services in proper rank order relative to one another.

92517 ***Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP)***
The RUC reviewed the survey results from 213 audiologists, otolaryngologists and neurologists and determined that the survey median work RVU of 0.80 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 7 minutes pre-service time, 20 minutes intra-service time and 5 minutes post-service time. The survey indicated a median pre-service work time of 10 minutes, however the specialty societies recommended reducing this time to 7 minutes, to account for fewer electrodes being utilized than in 92519. CPT code 92517 is the first of three new codes describing VEMP testing. This code describes cervical VEMP (cVEMP) testing.

The RUC compared the survey code to CPT code 29105 *Application of long arm splint (shoulder to hand)* (work RVU = 0.80 and 20 minutes intra-service time and 32 minutes total time), noting that the codes have identical intra-service and total time and should be valued identically. The RUC also compared the survey code to second key reference service, CPT code 95907 *Nerve conduction studies; 1-2 studies* (work RVU = 1.00 and 35 minutes total time). **The RUC recommends a work RVU of 0.80 for CPT code 92517.**

92518 ***Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; ocular (oVEMP)***
The RUC reviewed the survey results from 176 audiologists, otolaryngologists and neurologists and determined that the survey median work RVU of 0.80 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 7 minutes pre-service time, 20 minutes intra-service time and 5 minutes post-service time. The survey indicated a median pre-service work time of 10 minutes, however the specialty societies recommended reducing this time to 7 minutes, to account for fewer electrodes being utilized then in 92519. CPT code 92518 is the second of three new codes describing VEMP testing. This code describes ocular VEMP (oVEMP) testing. The service is the same as code 92517 for a different anatomical area and as such should have the same time and work value.

The RUC compared the survey code to CPT code 29105 *Application of long arm splint (shoulder to hand)* (work RVU = 0.80 and 20 minutes intra-service time and 32 minutes total time), noting that the codes have identical intra-service and total time and should be valued identically. The RUC also compared the survey code to second key reference service CPT code 95907 *Nerve conduction studies; 1-2 studies* (work RVU = 1.00 and 35 minutes total time). **The RUC recommends a work RVU of 0.80 for CPT code 92518.**

92519 ***Vestibular evoked myogenic potential (VEMP) testing, with interpretation and report; cervical (cVEMP) and ocular (oVEMP)***
The RUC reviewed the survey results from 176 audiologists, otolaryngologists and neurologists and determined that the survey median work RVU of 1.20 accurately reflects the physician and qualified health care professional work necessary for this service. The RUC recommends 10 minutes pre-service time, 35 minutes intra-service time and 5 minutes post-service time. CPT code 92519 is the third of three new codes describing VEMP testing. This code describes cVEMP testing and oVEMP testing that

are carried out consecutively on the same patient on the same day. The service is the combination of codes 92517 and 92518, however efficiencies are gained when the services are performed together.

The RUC compared the survey code to the top key reference service, CPT code 92540 *Basic vestibular evaluation, includes spontaneous nystagmus test with eccentric gaze fixation nystagmus, with recording, positional nystagmus test, minimum of 4 positions, with recording, optokinetic nystagmus test, bidirectional foveal and peripheral stimulation, with recording, and oscillating tracking test, with recording* (work RVU = 1.50 and 60 minutes intra-service time), noting that the reference code has more intra-service time justifying the greater work value. The RUC also compared the survey code to second key reference service, CPT code 95907 *Nerve conduction studies; 1-2 studies* (work RVU = 1.00 and 35 minutes total time). **The RUC recommends a work RVU of 1.20 for CPT code 92519.**

New Technology
CPT codes 92517-92519 will be placed on the new technology/new services list for re-examination after 3 years of data are available.

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

Exercise Test for Bronchospasm (Tab 8)
Alan Plummer, MD (ATS); Robert DeMarco, MD (CHEST)

The specialty societies have requested to defer the survey of CPT code 94619 and affirmation of code 94617 to the October 2019 RUC meeting. This deferment is due to the availability of the specialty society RUC Advisory team members. **The RUC recommends that the specialty societies survey these codes for the October 2019 RUC meeting.**

Office Visits (Tab 9)
Megan Adamson, MD (AAFP); Phillip Rogers, MD (AAHPM); Marianna Spanaki-Valeras, MD, PhD (AAN); Steve Krug, MD (AAP); Richard Wright, MD (ACC); William Fox, MD (ACP); Audrey Chun, MD (AGS); Brooke Bisbee, DPM (APMA)

In the July 27, 2018, Proposed Rule for the 2019 Medicare Physician Payment Schedule, the Centers for Medicare and Medicaid Services (CMS) proposed significant documentation and payment changes for office visits (99201-99215). CMS called for the major changes as part of their "Patients Over Paperwork" initiative with an expressed intent to allow physicians to spend more time with patients. Physicians are supportive and appreciative of this effort.

As part of both the Proposed and Final Rules in 2018, CMS also proposed to collapse payments for the office visits. Additionally, add-on codes were proposed for additional payment for primary care and certain other specialties. The medical community objected to these proposals and suggested that an alternative coding solution be developed to be utilized not only by Medicare, but by all payors. In the *Final Rule*, CMS stated the following:

> "We recognize that many commenters, including the AMA, the RUC, and specialties that participate as members in those committees, have stated intentions of the AMA and the CPT Editorial Panel to revisit coding for E/M office/outpatient services in the immediate future. We note that the 2-year delay in implementation will provide the opportunity for us to respond to the work done by the AMA and the CPT Editorial Panel, as well as other stakeholders. We

> will consider any changes that are made to CPT coding for E/M services, and recommendations regarding appropriate valuation of new or revised codes."

The Chairmen of the AMA CPT Editorial Panel and the AMA/Specialty Society Relative Value Update Committee (RUC) formed the CPT/RUC Workgroup on E/M to develop a coding structure for office visits to foster burden reduction, while ensuring appropriate valuation. The Workgroup convened seven conference calls and one face-to-face meeting over the course of six months. Each of these meetings were open and transparent, with approximately 300 individuals participating in meetings. The Workgroup solicited feedback from the national medical specialty societies and other health care professional organizations utilizing an electronic survey process, prior to most conference calls. The results of these surveys were shared with all meeting participants and used to develop the new coding structure and documentation guidelines.

Stakeholder input led the Workgroup to align with the CMS proposal to eliminate the physical exam and history component in selecting an appropriate code level. With the proliferation of electronic health record (EHR) systems, these elements of documentation became burdensome and often duplicative within the systems. The Workgroup agreed that the code selection should be based on medical decision making (MDM) or time spent by the physician/qualified health care professional (QHP) on the date of patient encounter. In February 2019, the CPT Editorial Panel approved the Workgroup's recommended new CPT guidelines and revised code descriptors for the office visit codes 99202-99205 and 99211-99215 to report code levels by MDM or time spent on the date of encounter. CPT code 99201 has been deleted. The Panel also created add-on code 99417 to describe extended office visits.

COMPELLING EVIDENCE

The specialty societies presented two points for compelling evidence that the work of providing office visits for the evaluation and management of new and established patients should be modified. First, a flawed methodology in the previous 2010 valuation of these services and second, a change in technology due to the implementation EHRs.

Flawed Methodology
The current work values for office visits were revised in 2010 when CMS accounted for work neutrality from the elimination of payment for consultation codes. In adjusting the work RVUs for office visits, CMS used a mathematical formula to derive the new values. CMS did not request that the RUC resurvey and CMS did not adjust the physician time for these services. The RUC also noted that during the 2005 Five-Year Review, the number of surveying specialties was very limited. Many specialties who commonly perform office visits, including surgical specialties, were not included. The RUC agreed that 1) the previous survey (2005) was not representative of all physicians and health care professionals who perform office visits; and 2) the valuation of these services was changed in 2010 using a flawed methodology.

Change in Technology
According to National Medical Ambulatory Care Survey (NAMCS) data, in 2015, 76% of all practices used electronic health records exclusively, 11% used them partially, and 12% used only paper records. In 2008 the corresponding numbers were 29%, 17%, and 53%. All remarkable differences demonstrating that the technology used to deliver office-based care has changed dramatically. This is confirmed by the CDC, which estimates that use of an EHR increased from 35% in 2007 to 87% in 2015.[1] The EHR

[1] Other citations supporting the change in technology include: https://journals.stfm.org/familymedicine/2018/february/young-2017-0121/
https://ehrintelligence.com/news/physician-ehr-use-workload-trumping-face-time-with-patients

contains more data than paper records, most of which must be reviewed including for drug-drug and, with increasing use of homeopathic substances, drug substance interactions. The use of EHRs has increased physician work by increasing the time physician spend documenting the medical record. In 2016, it was estimated that for every hour spent with patients, physicians spend 2 hours on EHR and desk work, according to an *Annals of Internal Medicine* study.[2]

With increased consolidation of hospitals and EHR systems (EPIC and Cerner now have a combined 85% market share of 500+ bed hospitals), physicians have access to more patient information. The centralization of data is in the best interest of patients and will help support quality care. However, this centralization does increase the time that physicians spend reviewing patient information. The presenters argued that EHR adoption has led to a decrease in efficiency, which may never be fully regained.

The RUC agrees that there is compelling evidence of 1) flawed methodology used in the previous valuation; and 2) technology changes with the growth in use of EHRs.

SURVEY PROCESS AND DATA ANALYSIS

The customized survey, vignettes and reference service lists (RSL) were developed and approved by the Research Subcommittee in conjunction with the CPT/RUC Workgroup on E/M and input from medical specialties. The RSLs were specifically developed in an objective manner to represent relativity within the Medicare Physician Payment Schedule. The Research Subcommittee considered requests from the surveying specialties to add or remove codes from the initial lists originally developed by the Workgroup. The vignettes were developed by the CPT/RUC Workgroup on E/M and approved by the CPT Editorial Panel and the RUC's Research Subcommittee. More than 80 percent of respondents agreed that the vignettes described their typical patient.

The office visit survey yielded the highest number of responses in the history of the RUC process, with nearly 1,700 physicians completing the survey. The survey was the concerted effort of 51 specialty societies and other health care professional organizations who represent 95 percent of Medicare claims for office visits. Each survey respondent chose his/her specialty that he/she identifies with from a list of 66 Medicare specialty designations (specialties with more than $1 million in Medicare allowed charges for office visits reported separately and bundled). The RUC analyzed the responses and noted that the number of survey responses received per specialty correlated with those who perform office visits in the Medicare Physician Payment Schedule. These data were summarized by categories of specialties (primary care, surgical and medicine/other) and the number of respondents by category were representative of Medicare allowed charges for office visits for those same categories.

To ensure that survey respondents understood the new CPT guidelines and descriptors and the impact that these changes may have on their work, the RUC asked that each respondent carefully read the new descriptors/guidelines and attest that they had read the information.

> *Have you reviewed the new CPT guidelines and code descriptors for office visit CPT codes 99202-99205, 99211-99215, 99417 in detail? Understanding this information is necessary to correctly complete this survey.*
>
> *☑ I confirm that I have reviewed the new CPT guidelines and code descriptors in detail.*

[2] https://annals.org/aim/article-abstract/2546704/allocation-physician-time-ambulatory-practice-time-motion-study-4-specialties?doi=10.7326%2fM16-0961

The survey respondents understood that code selection will be based on either MDM or time on the date of the patient encounter. While the history and physical is no longer required for purposes of documentation, it is expected that a clinically appropriate history and physical exam is performed during the visit.

When codes are reported based on time, there are specific time requirements within each code descriptor (e.g., 45-59 minutes for 99204). The CPT time describes the total time devoted to the visit on the day of service (i.e., the sum of face-to-face and non-face-to-face physician or QHP time that day). Importantly, however, the work value for the code is based on the entire time spent by the physician from three days before the visit to seven days following the visit. The survey clarified this distinction throughout the survey. The Research Subcommittee approved the use of three days prior and seven days following the office visits based on instructions within CPT to not report certain non-face-to-face services that relate to office visit pre/post work (e.g., telephone services and inter-professional consultations).

The RUC thoroughly discussed the way physician time was captured in the survey. The specialty societies indicated that the office visit codes currently include pre- and post-service time. The recent survey merely changed the way this time was captured. The pre-service time is described as three calendar days prior to the office visit, the intra-service time is described as the calendar day of the office visit and the post-service time is described as within seven days following the office visit. Each respondent reported three different times for each office visit code. The respondents were asked to indicate zero for the three day before/seven days following the encounter, if not typical. These three times were summed and a total time determined for each respondent. The median total time will not necessarily equal the sum of the median times for each of the three-time periods. For example, one physician might spend 5 minutes preparing to see a patient on the day prior to a visit based on their own workflow pattern. Whereas, another physician may perform all the pre-service work on the morning of the office visit. Therefore, both physicians would have responded differently on the survey for the times spent three days prior and on the date of service, but the total time would remain the same. The specialty societies noted that the physicians who completed the survey are very familiar with the concept of floor time and the day of encounter time question for office visits is similar.

The RUC recommends that the total time be utilized to value office visits, using the survey median of the individual survey respondent's total time. For five codes (99204, 99211, 99213, 99215 and 99417), the median total time from the survey equals the sum of the survey medians of the individual time components (3 days prior, date of encounter, and 7 days following). For five codes (99202, 99203, 99205, 99212 and 99214) the median total time from the survey is within 10% of the sum of the survey medians of the individual time components. Previous surveys used to measure physician time have used the survey respondent total time versus summing the individual components. An example is the Physician Practice Information (PPI) survey that used total number of hours worked per week versus summing the individual questions about time spent on various activities. Using the total time is best to balance the individual physician choice regarding when they typically perform record review and other activities. The RUC concluded for office visits, the work is the same level of intensity regardless of whether performed on the date of encounter or other dates surrounding the office visit. **Therefore, total time is the appropriate measurement of time and each individual survey respondent's total time response should be used in determining the median total time.**

INCREASE IN TOTAL TIME

The respondents agreed that the current times and work RVUs for every office visit code are too low. For most codes, the survey respondents indicated the time it takes to perform these services is 23%-38%

longer than what is reflected in the Medicare Physician Payment Schedule. Consistent with the time increase the respondents also indicated that these services are undervalued by 13%-34%.

The rationale for this increased time is in part discussed in the compelling evidence section and may largely be due to increased non-face-to-face time spent in reviewing additional patient data, provided by enhanced use of EHRs. The RUC also reviewed an argument that in the effort to be more efficient, physician practices are encouraging more follow up non-face-to-face care to preclude additional visits. Instead of bringing patients back for another visit, physicians are encouraged to complete more in the follow-up care to avoid that next visit. Physicians are also spending more time on asynchronous communication (e.g., email or phone calls) in the follow-up with patients and documenting the communication/information.

COMPARISON OF OFFICE VISITS TO HOSPITAL VISITS

Throughout the code by code analysis and comparison of office visits to hospital visits (e.g., initial, subsequent or observation hospital visits), the specialties noted that there is significant risk associated with patients in the office setting, which informs the intensity and complexity of the visit. First, patients with potentially major life-threatening conditions often first seek care in the office setting. Those problems could be known (e.g., coronary artery disease, cancer, severe depression or substance use disorder), but the physician will not know if the patient's condition is stable. That level of uncertainty increases the level of psychological stress for the physician. That stress is even higher with an undifferentiated problem (e.g., headache, syncope, nausea, vomiting or weight loss). For those patients in which there is not yet a diagnosis and in the office setting, the physician must perform a complex evaluation to determine whether the patient is stable. Second, treatment initiated in the office setting carries significant risk. In large part because the treatments will be carried out after the patient leaves the office and not under supervision of the physician or clinical staff. Such treatment risks include reactions to medications, drug interactions and potential implications of an incomplete diagnosis or time to imaging study. Therefore, the treatment in the outpatient setting must be thorough enough to anticipate those risks and have mitigation strategies.

NEW PATIENT OFFICE VISITS

99202 ***Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 15-29 minutes of total time is spent on the date of the encounter.***
The RUC reviewed 1,181 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the current work RVU of 0.93 appropriately accounts for the physician work required to perform this service. The RUC recommends 22 minutes total time. The RUC noted that the total time did not change, which supports maintaining the current value.

The RUC noted that CPT code 99201 has been deleted and some or all its previous utilization will now be reported with CPT code 99202. The current Medicare utilization of CPT code 99201 is only 9 percent of that of the Medicare utilization for 99202, thus the typical patient for a 99202 will not change.

The RUC compared 99202 to the top two key reference services 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A problem focused interval history; A problem focused examination; Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is stable, recovering or improving.*

Typically, 15 minutes are spent at the bedside and on the patient's hospital floor or unit. (work RVU = 0.76 and 20 minutes total time) and 99487 *Complex chronic care management services, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, establishment or substantial revision of a comprehensive care plan, moderate or high complexity medical decision making; 60 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month.;* (work RVU = 1.00 and 26 minutes total time). The RUC indicated that CPT code 99202 is slightly more intense than key reference code 99231 because those are straightforward or low-level complexity patients in the hospital that have already been evaluated and are stable, whereas 99202 patients are completely new with more uncertainty and potentially more diseases and medications. The RUC indicated that CPT code 99202 is slightly more intense than the non-face-to-face service CPT code 99487, but since it requires slightly less time it is appropriately valued lower. The RUC confirms that maintaining the current work RVU of 0.93 for CPT code 99202 maintains the appropriate rank order with key reference services 99231 and 99487.

For additional support the RUC compared 99202 to services with similar physician work and time, CPT code 78707 *Kidney imaging morphology; with vascular flow and function, single study without pharmacological intervention* (work RVU = 0.96 and 22 minutes total time) and CPT code 92242 *Fluorescein angiography and indocyanine-green angiography (includes multiframe imaging) performed at the same patient encounter with interpretation and report, unilateral or bilateral* (work RVU = 0.95 and 22 minutes total time). **The RUC recommends a work RVU of 0.93 with 22 minutes total time for CPT code 99202.**

99203 ***Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 30-44 minutes of total time is spent on the date of the encounter.*** The RUC reviewed 1,494 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the median work RVU of 1.60 appropriately accounts for the physician work required to perform this service. The RUC recommends 40 minutes total time. The total physician time increased by 38% or 11 minutes, which the RUC determined justified the 13% increase in physician work. The specialty societies indicated and the RUC agreed that physician time has increased due to higher number of diagnoses per patient and time required to review/manage the EHR.

The RUC compared 99203 to the top two key reference services 99221 *Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A detailed or comprehensive history; A detailed or comprehensive examination; and Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of low severity. Typically, 30 minutes are spent at the bedside and on the patient's hospital floor or unit*. (work RVU = 1.92 and 50 minutes total time) and 99232 *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 1.39 and 40 minutes total time). The RUC agreed that the median work RVU places 99203 in the proper rank order in comparison to CPT code 99221, which requires longer physician time and work. CPT code 99203 and CPT code 99232 have the same total time but is

99232 is reported for an established patient. The RUC also elaborated specific comparison of office visits to hospital visits in the introductory section of these recommendations.

For additional support the RUC referenced CPT code 77047 *Magnetic resonance imaging, breast, without contrast material; bilateral* (work RVU = 1.60 and 40 minutes total time) and MPC code 92004 *Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; comprehensive, new patient, 1 or more visits* (work RVU = 1.82 and 40 minutes of total time). **The RUC recommends a work RVU of 1.60 with 40 minutes total time for CPT code 99203.**

99204 ***Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 45-59 minutes of total time is spent on the date of the encounter.***
The RUC reviewed 1,622 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the median work RVU of 2.60 appropriately accounts for the physician work required to perform this service. The RUC recommends 60 minutes total time. The total physician time increased by 33% or 15 minutes, which the RUC determined justifies the 7% increase in physician work. The specialty societies indicated and the RUC agreed that physician time has increased due to higher number of diagnoses per patient and time required to review/manage the EHR.

The RUC compared 99204 to the top two key reference services 99234 *Observation or inpatient hospital care, for the evaluation and management of a patient including admission and discharge on the same date, which requires these 3 key components: A detailed or comprehensive history; A detailed or comprehensive examination; and Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problem(s) requiring admission are of low severity. Typically, 40 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 2.56 and 69 minutes total time) and 99219 *Initial observation care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission to outpatient hospital "observation status" are of moderate severity. Typically, 50 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 2.60 and 64.5 minutes total time). The RUC noted that the median work RVU of 2.60 places CPT code 99204 in the correct rank order with key reference code 99234. While 99234 requires more time, the complexity of medical decision making is lower. The median work RVU also places CPT code 99204 in proper rank order to CPT code 99219 which has the same work RVU and similar time. A 99219 patient has already been seen and assessed by a physician in the facility. For CPT code 99204 new patient visit, the physician is the first physician that is assessing the patient.

For additional support the RUC referenced CPT code 74262 *Computed tomographic (CT) colonography, diagnostic, including image postprocessing; with contrast material(s) including non-contrast images, if performed* (work RVU = 2.50 and 57 minutes total time), CPT code 31623 *Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with brushing or protected brushings* (work RVU = 2.63 and 65 minutes total time) and CPT code 75573 *Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology in the setting of congenital heart disease (including 3D image postprocessing, assessment of LV cardiac function, RV structure and function and*

evaluation of venous structures, if performed) (work RVU = 2.55 and 60 minutes total time). **The RUC recommends a work RVU of 2.60 with 60 minutes total time for CPT code 99204.**

99205 ***Office or other outpatient visit for the evaluation and management of a new patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 60-74 minutes of total time is spent on the date of the encounter.***
The RUC reviewed 1,472 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the median work RVU of 3.50 appropriately accounts for the physician work required to perform this service. The RUC recommends 85 minutes total time. The total physician time increased by 27% or 18 minutes, which the RUC determined justifies the 10% increase in physician work. The specialty societies indicated and the RUC agreed that physician time has increased due to higher number of diagnoses per patient and time required to review/manage the EHR.

The RUC compared 99205 to the top two key reference services 99223 *Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of high severity. Typically, 70 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 3.86 and 90 minutes total time) and 99220 *Initial observation care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission to outpatient hospital "observation status" are of high severity. Typically, 70 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 3.56 and 75 minutes total time). The RUC determined that the median work RVU of 3.50 placed CPT code 99205 in the proper rank order comparing physician work and time with the top two key reference services, which are also patients of high severity.

For additional support the RUC referenced services, CPT code 99483 *Assessment of and care planning for a patient with cognitive impairment, requiring an independent historian, in the office or other outpatient, home or domiciliary or rest home, with all of the following required elements: Cognition-focused evaluation including a pertinent history and examination; Medical decision making of moderate or high complexity; Functional assessment (eg, basic and instrumental activities of daily living), including decision-making capacity; Use of standardized instruments for staging of dementia (eg, functional assessment staging test [FAST], clinical dementia rating [CDR]); Medication reconciliation and review for high-risk medications;* (work RVU = 3.44 and 85 minutes total time) and CPT code 90792 *Psychiatric diagnostic evaluation with medical services* (work RVU = 3.25 and 90 minutes total time). **The RUC recommends a work RVU of 3.50 with 85 minutes total time for CPT code 99205.**

ESTABLISHED PATIENT OFFICE VISITS

99211 ***Office or other outpatient visit for the evaluation and management of an established patient, that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal.***
The RUC reviewed 1,103 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the current work RVU of 0.18 appropriately accounts for the physician work required to supervise this service. The RUC recommends 7 minutes total time. The RUC noted that the total time did not change, which supports maintaining the current value. This service is

typically performed by clinical staff under physician supervision and does not require direct contact between the physician and the patient.

The RUC compared 99211 to the top two key reference services 99406 *Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes* (work RVU = 0.24 and 7 minutes total time) and 93010 *Electrocardiogram, routine ECG with at least 12 leads; interpretation and report only* (work RVU = 0.17 and 6 minutes total time). The RUC determined that the current physician work and time for 99211 is supported by the two key reference services with similar physician work, time, intensity and complexity.

For additional support the RUC referenced MPC codes 93042 *Rhythm ECG, 1-3 leads; interpretation and report only* (work RVU = 0.15 and 7 minutes total time) and 96401 *Chemotherapy administration, subcutaneous or intramuscular; non-hormonal anti-neoplastic* (work RVU = 0.21 and 9 minutes total time). **The RUC recommends a work RVU of 0.18 with 7 minutes total time for CPT code 99211.**

99212 ***Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and straightforward medical decision making. When using time for code selection, 10-19 minutes of total time is spent on the date of the encounter.***
The RUC reviewed 1,353 survey responses from 51 specialty societies representing physicians and health care professionals and determined that a work RVU of 0.70 appropriately accounts for the physician work required to perform this service. Based on the RUC reviewer comments, the specialty societies indicated and the RUC agreed to crosswalk CPT code 99212 to CPT code 93264 *Remote monitoring of a wireless pulmonary artery pressure sensor for up to 30 days, including at least weekly downloads of pulmonary artery pressure recordings, interpretation(s), trend analysis, and report(s) by a physician or other qualified health care professional* (work RVU = 0.70 and 18 minutes total time). The RUC recommends 18 minutes total time. The RUC noted that the total time increased 13% or 2 minutes and determined the median work RVU of 0.75 was slightly high. Therefore, RUC recommends a work RVU of 0.70 to place this service in the proper rank order.

The RUC compared 99212 to the top two key reference services 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: A problem focused interval history; A problem focused examination; Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is stable, recovering or improving. Typically, 15 minutes are spent at the bedside and on the patient's hospital floor or unit* (work RVU = 0.76 and 20 minutes total time) and 99490 *Chronic care management services, at least 20 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient; chronic conditions place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline; comprehensive care plan established, implemented, revised, or monitored* (work RVU = 0.61 and 15 minutes total time). The top key reference code 99231 is more intense and requires slightly more physician time and therefore is valued slightly higher. The second top key reference service 99490 does not require face-to-face interaction. The RUC determined that CPT code 99212 is in the proper rank order with these two key reference services.

For additional support the RUC referenced CPT code 99452 *Interprofessional telephone/Internet/electronic health record referral service(s) provided by a treating/requesting physician or other qualified health care professional, 30 minutes* (work RVU = 0.70 and 18 minutes total time) and 92235 *Fluorescein angiography (includes multiframe imaging) with interpretation and report, unilateral*

or bilateral (work RVU = 0.75 and 17 minutes total time). **The RUC recommends a work RVU of 0.70 with 18 minutes total time for CPT code 99212.**

99213 ***Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and low level of medical decision making. When using time for code selection, 20-29 minutes of total time is spent on the date of the encounter.***
The RUC reviewed 1,650 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the median work RVU of 1.30 appropriately accounts for the physician work required to perform this service. The RUC recommends 30 minutes total time. The total physician time increased by 30% or 7 minutes, which the RUC determined justifies the 34% increase in physician work. The specialty societies indicated and the RUC agreed that physician time has increased due to higher number of diagnoses per patient and time required to review/manage the EHR.

The RUC compared 99213 to the top two key reference services 99232 *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 1.39 and 40 minutes total time) and 99487 *Complex chronic care management services, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, establishment or substantial revision of a comprehensive care plan, moderate or high complexity medical decision making; 60 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month.;* (work RVU = 1.00 and 26 minutes total time). The RUC noted that CPT code 99213 requires less physician work and time than CPT code 99232 and more physician work and time than CPT code 99487. Thus, the RUC agreed that the median work RVU and time places CPT code 99213 in the proper rank order with the top two key reference services.

For additional support the RUC referenced MPC codes 73721 *Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material* (work RVU = 1.35 and 30 minutes total time) and 78072 *Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT), and concurrently acquired computed tomography (CT) for anatomical localization* (work RVU = 1.60 and 30 minutes total time). As well as services with similar physician work and time, CPT code 99381 *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; infant (age younger than 1 year)* (work RVU = 1.50 and 30 minutes total time) and MPC code 99392 *Periodic comprehensive preventive medicine reevaluation 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, established patient; early childhood (age 1 through 4 years)* (work RVU = 1.50 and 30 minutes total time). The RUC determined that the median work RVU and total physician time for CPT code 99213 appropriately places this service in the proper rank order among services in the Medicare Physician Payment Schedule. **The RUC recommends a work RVU of 1.30 with 30 minutes total time for CPT code 99213.**

99214 ***Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and moderate level of medical decision making. When using time for code selection, 30-39 minutes of total time is spent on the date of the encounter.***

The RUC reviewed 1,691 survey responses from 51 specialty societies representing physicians and health care professionals and determined that a work RVU of 1.92 appropriately accounts for the physician work required to perform this service. The RUC crosswalked CPT code 99214 to MPC code 99221 *Initial hospital care, per day, for the evaluation and management of a patient, which requires these 3 key components: A detailed or comprehensive history; A detailed or comprehensive examination; and Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of low severity. Typically, 30 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 1.92 and 50 minutes total time). The RUC recommends 49 minutes total time. CPT code 99214 and 99221 require the same physician work and almost the same time. The RUC noted that the survey median of 2.00 was slightly high, yet the 25th percentile of 1.50, which is the current work RVU, would not capture the 23% or 9-minute increase in total physician time. Therefore, the RUC recommends a work RVU of 1.92 to place this service in the proper rank order.

The RUC compared 99214 to the top two key reference services 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 physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Typically, 35 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 2.00 and 55 minutes total time) and 99232 *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Typically, 25 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 1.39 and 40 minutes total time). The RUC noted that the top key reference service 99233 is a subsequent hospital care visit for typically an unstable patient with highly complex medical decision making, whereas CPT code 99214 is for an established patient with a moderate level of medical decision making. Therefore, the RUC determined that they should not be valued the same. The RUC compared CPT code 99214 to the second top key reference service, CPT code 99232, and noted that CPT code 99214 requires more physician time as the physician is trying to keep the patient out of the hospital by monitoring the patient in the office, assessing/prescribing treatment and arranging specific home services. Therefore, CPT code 99214 is appropriately valued higher than the second top key reference code 99232.

For additional support the RUC referenced MPC codes 99460 *Initial hospital or birthing center care, per day, for evaluation and management of normal newborn infant* (work RVU = 1.92 and 50 minutes total time) and 92004 *Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; comprehensive, new patient, 1 or more visits* (work RVU = 1.82 and 40 minutes total time). **The RUC recommends a work RVU of 1.92 with 49 minutes total time for CPT code 99214.**

99215 ***Office or other outpatient visit for the evaluation and management of an established patient, which requires a medically appropriate history and/or examination and high level of medical decision making. When using time for code selection, 40-54 minutes of total time is spent on the date of the encounter.***
The RUC reviewed 1,535 survey responses from 51 specialty societies representing physicians and health care professionals and determined that the median work RVU of 2.80 appropriately accounts for the physician work required to perform this service. The RUC recommends 70 minutes total time. The total physician time increased by 27% or 15 minutes, which the RUC determined justifies the 33% increase in physician work. The specialty societies indicated and the RUC agreed that physician time has increased due to higher number of diagnoses per patient and time required to review/manage the EHR.

The RUC compared CPT code 99215 to the top two key reference services 99234 *Observation or inpatient hospital care, for the evaluation and management of a patient including admission and discharge on the same date, which requires these 3 key components: A detailed or comprehensive history; A detailed or comprehensive examination; and Medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problem(s) requiring admission are of low severity. Typically, 40 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 2.56 and 69 minutes total time) and 99235 *Observation or inpatient hospital care, for the evaluation and management of a patient including admission and discharge on the same date, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problem(s) requiring admission are of moderate severity. Typically, 50 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 3.24 and 83.5 minutes total time). The RUC agreed that CPT code 99215 is appropriately valued in between these codes because the top key reference service 99234 has similar time and less complex medical decision making and the second top key reference service 99235 requires more time to perform while also having less complex medical decision making. The RUC determined that the median work RVU and time for CPT code 99215 places this service in the proper rank order with the two top key reference services. The RUC also elaborated on specific comparison of office visits to hospital visits in the introductory section of these recommendations.

The RUC also compared CPT code 99215 to CPT code 99219 *Initial observation care, per day, for the evaluation and management of a patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission to outpatient hospital "observation status" are of moderate severity. Typically, 50 minutes are spent at the bedside and on the patient's hospital floor or unit.* (work RVU = 2.60 and 64.5 minutes total time) and noted that CPT code 99215 requires high level medical decision making, whereas CPT code 99219 requires slightly less time and is for a patient of moderate severity. Therefore, it would be appropriate to value CPT code 99215 higher than CPT code 99219.

For additional support the RUC referenced CPT code 31646 *Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with therapeutic aspiration of tracheobronchial tree, subsequent, same hospital stay* (work RVU = 2.78 and 70 minutes total time) and CPT code 52310 *Cystourethroscopy, with removal of foreign body, calculus, or ureteral stent from urethra or bladder (separate procedure); simple* (work RVU = 2.81 and 72 minutes total time). **The RUC recommends a work RVU of 2.80 with 70 minutes total time for CPT code 99215.**

PROLONGED OFFICE VISIT

99417 ***Prolonged office or other outpatient evaluation and management service(s) (beyond the total time of the primary procedure which has been selected using total time), requiring total time with or without direct patient contact beyond the usual service, on the date of the primary service; each 15 minutes (List separately in addition to codes 99205, 99215 for office or other outpatient Evaluation and Management services)***
The RUC reviewed 1,112 survey responses from 51 specialty societies representing all physicians and health care professionals and determined that a work RVU of 0.61 appropriately accounts for the physician work required to perform this service. Based on RUC reviewer comments, the specialty societies recommended and the RUC agreed to crosswalk CPT code 99417 to the top key reference service 99490 *Chronic care management services, at least 20 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient; chronic conditions place the patient at significant risk of death, acute exacerbation/ decompensation, or functional decline; comprehensive care plan established, implemented, revised, or monitored.* (work RVU = 0.61 and 15 minutes total time). The RUC recommends 15 minutes total time. CPT code 99417 and 99490 require the same physician work and time and thus should be valued the same. The RUC noted that this service may only be reported with CPT codes 99205 and 99215 and may not be reported for any time less than 15 minutes. The RUC agreed that CPT code 99417 and CPT code 99490 require the same physician time and work and should be valued the same.

The RUC compared 99417 to the second top key reference service 99489 *Complex chronic care management services, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, establishment or substantial revision of a comprehensive care plan, moderate or high complexity medical decision making; 60 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month.; each additional 30 minutes of clinical staff time directed by a physician or other qualified health care professional, per calendar month (List separately in addition to code for primary procedure)* (work RVU = 0.50 and 13 minutes total time) and determined that CPT code 99489 describes clinical staff time directed by a physician and the physicians' time required is less than CPT code 99417. Therefore, CPT code 99417 is appropriately valued higher than the second top key reference code 99489.

For additional support the RUC compared 99417 to CPT code 99484 *Care management services for behavioral health conditions, at least 20 minutes of clinical staff time, directed by a physician or other qualified health care professional, per calendar month, with the following required elements: initial assessment or follow-up monitoring, including the use of applicable validated rating scales; behavioral health care planning in relation to behavioral/psychiatric health problems, including revision for patients who are not progressing or whose status changes; facilitating and coordinating treatment such as psychotherapy, pharmacotherapy, counseling and/or psychiatric consultation; and continuity of care with a designated member of the care team.* (work RVU = 0.61 and 15 minutes total time). CPT code 99417 and CPT code 99484 require the same physician time and work and thus should be valued the same. **The RUC recommends a work RVU of 0.61 with 15 minutes total time for CPT code 99417.**

RUC RECOMMENDATIONS

CPT Code	Descriptor	Work RVU	Total Time	Work Per Unit Time
99202	New Pt, straightforward medical decision making, 15-29 min day of visit	0.93	22 minutes	.042
99203	New Pt, low level medical decision making, 30-44 min day of visit	1.60	40 minutes	.040
99204	New Pt, moderate level medical decision making, 45-59 min day of visit	2.60	60 minutes	.043
99205	New Pt, high level medical decision making, 60-74 min day of visit	3.50	85 minutes	.041
99211	Est Pt, Supervision	0.18	7 minutes	.026
99212	Est Pt, straightforward medical decision making, 10-19 min day of visit	0.70	18 minutes	.039
99213	Est Pt, low level medical decision making, 20-29 min day of visit	1.30	30 minutes	.043
99214	Est Pt, moderate level medical decision making, 30-39 min day of visit	1.92	49 minutes	.039
99215	Est Pt, high level medical decision making, 40-54 min day of visit	2.80	70 minutes	.040
99417	Prolonged visit new/est pt, add'l 15 min	0.61	15 minutes	.041

PRACTICE EXPENSE

The practice expense (PE) customized survey for the office visit CPT codes 99202-99205, 99211-99215 and 99417, was developed and approved by the Research Subcommittee in conjunction with the CPT/RUC Workgroup on E/M and input from medical specialties. The Research Subcommittee determined that there are typical clinical staff tasks that are unique to office visits. Although the activities are similar to direct inputs currently codified, in the context of a typical office visit the work described is different enough that new clinical activity codes are recommended. For example, clinical activity, *education/instruction/counseling (to be used with E/M only)* is similar to CA035, *review home care instructions, coordinate visits/prescriptions*, however in the context of an office visit this is much more than a quick review of instructions and the higher-level visits often require extensive counselling on how to manage chronic conditions. To prevent inappropriate use of these clinical activities outside of this code

family, the RUC requests that the descriptions specify that the clinical activities should only be used for Evaluation and Management (E/M) services. In five instances, the clinical activity described does not align with any current clinical activity code so the RUC requests that new clinical activity codes be assigned:

- CA047: Identify need for imaging, lab or other test result(s) and ensure information has been obtained - three days prior (to be used with E/M only)
- CA048: Identify need for imaging, lab or other test result(s) and ensure information has been obtained - day of (to be used with E/M only)
- CA049: Review and document history, systems and medications (to be used with E/M only)
- CA050: Education/instruction/counseling (to be used with E/M only)
- CA051: Coordinate home or outpatient care (to be used with E/M only)

Upon completion of the work component survey, respondents were provided with instructions on completing the direct practice expense component of the office visits survey. Survey respondents were told that direct practice expense includes time spent by the physician's/qualified healthcare professional's clinical staff providing clinical activities, disposable medical supplies used to perform the service, and medical equipment used to perform the service. Survey respondents were instructed that part two of the survey is intended to capture practice expense in the physician office. It was strongly recommended that physicians jointly complete the PE section of the survey with their clinical staff and practice manager. They were asked to provide the name and title for the clinical staff and/or practice manager with whom they completed the survey.

Survey respondents were given background information for each question included in the PE survey. For the clinical activities staff time question, they were informed that the question is intended to capture the clinical staff time provided by health care professionals who are paid by their practice and cannot bill separately, such as registered nurses (RNs), licensed practical nurses (LPNs), and certified medical assistants (MAs). They were instructed that it is important not to count the clinical staff time for any separately reported services performed on the same date or other dates (e.g., a procedure performed on the same date, or chronic care management services performed during the month), as well as to not include any time performing administrative work. Survey respondents were asked how much time in minutes the clinical staff in their office spend providing the following clinical activities. They were advised to base estimates for each clinical staff activity on a typical patient for each of the office visit CPT codes 99202-99205, 99211-99215 and 99417 and that clinical staff activities for an office visit may include the following:

- Identify need for imaging, lab or other test result(s) and ensure information has been obtained
- Greet patient, provide gowning, ensure appropriate medical records are available
- Obtain vital signs
- Prep and position patient
- Review and document history, systems, and medications
- Prepare room, equipment, supplies
- Assist physician during exam
- Education/instruction/counseling
- Coordinate home or outpatient care
- Clean room/equipment by clinical staff
- Conduct patient communications (i.e. calls, texts, emails, other electronic communication w/patient, pharmacy, etc.,)

Survey respondents were also given the opportunity to provide a short clinical description and the amount of time for any clinical activities not described in the survey within three calendar days prior to the office visit, on the calendar day of the office visit and within seven calendar days after the office visit.

Survey respondents were advised that they should not include staff time for any administrative activities, regardless of who performs the activities, including:

Obtain referral documents
Schedule patient/remind patient of appointment
Obtain medical records/manage patient database/develop chart
Pre-certify patient/conduct pre-service billing
Verify insurance/register patient
Transcribe results/file and manage patient records
Schedule subsequent post service E/M services
Conduct billing and collection activities

The office visit practice expense survey yielded the highest number of responses in the history of the RUC process, with over 700 completed survey responses at a minimum and for some codes over 1,100 survey responses. An expert panel consisting of RUC advisors from the surveying specialty societies met via multiple conference calls to review the survey data. The specialty societies used the median total time for each CPT code, summing each respondents' total time recommendation, including times written in for "other clinical activity." The median total time served as the starting point for developing the recommendation to the PE Subcommittee. The specialty societies used the survey data, PE standards and current time inputs as the guiding principles for the recommended times and they also considered inter-family relationships (new versus established) and intra-family relationships (within new, within established). The recommended clinical activity time included in the spreadsheet is the survey times where those times do not exceed standard times or total current times. The RUC acknowledges that there is variation among specialties in how they perform evaluation and management services; specifically, who performs the associated tasks, and in what order, however, the RUC agreed with the specialty societies that the total times are very similar, if not identical across specialties. The PE Subcommittee confirmed that the median of total time from the survey includes time that the survey respondents wrote in for "other clinical activity." The Subcommittee also confirmed that the recommendations for individual clinical activities are the survey times where those times do not exceed standard times or current times and that is the reason that the median of total time from the survey is not identical to the recommended total clinical staff time.

The PE Subcommittee engaged in extensive discussion about the clinical activity staff time and agreed with the specialty societies rationale for using the survey median of total time rather than the medians of individual tasks. The Subcommittee discussed clinical staff serving as scribe during the "assist physician" time and determined that was not typical. The specialty societies agreed to remove that language from the PE summary of recommendation. No reduction in clinical staff time was needed in the PE spreadsheet, as the scribe work was not part of the recommendation for assist physicians time. The Subcommittee discussed clinical activity CA037, *Conduct patient communications,* which range in time from 1 to 11 minutes. While the Subcommittee standard for this clinical activity is in increments of 3 minutes for each patient communication (i.e., phone call, email and/or text), the Subcommittee agreed that the range for this family of codes was appropriate. A reviewer questioned if CA037, *Conduct patient communications* is new and the specialty societies clarified that CA037 is not a new clinical activity. However, the time for this clinical activity is currently included in the service period and moving forward should be included as post-service clinical staff time as is recommended for this family of services.

The PE Subcommittee agreed with the specialty societies that 5 minutes to obtain vital signs is appropriate for each office visit code except for 99417 where the vital signs are taken in the base code (99205 and 99215) and CPT code 99211 where the RUC recommends 3 minutes to obtain vital signs rather than 5 because "the presenting problems are minimal." The total time is 2 minutes less than current time for 99211 due to this reduction, however the physician work time remains the same.

The presenters responded to a question regarding the use of clinical activity, *identify need for imaging, lab or other test result(s) and ensure information has been obtained - three days prior (to be used with E/M only)* in the pre-service period and then repeating the same clinical activity, *identify need for imaging, lab or other test result(s) and ensure information has been obtained - day of (to be used with E/M only)* in the service period. This structure was approved by the Research Subcommittee and is repeated to capture the time that clinical staff spend performing this clinical activity regardless of whether they do it three days prior to the office visit or on the same day. For example, one clinical staff might spend 3 minutes preparing to see a patient on the day prior to a visit based on their own workflow pattern. Whereas, another clinical staff may perform all the pre-service work on the morning of the office visit. Therefore, both clinical staff would have responded differently on the survey for the times spent three days prior and on the date of service, but the total time would remain the same and is not duplicative. The specialty societies also explained that in many instances the clinical staff will identify the need for images and labs and find that the test is pending and will then need to go back on the day of the office visit to ensure that the information needed has been obtained. Survey respondents were instructed to include the time they would spend on the activity for a typical patient and were instructed that they should enter 0 if they do not perform any clinical activity in the three days prior to the office visit.
The office visit survey included practice expense questions about medical supplies and equipment. Respondents were asked to indicate whether they used the items included in SA047, *E/M Pack* and the survey results supported maintaining all current items in the pack. The survey also asked survey respondents to indicate whether they used an otoscope and whether an exam table or a power table was typical in their practice. The survey results indicated that equipment item, EQ189, *otoscope-ophthalmoscope (wall unit)* and equipment item, EF023, *table, exam* remain typical in the non-facility setting.

Survey respondents were also asked about additional medical supplies and equipment items used in their practices. The specialty societies looked not only at frequency of the suggested items, but how many different specialty societies submitted that item. For example, if an item is only utilized by a single specialty, and considered a specialty specific item, it would not be appropriate to include it in an office visit service provided by all specialties. The expert panel reviewed a list of potential medical supplies and equipment items that might be added to the office visit direct practice expense inputs and identified supply code SM022 *sanitizing cloth-wipe (surface, instruments, equipment)* as appropriate to add to the office visit codes. A *blood pressure cuff* was also considered; however, it is not a disposable supply and the purchase price is less than $500 so it cannot be included as a supply or equipment item. The expert panel recommended and the RUC agreed that one new equipment item, a *scale*, as well as existing equipment input, ED021 *computer, desktop, w-monitor* should be added to the equipment direct practice expense inputs. The PE Subcommittee modified the equipment time for the new equipment item, *scale.* The specialty societies recommended using the total clinical staff time to obtain vital signs for the equipment time for the scale, however the RUC determined that the time should be 2 minutes for each code where the scale is included because the RUC generally allocates 1 minute for each vital sign and the scale includes a height gauge so it should be allocated 1 minute to measure weight and 1 minute to measure height. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

GLOBAL SURGICAL PERIOD

The RUC recommends that the full increase of work and physician time for office visits be incorporated into the surgical global periods for each CPT code with a global of 010-day, 090-day and MMM (maternity) codes. The RUC recommends that the practice expense inputs should be modified for the office visits within the global periods. The RUC agrees that office visits work is equivalent and a crosswalk of 100% of the office visit valuations should be bundled into the codes with global periods of 010-days, 090-days and MMM. A spreadsheet itemizing these changes is included in the attached supporting material.

NEW TECHNOLOGY

The RUC recommends that CPT codes 99202-99205, 99211-99215 and 99417 be placed on the new technology/new services list for re-examination after 3 years of data are available. In October 2024, the RUC will review the 2021-2023 Medicare claims data to determine if the codes should be re-examined.

X. CMS Request/Relativity Assessment Identified Codes

Hip/Knee Arthroplasty (Tab 10)
William Creevy, MD (AAOS); Adam Sassoon, MD (AAHKS); Hussein Elkousy, MD (AAOS)

CMS provided detail in the Medicare Physician Payment Final Rule for CY 2019 on the seven high-volume codes nominated by Anthem for review under the potentially misvalued code initiative. In its request, Anthem noted a systemic overvaluation of work RVUs in certain procedures and tests based "on a number of GAO and MedPAC reports, media reports regarding time inflation of specific services, and the January 19, 2017 Urban Institute report for CMS." Anthem suggested that the times CMS assumes in estimating work RVUs are inaccurate for procedures, especially due to substantial overestimates of preservice and post-service time, including follow-up inpatient and outpatient visits that do not take place. According to Anthem, the time estimates for tests and some other procedures are primarily overstated as part of the intra-service time. Anthem stated that previous RUC reviews of these services did not result in reductions in valuation that adequately reflected reductions in surveyed times.

The specialty societies were critical of the Urban Institute report, "Collecting Empirical Physician Time Data," cited by Anthem which is based on a collection of empirical time data derived from electronic health records (EHRs) and/or direct observation at only three multispecialty health care systems. Only two sites provided data from EHRs, which forms the basis for the analysis of total hip arthroplasty and total knee arthroplasty. Important characteristics of the sites are not specified (e.g. size, procedure volume, academic medical center or teaching hospital, urban or rural, government entity, not-for profit or for-profit) and data was collected for only 6 or 12 months. The Urban Institute authors acknowledged the limitations of the project, "We recognize that these three sites were very much a sample of convenience and should not necessarily be viewed as representative of other health systems." In addition, physician interviews in the study were limited; only five physicians from five multispecialty group practices were interviewed for Orthopaedic Surgery. There is no information available to confirm that these physicians perform total hip arthroplasty and/or total knee arthroplasty and their level of experience and clinical volume is not specified.

The specialties did not believe there was sufficient evidence that CPT codes 27130 and 27447 were misvalued and therefore chose to present the survey data from the January 2013 RUC meeting when the codes were last reviewed and recommended that the current values for both codes be maintained. The RUC, however, determined that the specialty societies should resurvey the codes as requested by CMS and the same as the other five services that were nominated by Anthem. The codes were last valued in

2013 and there was divergence between the RUC recommendation of 19.60 RVUs and the CMS value of 20.72 RVUs. The RUC noted that there is no precedent to affirm RUC recommendations that are more than 5 years old, further justifying a resurvey of the codes. The RUC agrees with the specialties that a random sample of surgeons with a broad range of volume and experience provides a more accurate estimate of intra-service time. The RUC determined that it is not appropriate to use survey data to justify a current work value that is higher than what was recommended at the time of review and therefore requests a resurvey of the codes. **The RUC recommends that CPT codes 27130 and 27447 be surveyed and presented at the October 2019 RUC meeting.**

Toe Amputation (Tab 11)
William Creevy, MD (AAOS); Charles Mabry, MD (ACS); Tye Ouzounian, MD (AOFAS); Brooke Bisbee, DPM (APMA); Matthew Sideman, MD (SVS); Hussein Elkousy, MD (AAOS); Robert Zwolak, MD (SVS); Francesco Aiello, MD (SIR)

In January 2019, the Relativity Assessment Workgroup reviewed site-of-service anomaly screen based on the review of three years of data (2015, 2016 and 2017) for services with utilization over 10,000 in which a service is typically performed in the inpatient hospital setting, yet only a half discharge day management (99238) is included. One service was identified 28820 *Amputation, toe; metatarsophalangeal join*t. When this service was reviewed in October 2010 the RUC made a recommendation as an inpatient service with 1- 99231 hospital visit and 1-99238. CMS review of estimated data for 2010 indicated this service was performed in the inpatient setting 48% of the time. This estimation was updated for the RUC presentation in October and showed the final 2010 data inpatient setting claims were 54%. However, CMS rejected the RUC recommendation of 7.00 work RVUs, instead finalized a 5.82 work RVU, removed the 99231 hospital visit and reduced the discharge day to half. The data now indicates that this service is performed 56% in the hospital setting.

Change in Global Period
Based on this family of services recent history, the specialties recommended to CMS prior to conducting the RUC survey that it would be appropriate for these services to have their global period changed from 090-day to 000-day so the site-of-service is less of a contributing factor to the codes valuation. CMS did not object to the proposed global period change when provided with the rationale. Since 2011, the typical site of service for code 28820 was the inpatient setting (56 percent of the time per the 2018 claims data). However, partial amputation code 28825 is inpatient 43 percent of the time per the 2018 claims data. Given the disparate site of service between the two codes in this family, the heterogeneity in post-operative care, as well as the codes valuation history where 28820 has been typically performed in the inpatient setting since the last time the service was valued, the RUC agreed with the specialties that the global period change would be appropriate.

The RUC also agreed with the specialties that these codes are presently misvalued. First, CMS did not accept the RUC recommendation when this service was valued and instead used a reverse building block methodology to modify the times and work value to value the service as if it is outpatient (even though that was not reflected in the most current Medicare claims data available at the time). Second, the specialty noted and the RUC concurred that there has been a change in patient population. 94 percent of the survey respondents found the vignette, which was an elderly patient with advanced diabetes and multiple co-morbidities, to be typical. Diabetic patients requiring 28820 and 28825 have multiple co-morbidities and increasingly present for toe amputation compromised and resistant to antibiotics. Although there have been advances in medical care and prevention of foot disease (ie, drugs, aggressive wound care, and emphasis on foot care), the need for amputation for patients who have failed medical management of their disease has increased. The specialties cited a study from *Diabetic Care* which found

that the rate of amputations for diabetics increased by 50 percent between 2009 and 2015 to 4.6 for every 1000 adults.[3]

28820 ***Amputation, toe; metatarsophalangeal joint***
The RUC reviewed the survey results from 233 physicians and determined that the survey 25th percentile work RVU of 4.10 accounts for the work required to perform this service. The RUC recommends 33 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 25 minutes of immediate post-service time. Additional positioning time above the standard package is warranted to account for the time involved to perform the following: padding of bony prominences and application of thermal regulation drapes; assessing position of the extremities and head and adjusting as needed; placing foam padding under nonoperative leg to minimize pressure on heel; placing the patient's operative leg properly on the table and positioning with proper bolstering to aid surgical exposure and prevent the leg from externally rotating; indicate areas of skin to be prepared and marking surgical incisions with consideration of necessary soft tissue to cover, pad and close after the amputation; and placing an ankle tourniquet.

To justify a work value of 4.10, the RUC compared the survey code to top key reference code 11044 *Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less* (work RVU= 4.10, intra-service time of 45 minutes, total time of 116 minutes) and noted that even though the reference code has more intra-service time, both codes involve similar total time and the survey code has much more intense surgical skin-to-skin time. CPT code 11044 is typically reported for debridement of a lower extremity ulcer with minimal local anesthesia. Although debridement is tedious work, it is not intensive or complex. In comparison, the survey code requires more complex decisions regarding skin and soft tissue incisions and bone resection to be able to fashion flaps for closure after resection. In addition, attention to vessels and blood flow to adjacent toe(s) add both complexity and intensity to this procedure and warrants a higher intensity relative to the reference code. 71 percent of the survey respondents that selected 11044 as their key reference service had indicated that the survey code is more intense and complex. The RUC also compared the survey code to MPC code 52441 *Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant* (work RVU= 4.50, intra-service time of 30 minutes, total time of 93 minutes) and noted that both codes have identical intra-service times and the survey code is appropriately valued somewhat less than the relatively more intense reference code.

The RUC also noted that the current CMS times and work value result in an inappropriately low IWPUT of 0.0174, indicating that the current relationship between time and value is inappropriate and should be considered when comparing the current time and value to the RUC proposed time and value. **The RUC recommends a work RVU of 4.10 for CPT code 28820.**

28825 ***Amputation, toe; interphalangeal joint***
The RUC reviewed the survey results from 233 physicians and determined that the survey 25th percentile work RVU of 4.00 appropriately accounts for the physician work required to perform this service. The RUC recommends 33 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 15 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 20 minutes of immediate post-service time. Additional positioning time above the standard package is warranted to account for the time involved to perform the following: padding of bony prominences and application of thermal regulation drapes; assessing position of the extremities and head and adjusting as needed; placing foam padding under nonoperative leg to minimize pressure on heel; placing the patient's operative leg properly

[3] Geiss LS, Li Y, Hora I, Albright A, Rolka D, Gregg EW (Division of Diabetes Translation, CDC). Resurgence of Diabetes-Related Nontraumatic Lower-Extremity Amputation in the Yound and Middle-Aged Adult U.S. Population. Diabetes Care 2019 Jan; 42(1): 50-54. https://doi.org/10.2337/dc18-1380.

on the table and positioning with proper bolstering to aid surgical exposure and prevent the leg from externally rotating; indicate areas of skin to be prepared and marking surgical incisions with consideration of necessary soft tissue to cover, pad and close after the amputation; and placing an ankle tourniquet.

The RUC noted that the immediate post-service period for a partial amputation is typically somewhat shorter, justifying a somewhat lower valuation for code 28825 relative to code 28820. To justify a work value of 4.00, the RUC compared the survey code to top key reference code 11044 *Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less* (work RVU= 4.10, intra-service time of 45 minutes, total time of 116 minutes) and noted that even though the reference code has more intra-service time, both codes involve similar total time and the survey code has much more intense surgical skin-to-skin time. CPT code 11044 is typically reported for debridement of a lower extremity ulcer with minimal local anesthesia. Although debridement is tedious work, it is not intensive or complex. In comparison, the survey code requires more complex decisions regarding skin and soft tissue incisions and bone resection to be able to fashion flaps for closure after resection. In addition, attention to vessels and blood flow to adjacent toe(s) add both complexity and intensity to this procedure and warrants a higher intensity relative to the reference code. 72 percent of the survey respondents that selected 11044 as their key reference service had indicated that the survey code is more intense and complex. The RUC also compared the survey code to MPC code 52441 *Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant* (work RVU= 4.50, intra-service time of 30 minutes, total time of 93 minutes) and noted that both codes have identical intra-service times and the survey code is appropriately valued somewhat less than the relatively more intense reference code.

The RUC also noted that the current CMS times and work value result in an inappropriately low IWPUT of 0.0099, indicating that the current relationship between time and value is inappropriate and should be taken into account when comparing the current time and value to the RUC proposed time and value. **The RUC recommends a work RVU of 4.00 for CPT code 28825.**

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

<u>Esophagogastroduodenoscopy (Tab 12)</u>
R. Bruce Cameron, MD (ACG); Donald Selzer, MD (SAGES); Shivan Mehta, MD (AGA); Seth Gross, MD (ASGE); Charles Mabry, MD (ACS); Ketan Sheth, MD (SAGES)

CMS provided detail in the Final Rule for 2019 on the seven codes nominated by Anthem. CMS indicated they received one submission that nominated several high-volume codes for review under the potentially misvalued code initiative. In its request, Anthem noted a systemic overvaluation of work RVUs in certain procedures and tests based "on a number of GAO and MedPAC reports, media reports regarding time inflation of specific services, and the January 19, 2017 Urban Institute report for CMS." Anthem suggested that the times CMS assumes in estimating work RVUs are inaccurate for procedures, especially due to substantial overestimates of preservice and post-service time, including follow-up inpatient and outpatient visits that do not take place. According to Anthem, the time estimates for tests and some other procedures are primarily overstated as part of the intra-service time. Anthem stated that previous RUC reviews of these services did not result in reductions in valuation that adequately reflected reductions in surveyed times.

The specialty societies were critical of the Urban Institute report, "Collecting Empirical Physician Time Data," cited by Anthem which is based on a collection of empirical time data derived from electronic health records (EHRs) and/or direct observation at only three multispecialty health care systems. Only two sites provided data from EHRs, which forms the basis for the analysis of gastrointestinal endoscopy

service codes. For CPT code 43239 specifically, a sample size of N=227 from EHR data was utilized. Important characteristics of the sites are not specified (e.g. size, procedure volume, academic medical center or teaching hospital, urban or rural, government entity, not-for profit or for-profit) and data was collected for only 6 or 12 months. The Urban Institute authors acknowledged the limitations of the project, "We recognize that these three sites were very much a sample of convenience and should not necessarily be viewed as representative of other health systems." Limitations also exist with the clinical expert review conducted as part of the project. Interviews were conducted with only five gastroenterologists, which the authors described as a "convenience sample" rather than a "representative sample." These interviews were used to draw conclusions regarding the time and work estimates, vignette representativeness, and service description accuracy based on the sample of 5 physicians. Alternately, the RUC recommendations for CPT code 43239 in 2013 were based on data from 310 respondents.

CPT code 43239 has been reviewed by the RUC in 1995, 2000, and 2013. In 2013, CMS did not accept the RUC recommendation of 2.56 work RVUs and instead approved a work value of 2.49. This value was adjusted for the removal of moderate sedation work of 0.10 work RVUs in 2017 to the current value of 2.39 work RVUs. As requested, the specialty societies conducted another survey for this April 2019 RUC meeting. The specialties determined that the survey data confirm the current physician work value and times that were previously approved by CMS, further reinforcing the analogous biopsy and snare polypectomy incremental values above the base codes previously approved by the RUC.

43239 ***Esophagogastroduodenoscopy, flexible, transoral; with biopsy, single or multiple***
The RUC reviewed the survey results from 142 gastroenterologists and surgeons and determined that the current work RVU of 2.39 accurately reflects the physician work necessary for this service which is below the survey 25th percentile work RVU of 2.50. The recommendation maintains the current value for CPT code 43239 which reflects the EGD base code 43235 *Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)* (work RVU=2.09 and 15 minutes intra-service time) plus the established increment of 0.30 previously approved by the RUC for biopsy. Since CPT code 43239 was last surveyed and presented at the January 2013 meeting, there has been no change in technique, technology, patient population, site of service, or guidelines.

The RUC recommends 13 minutes pre-service evaluation time, 3 minutes pre-service positioning time, 5 minutes pre-service scrub/dress/wait time, 17 minutes intra-service time, and 12 minutes immediate post-service time. Pre-time Package 1A is appropriate for CPT code 43239 with an additional 2 minutes for left lateral decubitus positioning of the patient and to position the endoscopy equipment. Although Package 1 states "no anesthesia care," this procedure will be performed under moderate sedation or anesthesia (both of which are separately reported). The preservice time and the work RVUs were reduced when new codes to separately report moderate sedation were adopted in 2017. The recommended post-time package is 8A with one minute removed. The intra-service time is two minutes longer than previous, but this is consistent with the incremental time to perform the biopsy compared to the base diagnostic EGD code. There was concern regarding this issue during the 2013 valuation because the survey data for 43239 had the same intra-service time as EGD base code 43235. At that time, survey respondents reported intra-time in increments of five minutes which masks slight differences of plus or minus a few minutes. Thus, the current survey with its degree of granularity has corrected this issue as it makes clinical sense to add the two minutes of intra time due to the addition of biopsy and confirms the existing value.

The RUC compared CPT code 43239 to the top key reference service code 43250 *Esophagogastroduodenoscopy, flexible, transoral; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps* (work RVU = 2.97, 20 minutes intra-service time and 53 minutes total time) and noted that the survey code has three minutes less intra-service and total time than the reference code, yet

77% of survey respondents rated the survey code as identical to the key reference code in overall intensity/complexity. Conversely, the survey code was rated as more intense and complex relative to the second key reference code 43235 *Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)* (work RVU = 2.09, 15 minutes intra-service time and 49 minutes of total time) by 75% of survey respondents. Thus, the key reference codes appropriately bracket the survey code and intensity comparisons support maintenance of the existing work value.

For additional support, the RUC compared the survey code to CPT code 31573 *Laryngoscopy, flexible; with therapeutic injection(s) (eg, chemodenervation agent or corticosteroid, injected percutaneous, transoral, or via endoscope channel), unilateral* (work RVU = 2.43, 15 minutes intra-service time, 52 minutes of total time) and noted that the laryngoscopy code has two minutes less intra-service time than the survey code and both codes involve a similar amount of total time. The RUC also compared the survey code to CPT code 43236 *Esophagogastroduodenoscopy, flexible, transoral; with directed submucosal injection(s), any substance* (work RVU = 2.39, 20 minutes intra-service time and 57 minutes of total time) and noted that when these codes were last reviewed in 2013, the RUC compared 43239 to 43236 and agreed that while the intra-service and total times are slightly different, the work values should be almost identical to maintain relativity within the family of EGD and esophagoscopy codes as both services involve a similar amount of physician work. The RUC concluded that the current work RVU for CPT code 43239 should be maintained which supports the incremental approach to the EGD family and maintains relativity. **The RUC recommends a work RVU of 2.39 for CPT code 43239.**

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

<u>Colonoscopy (Tab 13)</u>
R. Bruce Cameron, MD (ACG); Charles Mabry, MD (ACS); Shivan Mehta, MD (AGA); Seth Gross, MD (ASGE); Donald Selzer, MD (SAGES); Steve Sentovich, MD (ASCRS); Ketan Sheth, MD (SAGES)

CMS provided detail in the Final Rule for 2019 on the seven codes nominated by Anthem. CMS indicated they received one submission that nominated several high-volume codes for review under the potentially misvalued code initiative. In its request, Anthem noted a systemic overvaluation of work RVUs in certain procedures and tests based "on a number of GAO and MedPAC reports, media reports regarding time inflation of specific services, and the January 19, 2017 Urban Institute report for CMS." Anthem suggested that the times CMS assumes in estimating work RVUs are inaccurate for procedures, especially due to substantial overestimates of preservice and post-service time, including follow-up inpatient and outpatient visits that do not take place. According to Anthem, the time estimates for tests and some other procedures are primarily overstated as part of the intra-service time. Anthem stated that previous RUC reviews of these services did not result in reductions in valuation that adequately reflected reductions in surveyed times.

The specialty societies were critical of the Urban Institute report, "Collecting Empirical Physician Time Data," cited by Anthem which is based on a collection of time data derived from electronic health records (EHRs) and/or direct observation at only three multispecialty health care systems. Only two sites provided data from EHRs. Important characteristics of the sites are not specified (e.g. size, procedure volume, academic medical center or teaching hospital, urban or rural, government entity, not-for profit or for-profit) and data was collected for only 6 or 12 months. The Urban Institute authors acknowledged the limitations of the project, "We recognize that these three sites were very much a sample of convenience and should not necessarily be viewed as representative of other health systems." For CPT code 45385 specifically, a sample size of N=120 was utilized. Limitations also exist with the clinical expert review

conducted as part of the project. Interviews were conducted with only five gastroenterologists, which the authors described as a "convenience sample" rather than a "representative sample." These interviews were used to draw conclusions regarding the time and work estimates, vignette representativeness, and service description accuracy based on the sample of 5 physicians. Alternately, the RUC recommendations for CPT code 45385 in 2014 were based on data from 145 respondents.

CPT code 45385 was last reviewed in January 2014 and the CMS accepted the RUC recommendation of 4.67 work RVUs for CY 2016. This value was subsequently adjusted for the removal of moderate sedation work of 0.10 work RVUs in 2017 to the current value of 4.57 work RVUs. As requested, the specialty societies surveyed CPT code 45385 for the April 2019 RUC meeting. The specialties determined that the survey data confirm the current physician work value and times that were previously approved by CMS, further reinforcing the analogous biopsy and snare polypectomy incremental values above the base codes previously approved by the RUC.

45385 ***Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique***
The RUC reviewed the survey results from 208 gastroenterologists and surgeons and determined that the current work RVU of 4.57 accurately reflects the physician work necessary for this service, which is slightly above the survey 25th percentile. The recommendation maintains the current value for CPT code 45385, which reflects the colonoscopy base code 45378 *Colonoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)* (work RVU = 3.26 and 25 minutes intra-service time) plus the established increment of 1.31 previously approved by the RUC for endoscopic removal of a lesion by snare. Since CPT code 45385 was last surveyed and presented at the January 2014 RUC meeting, there has been no change in technique, technology, patient population, site of service, or guidelines. The specialties clarified that the retrieval device used for removal of the polyp is attached to the processor, unlike other retrieval devices that are not typical and where there is the potential of residual polyp. The snare technique is the recommended and typical technique for removal of most polyps because it is safe, effective, evidence-based, and results in unblocked resection and complete removal of the lesion. The risk of leaving residual polyp that could result in interval colon cancer is mitigated with this technique.

The RUC recommends 13 minutes pre-service evaluation time, 3 minutes pre-service positioning time, 5 minutes pre-service scrub/dress/wait time, 30 minutes intra-service time, and 15 minutes immediate post-service time. The RUC determined that Pre-time Package 1A is appropriate for CPT code 45385. Although Package 1 states "no anesthesia care," this procedure will be performed under moderate sedation or anesthesia (separately reported). The pre-service time and the work RVUs were reduced when new codes to separately report moderate sedation were adopted in 2017. The recommended post-time package is 8B which is a slightly higher package than previous recognizing that the post-encounter is more complex depending upon the results of the procedure.

The RUC compared CPT code 45385 to the top key reference service code 45388 *Colonoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)* (work RVU = 4.88, 35 minutes intra-service time and 73 minutes total time) and noted that the reference code has more intra-service and total time than the survey code and is therefore appropriately valued higher. The RUC also compared code 45385 to the second key reference code 45384 *Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps* (work RVU = 4.07, 28 minutes intra-service time and 65 minutes total time) and noted that the survey code has more intra and total time because the snare polypectomy is technically more challenging and takes more physician work and time to perform which justifies the greater work value and intensity. It was noted that 67% of survey respondents that selected the second key reference code rated the survey code as more intense and complex, justifying a higher work value for the survey code. The key reference

codes appropriately bracket the survey code and demonstrate that maintenance of the current value will maintain relativity within the family.

For additional support, the RUC compared CPT code 45385 to MPC codes 37191 *Insertion of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed* (work RVU = 4.46 and 30 minutes intra-service time) and 52441 *Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant* (work RVU = 4.50 and 30 minutes intra-service time) and noted that while the codes have identical intra-service times, the survey code is a slightly more intense procedure and should therefore be valued higher. The RUC concluded that the existing work RVU for CPT code 45385 should be maintained which supports the incremental approach to the GI endoscopy family and maintains relativity. **The RUC recommends a work RVU of 4.57 for CPT code 45385.**

Practice Expense
The PE Subcommittee made one modification with the addition of a biopsy trap (SD121 *suction specimen trap, sterile*). **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

<u>Intravitreal Injection (Tab 14)</u>
David Glasser, MD (AAO); John Thompson, MD (ASRS); John McCallister (AAO); Ankoor Shah, MD (AAO)

This service was identified via High Volume Growth, CMS Fastest Growing, Harvard Valued - Utilization over 100,000 and CMS High Expenditure Procedural Codes (first iteration) screens. In 2008, the specialty society indicated there are new pharmacological advancements leading to an increase in the volume of this service. The specialty society recommended that this service be surveyed and the Workgroup agreed. In the Medicare Physician Payment Schedule Proposed Rule for CY 2012, CMS requested that the RUC review a list of 70 high PFS expenditure procedural codes representing services furnished by an array of specialties. In Jan 2012, the RAW determined that no action was required and reaffirmed the recent Feb 2009 RUC recommendation. In October 2015, the RAW screen was conducted for all services with total Medicare utilization of 10,000 or more that have increased by at least 100% from 2008 through 2013. In January 2016, the RAW noted that CPT code 67028 decreased in 2011 and to review the utilization in 2 years. In January 2019, the Workgroup noted that this service is performed to treat a variety of diseases and the original valuation was based on a crosswalk code that has since been revalued. The RUC recommended it be surveyed for April 2019.

Compelling Evidence
The specialty society presented compelling evidence based on a change in pre-service time. Pre-service evaluation time was removed from the valuation of CPT code 67028 in 2009 when it was found to be typically performed with an evaluation and management (E/M) same-day office visit. A review of the last three years of CMS' data indicates that the code is now typically (over 50% of the time) done without a same-day office visit (standing at 52% in 2017). The specialty argued that this change in service to a procedure done without an office visit is compelling evidence to request an increase in work value for CPT code 67028 and, as reflected in the survey data, increased pre-service evaluation time is the reason for a recommended increase in value. The RUC accepted compelling evidence for this code based on the change in service with the return to a stand-alone procedure.

67028 *Intravitreal injection of a pharmacologic agent (separate procedure)*
The RUC reviewed the survey results from 162 ophthalmologists and retina specialists and determined that the current work RVU of 1.44 accurately reflects the physician work necessary for this service and

falls below the survey 25th percentile. CPT code 67028 describes the injection of a drug into the vitreous and is typically performed in the office for treatment of retinal diseases such as neovascular macular degeneration and macular edema. The procedure was last valued by the RUC in 2009. The RUC agreed to restore pre-service time because the procedure is no longer typically reported with a same-day office visit. Although the pre-service time and work value were both decreased in 2009 when the procedure was typically performed with a same-day office visit, the RUC chose not to increase the work value now despite the increased pre-service time. If E/M reporting surpasses 51% in the future, it would be inappropriate to remove value for any resulting removed pre-service time. The RUC therefore recommends 14 minutes pre-service evaluation time, 1 minute pre-service positioning time, 5 minutes pre-service scrub/dress/wait time, 4 minutes intra-service time, and 5 minutes immediate post-service time *as supported by the survey*. It should be noted that the RUC discussed whether the decrease in intra-service time from 5 to 4 minutes was indicative of less work or due to changes in survey methodology instructing respondents not to round up time estimates. The RUC determined that the intra-service work of this procedure has not changed, and therefore, did not add work value corresponding to the additional pre-service time. If E/M reporting surpasses 50% in the future, it will be important to consider that *the work value in 2019 was not increased in concert with the added pre-service time*.

The RUC compared CPT code 67028 to the top key reference service code 65800 *Paracentesis of anterior chamber of eye (separate procedure); with removal of aqueous* (work RVU = 1.53, 5 minutes intra-service time, 28 minutes total time) and noted that the times are similar and both services are complex, intra-ocular procedures. The RUC also compared 67028 to the second key reference code 67500 *Retrobulbar injection; medication (separate procedure, does not include supply of medication)* (work RVU = 1.18 and 5 minutes intra-service time, 33 minutes total time) and noted that 67028 is appropriately valued higher because the survey code is an intra-ocular injection which is more complex with higher risk than the previous reference code which is extra-ocular. Likewise, almost all survey respondents that selected the second key reference code (94%) rated the survey code as more complex. The RUC also raised questions about whether there is an overlap in work with CPT code 92134, *Scanning computing ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; retina* which is typically separately reported. The societies confirmed there is no duplication in times between 92134 and the surveyed service of 67028, as the image of the eye is taken in another room and viewed before the eye is examined and patient is prepared for the injection.

For additional support, the RUC compared CPT code 67028 to MPC code 57452 *Colposcopy of the cervix including upper/adjacent vagina;* (work RVU = 1.50, 15 minutes intra-service time and 40 minutes total time) and CPT code 65430 *Scraping of cornea, diagnostic, for smear and/or culture* (work RVU = 1.47, 10 minutes intra-service time and 28 minutes total time) and noted in both cases that the higher times for the comparator codes correspond to the higher work value, although the survey code involves more intense physician work. The RUC concluded that the existing work RVU for CPT code 67028 should be maintained. **The RUC recommends a work RVU of 1.44 for CPT code 67028.**

Practice Expense

There was significant discussion about the refrigerator (ED043 *refrigerator, vaccine, temperature monitor w-alarm, security mounting w-sensors, NIST certificates*) and whether it was a direct or indirect expense. It was retained as a direct expense in accordance with the spreadsheet. The medication grade refrigerator is used to solely to store highly expensive and fragile biologics for use at the time they are needed. Although the medications are stored for longer than the length of the service it would be extremely difficult to determine typical length of storage. The RUC and CMS have a precedent of including refrigerators in direct expense costs and using the total clinical staff time for the equipment minutes, as was done for vaccination codes, including 90471, 90472, 90473, and 90474, where the equipment time for the refrigerator is equal to the total technician time. **The RUC recommends the direct practice expense inputs as submitted by the specialty society.**

CT Head/Brain (Tab 15)
Kurt Schoppe, MD (ACR); Melissa Chen, MD (ASNR); Lauren Golding, MD (ACR); Andrew Moriarity, MD (ACR); Ryan Lee, MD (ASNR)

CMS provided detail in the Final Rule for 2019 on the seven codes nominated by Anthem, one of which was CT Head/Brain code 70450. CMS indicated they received one submission that nominated several high-volume codes for review under the potentially misvalued code initiative. In its request, Anthem noted a systemic overvaluation of work RVUs in certain procedures and tests based "on a number of GAO and MedPAC reports, media reports regarding time inflation of specific services, and the January 19, 2017 Urban Institute report for CMS." Anthem suggested that the times CMS assumes in estimating work RVUs are inaccurate for procedures, especially due to substantial overestimates of preservice and post-service time, including follow-up inpatient and outpatient visits that do not take place. According to Anthem, the time estimates for tests and some other procedures are primarily overstated as part of the intra-service time. Anthem stated that previous RUC reviews of these services did not result in reductions in valuation that adequately reflected reductions in surveyed times. The RUC placed these services on the LOI for review at the April 2019 RUC meeting. The specialty had indicated their intent to survey 70450 and family codes 70460 and 70470.

The Urban Institute report, "Collecting Empirical Physician Time Data," cited by Anthem in their nomination letter is based on a collection of time data derived from electronic health records (EHRs) and/or direct observation at only three multispecialty health care systems. Out of the three sites, only two of the sites were able to provide data from EHRs. Important characteristics of the sites are not specified (e.g. size, procedure volume, academic medical center or teaching hospital, urban or rural, government entity, not-for profit or for-profit) and data was collected for only 6 or 12 months. The Urban Institute authors acknowledged the limitations of the project, "We recognize that these three sites were very much a sample of convenience and should not necessarily be viewed as representative of other health systems." For CPT code 70450 specifically, EHR data was not part of the analysis — an abject sample size of N=9 from direct observation data was utilized. The conclusions of the Urban Institute report are based on a convenience sample, and the methodology by which conclusions were drawn does not meet the rigor of RUC evaluation protocols.

70450 ***Computed tomography, head or brain; without contrast material***
The RUC reviewed the survey results from 92 radiologists and neuroradiologists and recommends the current work value of 0.85 which was below the survey 25th percentile of 0.90. The RUC recommends 4 minutes of pre-service time, 10 minutes of intra-service time and 4 minutes of post-service time. The RUC discussed the need for review of prior studies in both the pre-service and intra-service time components. The specialties explained that in the pre-service time a review of prior studies is essential in ensuring that contrast is not needed for the study, communicating the proper protocol with the technologist and to confirm the appropriateness of the study. In the intra-service time, a review of prior studies is also performed during the interpretation in order to make comparisons between previous scans and the new scan.

The RUC reviewed the top key reference service CPT code 70486 *Computed tomography, maxillofacial area; without contrast material* (work RVU= 0.85, intra-service time of 10 minutes, total time of 16 mintues) and noted that both services involve an identical amount of intra-service time and similar total time. Accordingly, the RUC determined a work RVU of 0.85 accurately values 70450 in comparison to this similar reference service. In addition, CPT code 72192 *Computed tomography, pelvis; without contrast material* (work RVU= 1.09) was compared to the survey code and the RUC agreed that while both services have identical intra-service time of 10 minutes, the reference code should be valued higher because of greater intensity and complexity. The RUC also reviewed radiology codes outside the CT family and determined that MPC code 76700 *Ultrasound, abdominal, real time with image*

documentation; complete (work RVU= 0.81), with similar intra-service time, should be valued similarly. **The RUC recommends a work RVU of 0.85 for CPT code 70450.**

70460 *Computed tomography, head or brain; with contrast material*
The RUC reviewed the survey results from 92 radiologists and neuroradiologists and recommends the current work RVU of 1.13 for CPT code 70460, which is below the survey 25th percentile work RVU of 1.16. The RUC recommends 5 minutes of pre-service time, 12 minutes of intra-service time and 4 minutes of post-service time. The RUC discussed the need for review of prior studies in both the pre-service and intra-service time components. The specialties explained that in the pre-service time a review of prior studies is essential to ensure contrast is needed, communicate proper protocol with the technologist and to confirm the appropriateness of the study. In the intra-service time a review of prior studies is also performed during the interpretation in order to make comparisons between previous scans and the new scan.

The RUC reviewed the top key reference service code 70487 *Computed tomography, maxillofacial area; with contrast material(s)* (work RVU= 1.13, intra-service time of 12 minutes, total time of 22 minutes) and noted that both services involve an identical amount of intra-service time, similar total time, similar intensity and should be valued similarly. The RUC also compared the survey code to CPT code 74150 *Computed tomography, abdomen; without contrast material* and noted that both codes have identical intra-service time, similar total time and should have a similar valuation due to involving a similar amount of physician work. **The RUC recommends a work RVU of 1.13 for CPT code 70460.**

70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections*
The RUC reviewed the survey results from 92 radiologists and neuroradiologists and recommends the current work RVU of 1.27 for CPT code 70470, which is below the survey 25th percentile work RVU of 1.3. The RUC recommends 5 minutes of pre-service time, 15 minutes of intra-service time and 4 minutes of post-service time. The RUC discussed the need for review of prior studies in both the pre-service and intra-service time components. The specialties explained that in the pre-service time a review of prior studies is essential to ensure need for contrast, communicate proper protocol with the technologist and to confirm the appropriateness of the study. In the intra-service time a review of prior studies is also performed during the interpretation in order to make comparisons between previous scans and the new scan.

The RUC reviewed the top key reference service code 70488 *Computed tomography, maxillofacial area; without contrast material, followed by contrast material(s) and further sections* (work RVU= 1.27, intra-service time of 15 minutes, total time of 25 minutes) and noted that both services have identical intra-service time, similar total time and involve an identical amount of physician work. The RUC also compared the survey code to CPT code 74160

Computed tomography, abdomen; with contrast material(s) (work RVU= 1.27, intra-service time of 15 minutes, 23 minutes of total time) and agreed that both studies should be valued similarly as they involve an identical amount of intra-service time, similar total time and analogous physician work. **The RUC recommends a work RVU of 1.27 for CPT code 70470.**

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

X-Ray Bile Ducts (Tab 16)
Kurt Schoppe, MD (ACR); R. Bruce Cameron, MD (ACG); Shivan Mehta, MD (AGA); Seth Gross, MD (ASGE); Lauren Golding, MD (ACR); Andrew Moriarity, MD (ACR)

In January 2019, the Relativity Assessment Workgroup (RAW) reviewed CMS/Other Source codes with 2017e Medicare utilization over 30,000 and codes 74300 and 74328 were both identified as part of this screen. The RUC recommended these services be surveyed for April 2019. Codes 74329 and 74330 were also included as part of the same code family. CPT code 74301 was referred to CPT for deletion.

74300 ***Cholangiography and/or pancreatography; intraoperative, radiological supervision and interpretation***
The RUC reviewed the survey results from 30 radiologists and recommends the survey 25th percentile work RVU of 0.32 and the following physician time components: 2 minutes of pre-service time, 5 minutes of intra-service time and 2 minutes of post-service time. To justify a work value of 0.32, the RUC compared the survey code to CPT codes 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU= 0.29, intra-service time of 5 minutes, total time of 7 minutes) and 71048 *Radiologic examination, chest; 4 or more views* (work RVU= 0.31, intra-service time of 5 minutes, total time of 7 minutes) and noted that all three services involve identical intra-service time. The survey code involves 2 more minutes of total time, justifying the slightly higher valuation and placing it in appropriate rank order with both reference codes. **The RUC recommends a work RVU of 0.32 for CPT code 74300.**

74328 ***Endoscopic catheterization of the biliary ductal system, radiological supervision and interpretation***
The RUC reviewed the survey results from 65 radiologists and gastroenterologists and recommends the survey 25th percentile work RVU of 0.47 and the following physician time components: 5 minutes of pre-service time, 10 minutes of intra-service time and 5 minutes of post-service time. To justify a work value of 0.47, the RUC compared the survey code to MPC code 93923 *Complete bilateral noninvasive physiologic studies of upper or lower extremity arteries, 3 or more levels (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental blood pressure measurements with bidirectional Doppler waveform recording and analysis, at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental volume plethysmography at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental transcutaneous oxygen tension measurements at 3 or more levels), or single level study with provocative functional maneuvers (eg, measurements with postural provocative tests, or measurements with reactive hyperemia)* (work RVU= 0.45, intra-service time of 10 minutes, total time of 16 minutes) and noted that both services involve identical intra-service time, whereas the survey code involves more total time and should be valued somewhat higher. The RUC also compared the survey code to CPT code 96573 *Photodynamic therapy by external application of light to destroy premalignant lesions of the skin and adjacent mucosa with application and illumination/activation of photosensitizing drug(s) provided by a physician or other qualified health care professional, per day* (work RVU= 0.48, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services involve an identical amount of intra-service and total time, as well as similar physician work intensity, and therefore should be valued similarly. **The RUC recommends a work RVU of 0.47 for CPT code 74328.**

74329 ***Endoscopic catheterization of the pancreatic ductal system, radiological supervision and interpretation***
The RUC reviewed the survey results from 64 radiologists and gastroenterologists and recommends the survey 25th percentile work RVU of 0.50 and the following physician time components: 5 minutes of pre-service time, 10 minutes of intra-service time and 5 minutes of post-service time. The RUC noted that

although codes 74328 and 74329 involve an identical amount of time, CPT code 74329 is a somewhat more intense service to perform because the evaluation of the pancreatic ductal system is more intense than the evaluation of the biliary system due to differences in anatomy. To justify a work value of 0.50, the RUC compared the survey code to CPT code 93931 *Duplex scan of upper extremity arteries or arterial bypass grafts; unilateral or limited study* (work RVU= 0.50, intra-service time of 10 minutes and total time of 20 minutes) and noted that both services involve an identical amount of time and physician work intensity and should be valued the same. The RUC also compared the survey code to CPT code 78014 *Thyroid imaging (including vascular flow, when performed); with single or multiple uptake(s) quantitative measurement(s) (including stimulation, suppression, or discharge, when performed)* (work RVU= 0.50, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services involve an identical amount of time and physician work intensity and should be valued the same. **The RUC recommends a work RVU of 0.50 for CPT code 74329.**

74330 *Combined endoscopic catheterization of the biliary and pancreatic ductal systems, radiological supervision and interpretation*
The RUC reviewed the survey results from 65 radiologists and gastroenterologists and recommends the survey 25th percentile work RVU of 0.70 and the following physician time components: 6 minutes of pre-service time, 12 minutes of intra-service time and 6 minutes of post-service time. To justify a work value of 0.70, the RUC compared the survey code to CPT code 76641 *Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; complete* (work RVU= 0.73, intra-service time of 12 minutes, total time of 22 minutes) and noted that both services involve identical intra-service, similar total times and a similar amount of physician work. The RUC also compared the survey code to CPT code 95976 *Electronic analysis of implanted neurostimulator pulse generator/transmitter (eg, contact group[s], interleaving, amplitude, pulse width, frequency [Hz], on/off cycling, burst, magnet mode, dose lockout, patient selectable parameters, responsive neurostimulation, detection algorithms, closed loop parameters, and passive parameters) by physician or other qualified health care professional; with simple cranial nerve neurostimulator pulse generator/transmitter programming by physician or other qualified health care professional* (work RVU= 0.73, intra-service time of 11 minutes, total time of 23 minutes) and noted that the survey code involves 1 more minute of intra-service time and total time; both services involve a similar intensity and amount of physician work and should be valued similarly. **The RUC recommends a work RVU of 0.70 for CPT code 74330.**

Practice Expense
These services are facility-only and have no direct practice inputs.

<u>Introduction of Catheter or Stent (Tab 17)</u>
Kurt Schoppe, MD (ACR); Curtis Anderson, MD (SIR); Michael Hall, MD (SIR); Minhajuddin Khaja, MD (SIR); Lauren Golding, MD (ACR); Andrew Moriarity, MD (ACR)

CPT code 75984 was identified in October 2012 via the Code Reported Together 75% More screen, second iteration. The RUC recommended bundling 50392 and 74475, 50393 and 74480, 50394 and 74425, 50398 and 75984 and 50392. All codes were bundled and reviewed as part of the Genitourinary Catheter Procedures issue at the January 2015 RUC meeting, except for 75984. CPT code 75984 has not been included in any coding change proposals to date. The specialty society submitted an action plan indicating why a code change proposal has not been submitted as well as the next steps to address this service. The specialty societies indicated that the utilization for this service will go down after the other coding changes take effect. The Workgroup recommended reviewing this service after more utilization data is available, which resulted in the service being surveyed for the April 2019 RUC meeting.

Compelling Evidence
The specialty society presented compelling evidence for CPT code 75984 based on a flawed methodology with inadequate time assigned to the code under the CMS/Other value. In addition, there is a change in patient population because of bundling with a large majority of genitourinary procedures for CPT 2016. Due to the previous bundling, it is now more common for the survey code to be performed in patients with an abdominal abscess drain. Also, as the RUC has noted previously during review of other services, codes with the CMS/Other designation were never surveyed by the RUC or any other stakeholder; their physician time and work were assigned by CMS in rulemaking over 25 years ago using an unknown methodology. The specialty society also noted that an increase in value for this code is justified by the survey data, comparisons with the key reference services, and to maintain relativity with other diagnostic imaging services. The RUC approved the societies' compelling evidence based on previously unknown and flawed methodology, as well as a change in patient population.

75984 Change of percutaneous tube or drainage catheter with contrast monitoring (eg, genitourinary system, abscess), radiological supervision and interpretation
The RUC reviewed the survey results from 55 interventional and diagnostic radiologists and recommends the survey 25th percentile work RVU of 0.83 5 minutes of pre-service time, 15 minutes of intra-service time and 5 minutes of immediate post-service time. To justify a work value of 0.83, the RUC compared the survey code to the 2nd key reference code 72265 *Myelography, lumbosacral, radiological supervision and interpretation* (work RVU= 0.83, intra-service time of 15 minutes) and noted that both radiologic supervision and interpretation codes typically involve identical intra-service and total time to perform, as well as an identical intensity and complexity and therefore should be valued the same. The RUC also compared the survey code to MPC Code 95819 *Electroencephalogram (EEG); including recording awake and asleep* (work RVU= 1.08, intra-service time of 15 minutes and total time of 26 minutes) and noted that both services have identical intra-service time and similar total time and that a value of 0.83 for the survey code maintains appropriate relativity to the value of the slightly more intense reference code. **The RUC recommends a work RVU of 0.83 for CPT code 75984.**

Practice Expense
The RUC recommends the direct practice expense inputs as submitted by the specialty societies.

<u>Ophthalmic Ultrasound (Tab 18)</u>
David Glasser, MD (AAO); Charles Fitzpatrick, OD (AOA); Parag Parekh, MD (ASCRS)

The Relativity Assessment Workgroup (RAW) performed an analysis to identify services that were RUC referrals to develop CPT Assistant articles from 2013-2016 and ophthalmic ultrasound code 76513 was identified as part of this analysis. Following a review of action for this service, the RUC recommended that this service be surveyed for April 2019.

At the April 2019 RUC meeting, the specialty societies requested for the RUC to support their decision to refer this service to the CPT Editorial Panel for revision. In preparing for the survey, the specialty requested data from AMA staff on how often this service is performed unilaterally and bilaterally, as the code currently describes a unilateral service. CPT code 76513 has typically been performed bilaterally each of the past three years available in the Medicare Carrier 5% Standard Analytic File (2015-2017). The specialty noted their intent to submit a code change application with a change to the descriptor to include "unilateral or bilateral" for the September 2019 CPT Editorial Panel meeting for CPT 2021. **The RUC recommends CPT code 76513 be referred to CPT.**

Proton Beam Treatment Delivery (PE Only) (Tab 19)
Michael Kuettel, MD (ASTRO); Peter Orio, DO (ASTRO); Amara Rewari, MD (ASTRO); William Hartsell, MD (ASTRO); Gerald White, MS (ASTRO)

In April 2018, the Relativity Assessment Workgroup (RAW) identified CPT codes 77522 *Proton treatment delivery; simple, with compensation* and 77523 *Proton treatment delivery; intermediate* as contractor-priced Category I CPT codes that have 2017 estimated Medicare utilization over 10,000. Although the RAW agreed with the specialty society that this family of codes should remain contractor priced, the RUC determined that these services should be surveyed for practice expense (PE). The specialty society included CPT codes 77520 *Proton treatment delivery; simple, without compensation* and 77525 *Proton treatment delivery; complex* as part of the family. The Research Subcommittee approved a custom PE survey and vignettes. The specialty identified a list of 32 practices that were believed to be treating, non-facility practices. The specialty received 10 completed non-facility practice surveys, five notifications that the practice is facility-based and one notification that the practice had not started treating patients. Unlike the typical RUC survey, where a practitioner is completing the survey based on their own individual experience, the proton beam therapy surveys were completed with the practice in mind. The specialty society used the data from the survey as well as an expert panel to develop the practice expense recommendations. The proton treatment delivery codes 77520, 77522, 77523 and 77525 are currently contractor priced and do not have established non-facility direct practice expense inputs. The reference code used on the PE spreadsheet is CPT code 77373 *Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions*, a specialized radiation treatment delivery service, for which a PE survey was conducted and was recently reviewed by the PE Subcommittee.

The specialty societies explained that they had some difficulty in determining the appropriate recommendation for CPT code 77520. The specialty society received only three survey responses for code 77520 and the data was not consistent between the three surveys. The most recent Medicare Provider Utilization and Payment Data (2016) indicates that CPT code 77520 had three providers. One center treated 11 beneficiaries, another center also treated 11 beneficiaries and a large cancer center treated 61 beneficiaries. The large cancer center is converting to a facility; therefore, the specialty society anticipates that the utilization will drop to less than 1,000 per year for CPT code 77520. The two simple codes, 77520 and 77522, are almost identical. The PE Subcommittee questioned the difference between providing the service with compensation and without. The presenters explained that the compensator is a way to account for differences in tumor volume and patient anatomy. Compensation is the way that the clinical staff prepare modifies the proton radiation beam to conform to the body/tumors and does not change the delivery system characteristics. The same equipment is used for both services. Almost all patients would require some type of compensation and that is why code 77520, without compensation, is low volume. However, the code should not be deleted because a simple treatment code without compensation is needed to treat ocular melanoma, a low-volume tumor, generally seen in patients outside of the Medicare population. In addition, the Medicare Provider Utilization and Payment Data file indicates that current allowable charges/payments for CPT codes 77520 and 77522 are very similar, $865 and $884 respectively. Given that the services are nearly identical and that the small number of providers made it impossible to obtain reliable survey data, the specialty society recommended, and the RUC agreed, that CPT code 77520 direct practice expense inputs should be directly crosswalked to CPT code 77522.

The PE Subcommittee discussed that each proton treatment vault is distinct and the vendors for proton treatment delivery system mandate that the construction of the vault has specific criteria that is for that machine alone. Each vault is designed and constructed to house the cyclotron or synchrotron, the transmission line, as well as the radiation treatment gantry and its associated spaces. The presenters confirmed that the typical vault can only be used for one patient at a time. Prior to 2014 there were

centers with multiple rooms installed, but because of changing technology, in 2018 there were no multiple room centers sold to provide proton beam treatment. The specialty also confirmed that there are no alternative treatment configurations that would potentially require fewer resources. The vault must comply with federal and state regulation to provide radiation protection for those performing the procedure. This is a rapidly changing technology and the change in the treatment machine often requires extensive modification to the vault. The specialty society is recommending 15 years useful life for this equipment item, consistent with the useful life of the linear accelerator vault. The RUC expressed concern about the extremely high cost of the vault, and the specialty agreed that these services are extremely hard to value and is why they are currently contractor priced. The RUC noted that it is not the purview of the RUC to make recommendations about pricing and useful life of equipment, therefore relies on the expertise of CMS to make those determinations.

There are two *Radiation Therapists* (L050C) involved in providing this service. The RUC agreed with the specialty society that two credentialed radiation therapists must be available per treatment unit and for any treatment delivery to ensure safety and quality of care. The PE Subcommittee carefully reviewed the tasks allocated to each radiation therapist to ensure there is no double counting both in the clinical activities staff time and the equipment time calculations. **The RUC recommends the direct practice expense inputs as submitted by the specialty society.**

New Technology
CPT codes 77520, 77522, 77523 and 77525 will be placed on the new technology/new services list for re-examination after 3 years of data are available.

Complete Electrocardiogram (Tab 20)
Richard Wright, MD (ACC); Thad Waites, MD (ACC); Edward Tuohy, MD (ACC)

CMS provided detail in the Final Rule for 2019 on the seven codes nominated by Anthem. CMS indicated they received one submission that nominated several high-volume codes for review under the potentially misvalued code initiative. In its request, Anthem noted a systemic overvaluation of work RVUs in certain procedures and tests based "on a number of GAO and MedPAC reports, media reports regarding time inflation of specific services, and the January 19, 2017 Urban Institute report for CMS." Anthem suggested that the times CMS assumes in estimating work RVUs are inaccurate for procedures, especially due to substantial overestimates of preservice and post-service time, including follow-up inpatient and outpatient visits that do not take place. According to Anthem, the time estimates for tests and some other procedures are primarily overstated as part of the intra-service time. Anthem stated that previous RUC reviews of these services did not result in reductions in valuation that adequately reflected reductions in surveyed times.

The specialty societies were critical of the Urban Institute report, "Collecting Empirical Physician Time Data," cited by Anthem which is based on a collection of empirical time data derived from electronic health records (EHRs) and/or direct observation at only three multispecialty health care systems. Important characteristics of the sites are not specified (e.g. size, procedure volume, academic medical center or teaching hospital, urban or rural, government entity, not-for profit or for-profit) and data was collected for only 6 or 12 months. CPT code 93010, specifically, was considered an outlier for much of the Urban Institute report. The conclusions of the report are based on a "sample of convenience" and the methodology by which conclusions were drawn does not meet the rigor of RUC evaluation protocols.

As requested, the specialty societies surveyed CPT code 93010 for this April 2019 RUC meeting. The specialties explained that the family of electrocardiogram (ECG) codes is relatively unique in that CPT

code 93000 is the global service which is billed in the hospital setting, 93005 is the technical (practice expense) component and 93010 is the professional (physician work) component. For purposes of this review, the societies surveyed the professional component code 93010 and developed PE recommendations for 93005. These recommendations for work and practice expense correlate to the global code 93000 and are replicated accordingly.

93010 ***Electrocardiogram, routine ECG with at least 12 leads; interpretation and report only***
The RUC reviewed the survey results from 75 cardiologists for CPT code 93010 and determined that the current work RVU of 0.17 accurately reflects the physician work necessary for this service and falls below the survey 25th percentile. The specialty believes that the work for this service has not changed and acknowledged variations depending on the site of service and patient population. The facility setting is typical and much more likely to have complex cases with abnormalities in the electrocardiograms. The physician must review all computer-interpreted ECGs for inconsistencies and to ensure the results are interpreted correctly. The RUC agreed with the specialty societies that this service is not just an automated test. The physician intra-service work required to perform this service includes: The physician obtains the ECG directly from technician and/or goes to ECG reading room to review the ECG. Review and compare the ECG computer interpretation, if available, adjusting for age, weight, body habitus, gender, known cardiac diagnoses, and effect of electronic cardiac devices, if present. Inspect the ECG for rhythm, including assessment of atrial and ventricular rates and rhythms, and the summation of those two rhythms as the patient's intrinsic rhythm. Measure primary intervals and compare with computer-generated intervals, if available, and intervals from previous ECGs (these intervals include ECG tracing data, such as the PR, QRS duration, QT duration, and others). Analyze and compare the P-wave morphology and axis and the QRS axis. Analyze QRS morphology in comparison to previous ECGs, assessing criteria for voltage, MI, hypertrophy, and presence of early or altered depolarization. Analyze the ST segments and T waves for evidence of ischemia, infarction, pericarditis, or repolarization abnormalities. Carefully inspect each tracing for the presence or absence of pacemaker impulses or artifacts. Review and compare one or more previous ECGs with the current ECG. Then compare ECG interpretation with that obtained from the computer ECG analysis, if available, and then delete and/or include appropriate diagnoses. Dictate, write, and/or confirm interpretation with that of the computer-generated interpretation, if available.

The RUC recommends 2 minutes of pre-service evaluation time and 3 minutes of intra-service time, as supported by the survey, and 1 minute of post-service time. The post-service time was reduced by 1 minute to be consistent with the current value recommendation.

For principal support, the RUC referenced the ankle and foot x-ray services, CPT codes 73610 *Radiologic examination, ankle; complete, minimum of 3 views* (work RVU = 0.17, 3 minutes intra-service time, 5 minutes total time) and 73630 *Radiologic examination, foot; complete, minimum of 3 views* (work RVU = 0.17, 3 minutes intra-service time, 5 minutes total time) and noted that the intra-service times and amount of physician work are identical.

The RUC also compared CPT code 93010 to the top key reference code 93042 *Rhythm ECG, 1-3 leads; interpretation and report only* (work RVU = 0.15 and 3 minutes intra-service time, 7 minutes total time) and noted that while the intra-service times are identical, eighty percent of survey respondents that selected the top reference code rated the survey code as more intense and complex relative to the key reference code, justifying a slightly higher work value. This comparison is reasonable, since the times are similar, and respondents estimated the 12-lead ECG to be more work with more intensity.

For additional support, the RUC referenced several MPC codes that align with the recommendation: 51741 *Complex uroflowmetry (eg, calibrated electronic equipment)* (work RVU = 0.17 and 5 minutes intra-service time, 7 minutes total time), 73120 *Radiologic examination, hand; 2 views* (work RVU = 0.16 and 4 minutes intra-service time, 6 minutes total time), 96402 *Chemotherapy administration, subcutaneous or*

intramuscular; hormonal anti-neoplastic (work RVU = 0.19 and 3 minutes intra-service time, 9 minutes total time). The RUC concluded that the existing work RVU for CPT code 93010 should be maintained. **The RUC recommends a work RVU of 0.17 for CPT code 93010.**

93000 ***Electrocardiogram, routine ECG with at least 12 leads; with interpretation and report***
The RUC determined that the recommendations for work and practice expense for CPT code 93010 also fully apply to the global code CPT code 93000. Therefore, the RUC replicated its review of the survey results for 93010 and determined that the current work RVU of 0.17 accurately reflects the physician work necessary for the global service 93000. The RUC recognized that there is no overlap with E/M and the 2 minutes of pre-service time and 1 minute post-service time is only associated with the pre and post work for this service including review of prior ECGS. The RUC recommends 2 minutes of pre-service evaluation time and 3 minutes of intra-service time and 1 minute of post-service time. The RUC concluded that the existing work RVU for both the global and professional codes for ECG should be maintained. **The RUC recommends a work RVU of 0.17 for CPT code 93000.**

Practice Expense
The RUC agreed with the specialty society that it is appropriate to change the clinical staff type from L051A *RN* to L037D *RN/LPN/MTA*. The PE Subcommittee made one modification changing gauze to alcohol swabs (SJ053 *swab-pad, alcohol*). **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Complete Transthoracic Echocardiography (TTE) with Doppler (Tab 21)
Richard Wright, MD (ACC); Michael Main, MD (ASE); Thad Waites, MD (ACC); Edward Tuohy, MD (ACC); Geoffrey Rose, MD (ASE)

CMS provided detail in the Final Rule for 2019 on the seven codes nominated by Anthem. CMS indicated they received one submission that nominated several high-volume codes for review under the potentially misvalued code initiative. In its request, Anthem noted a systemic overvaluation of work RVUs in certain procedures and tests based "on a number of GAO and MedPAC reports, media reports regarding time inflation of specific services, and the January 19, 2017 Urban Institute report for CMS." Anthem suggested that the times CMS assumes in estimating work RVUs are inaccurate for procedures, especially due to substantial overestimates of preservice and post-service time, including follow-up inpatient and outpatient visits that do not take place. According to Anthem, the time estimates for tests and some other procedures are primarily overstated as part of the intra-service time. Anthem stated that previous RUC reviews of these services did not result in reductions in valuation that adequately reflected reductions in surveyed times.

The specialty societies were critical of the Urban Institute report, "Collecting Empirical Physician Time Data," cited by Anthem which is based on a collection of time data derived from electronic health records (EHRs) and/or direct observation at only three multispecialty health care systems. Important characteristics of the sites are not specified (e.g. size, procedure volume, academic medical center or teaching hospital, urban or rural, government entity, not-for profit or for-profit) and data was collected for only 6 or 12 months. The Urban Institute authors acknowledged the limitations of the project, "We recognize that these three sites were very much a sample of convenience and should not necessarily be viewed as representative of other health systems." All of the empirical time data for the codes included in the "imaging and other test interpretations" service type came from direct observation and thus form the basis for the analysis of noninvasive cardiac testing codes. For CPT code 93306 specifically, an abject sample size of N=20 from direct observation data was utilized. Alternately, the RUC recommendations for CPT code 93306 in 2016 were based on survey data from 172 cardiologists. The conclusions of the Urban Institute report are based on a convenience sample, and the methodology by which conclusions were drawn does not meet the rigor of RUC evaluation protocols.

CPT code 93306 was most recently reviewed in April 2016, and CMS accepted the RUC recommendation of 1.50 work RVUs for CY 2018. At that time, the specialty societies indicated and the RUC agreed that there had been a change in technique and diffusion of technology used to perform the procedure. The Urban Institute study that Anthem referenced would not have accounted for the 2018 change as it was based on earlier data. As requested, the specialty societies surveyed CPT code 93306 for this April 2019 RUC meeting.

93306 ***Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, with spectral Doppler echocardiography, and with color flow Doppler echocardiography***
The RUC reviewed the survey results from 99 cardiologists for CPT code 93306 and determined that the survey 25th percentile work RVU of 1.46 accurately reflects the physician work necessary for this service. The RUC recommends 3 minutes of pre-service evaluation time, 20 minutes of intra-service time and 5 minutes of post-service time as supported by the survey. The RUC noted that the echocardiography service has not changed in the last two years. As total time decreased by two minutes per the survey, the slight reduction in work RVU offered by the 25th percentile was considered appropriate.

The RUC compared CPT code 93306 to the top key reference service code 93351 *Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report; including performance of continuous electrocardiographic monitoring, with supervision by a physician or other qualified health care professional* (work RVU = 1.75, 20 minutes intra-service time and 40 minutes total time) and noted that while the intra-service times are identical, total time is higher for the reference service because the physician provides direct supervision of the patient in the stress testing laboratory as part of pre-service time. Survey respondents indicated that CPT code 93306 is more intense/complex than the stress echocardiography with ECG monitoring code 93351. This comparison is reasonable as there are some clinical similarities, yet respondents estimated a diagnostic TTE to be a higher intensity at the median response level.

The RUC also compared CPT code 93306 to the second key reference code 78452 *Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection* (work RVU = 1.62, 20 minutes intra-service time and 40 minutes total time). Again, the survey respondents that selected the second key reference code indicated that code 93306 is somewhat more intense/complex than the reference service, while the intra-service times are identical. The specialty societies indicated that the higher intensity and complexity measures likely reflect the more diverse disease processes to consider when the physician is reviewing the images. CPT code 93306 provides a non-invasive comprehensive assessment of cardiac structure and function which includes measurements performed during the examination, 2-dimensional and/or M-Mode numerical data for transthoracic echocardiograms, and Doppler/color flow data. Whereas, CPT code 78452 assesses heart conditions including myocardial wall motion abnormalities with myocardial perfusion at stress and rest. The total time differences between the two codes were solely based on the shorter pre- and post-service time periods, which are balanced by the difference in work RVUs.

For additional support, the RUC referenced MPC code 74170 *Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further sections* (work RVU = 1.40 and 18 minutes intra-service) and similar service 72146 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; without contrast material* (work RVU = 1.48 and 20 minutes intra-service time).

The RUC concluded that CPT code 93306 should be valued at the 25th percentile work RVU as supported by the survey. **The RUC recommends a work RVU of 1.46 for CPT code 93306.**

Practice Expense
The PE Subcommittee decreased the amount of ultrasound gel to 25ml (SJ062 *ultrasound transmission gel*) and made a formula change to the ultrasound room minutes (EL015 *room, ultrasound, general*). **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

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

Pacing Heart Stimulation (Tab 22)
Richard Wright, MD (ACC); David Slotwiner, MD (HRS); Thad Waites, MD (ACC); Edward Tuohy, MD (ACC); Mark Schoenfeld, MD (HRS)

In January 2019, the Relativity Assessment Workgroup reviewed CMS/Other Source codes with 2017e Medicare utilization over 30,000. CPT code 93623 was identified and the RUC recommended this service be surveyed for April 2019.

Editorial Proposal to CPT
During presentation of CPT code 93623 at the April 2019 RUC meeting, the specialty societies indicated that the service is meant to be reported only once per day, whether a drug is infused once to create an arrhythmia or more than one time. Unit of service data has indicated both a mean and median of one unit of service per day. The specialty societies recommended and the RUC agreed that it would be reasonable to add a parenthetical change after CPT code 93623 to clarify that it is only to be reported once per day.

93623 ***Programmed stimulation and pacing after intravenous drug infusion (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 46 cardiologists and determined that the survey 25th percentile work RVU of 2.04 appropriately accounts for the physician work involved to perform this service. The RUC recommends 20 minutes of intra-service time. To justify a work RVU of 2.04, the RUC compared the survey code to the top key reference service 93463 *Pharmacologic agent administration (eg, inhaled nitric oxide, intravenous infusion of nitroprusside, dobutamine, milrinone, or other agent) including assessing hemodynamic measurements before, during, after and repeat pharmacologic agent administration, when performed (List separately in addition to code for primary procedure)* (work RVU = 2.00 and intra-service time of 30 minutes) and noted that both services involve a similar amount of physician work, however survey respondents who selected the pharmacologic agent administration code 93463 as the top key reference service found the survey code to be more intense/complex overall. The RUC agreed that this comparison is reasonable since survey respondents estimated the survey code to involve a similar amount of work to CPT code 93463. The RUC also compared the survey code to MPC code 36227 *Selective catheter placement, external carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)* (work RVU = 2.09 and intra-service time of 15 minutes) and noted that both services involve similar physician work and time and should be valued similarly. Additionally, the RUC agreed that both reference services bracket the survey code in both physician work and time, supporting the recommended work value for the survey code. **The RUC recommends a work RVU of 2.04 for CPT code 93623.**

Practice Expense
These services are facility-only and have no direct practice inputs.

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

Intracardiac Echocardiography (Tab 23)
Richard Wright, MD (ACC); David Slotwiner, MD (HRS); Thad Waites, MD (ACC); Edward Tuohy, MD (ACC); Mark Schoenfeld, MD (HRS)

In January 2019, the Relativity Assessment Workgroup (RAW) reviewed services with 2017e Medicare utilization of 10,000 or more that has increased by at least 100% from 2012 through 2017. CPT code 93662 was identified and the RUC recommended this service be surveyed for April 2019.

93662 ***Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (List separately in addition to code for primary procedure)***
The RUC reviewed the survey results from 42 cardiologists and agreed on the following physician time component: 25 minutes of intra-service time.

The RUC reviewed the recommended survey 25th percentile work RVU of 2.53 and agreed that this value appropriately captures the amount of physician work involved. The recommended work value and time for this service reflects the change in technology from when it was last valued in 2000. Intracardiac echocardiography has become an essential tool for complex catheter ablation of many types of arrhythmias and it has also enabled operators to significantly reduce the use of fluoroscopy. Since this service was last valued, arrhythmia mapping systems have developed the ability to incorporate intracardiac echo images into 3-dimensional electroanatomical maps. This has improved the accuracy, safety and effectiveness of catheter ablation for a wide range of arrhythmias, most notably atrial fibrillation. To justify a work RVU of 2.53, the RUC compared the survey code to CPT code 34713 *Percutaneous access and closure of femoral artery for delivery of endograft through a large sheath (12 French or larger), including ultrasound guidance, when performed, unilateral (List separately in addition to code for primary procedure)* (work RVU = 2.50 and intra-service time of 20 minutes) and determined that the recommended work value for the survey code is supported by CPT code 34713 which has similar physician work and time. The RUC also compared the survey code to MPC code 36476 *Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)* (work RVU = 2.65 and intra-service time of 30 minutes) and determined that the recommended work value is supported by MPC code 36476. The RUC agreed that both reference services bracket the survey code in both physician work and time, supporting the recommended work value for the survey code.

Additionally, survey respondents who selected coronary intravascular ultrasound (IVUS) code 92978 as the top key reference service (KRS), found the survey code to be more intense/complex overall. The RUC agreed that this comparison is reasonable, since the median survey time of 25 minutes for the survey code equals the 25-minute intra-service time for KRS code 92978, yet survey respondents estimated the survey code to be more work and takes significantly more mental effort and judgment than KRS code 92978, further supporting the recommended survey 25th percentile work RVU of 2.53 for the survey code. **The RUC recommends a work RVU of 2.53 for CPT code 93662.**

Practice Expense
These services are facility-only and have no direct practice inputs.

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

Ventricular Assist Device (VAD) Interrogation (Tab 24)
Richard Wright, MD (ACC); James Levett, MD (STS); Thad Waites, MD (ACC); Edward Tuohy, MD (ACC); Stephen Lahey, MD (AATS); Joseph Turek, MD (STS). *A presenter was precluded from speaking due to a financial conflict.*

In January 2019, the Relativity Assessment Workgroup (RAW) reviewed services with 2017e Medicare utilization of 10,000 or more that has increased by at least 100% from 2012 through 2017. CPT code 93750 was identified and the RUC recommended this service be surveyed for April 2019.

93750 ***Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report***
The RUC reviewed the survey responses from 72 cardiologists and cardiothoracic surgeons and recommends a work RVU of 0.85 and the following physician time components: 6 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time. The RUC noted that this service is typically performed on the same day as an evaluation and management (E/M) service. The RUC accounted for this typical overlap in both their pre-service evaluation time and work value recommendation. The amount and complexity of data produced by ventricular assist devices has greatly increased as the technology includes real-time wave forms and has improved sensitivity which triggers more events relative to prior generations of technology. The increase in the amount and complexity of hemodynamic data has contributed to this service's increase in intensity relative to when the service was last reviewed. The pre-service work involves looking at older ventricular assist device data and correlating the past data with other hemodynamic data and would be separate from the E/M visit work.

CPT code 93750 was assigned 30 minutes of intra-service and total physician time when it was last reviewed by the RUC in April 2009. At that time, the work of reviewing previous studies and writing the report was all grouped into the intra-service time, resulting in the code having only intra-service time assigned for CPT 2010. In addition, the 2009 survey for 93750 had several flaws; it only achieved 20 survey responses. The interrogation service was included on the same survey instrument as major surgical procedure codes 33981-33983 and the survey instrument was designed for major surgical procedures. Due to the low number of survey responses and the other 2009 survey flaws, the specialty proposed and the RUC agreed to crosswalk the times and values for 93750 to a ZZZ code that has since been deleted, code 95973*, Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex spinal cord, or peripheral (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)*. The RUC agreed that the current physician time for this service is flawed and making a physician time comparison between the current time and the updated physician time. Only a comparison of total time to total time would have any validity.

The RUC reviewed the survey 25th percentile work RVU of 0.96 and agreed this value somewhat overestimates the amount of physician work required to perform this service. To determine an appropriate work RVU, the RUC compared the survey code to CPT code 78598 *Quantitative differential pulmonary perfusion and ventilation (eg, aerosol or gas), including imaging when performed* (work RVU = 0.85, intra-service time of 10, total time of 24 minutes) and noted that both services have identical intra-service time, involve a very similar amount of total time and an identical amount of physician work. Therefore,

the RUC recommends a direct work RVU crosswalk from CPT code 78598 to 93750. The RUC noted that a value of 0.85 for the survey code establishes the appropriate relativity to other services that involve programming and/or interrogation of a programmable device. This service is typically performed on very sick patients, who often have a left-ventricular assist device, in the inpatient setting which increases the intensity relative to other services involving programmable cardiac devices. The RUC also compared the survey code to MPC code 78306 *Bone and/or joint imaging; whole body* (work RVU = 0.86, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services involve identical intra-service time, similar total time and should have similar valuation. **The RUC recommends a work RVU of 0.85 for CPT code 93750.**

Practice Expense
The PE Subcommittee corrected the equipment times based on the formulas as provided by CMS. In addition, the PE Subcommittee changed the clinical staff type for CA013 *Prepare Room, Equipment and Supplies* from an RN to the RN/LPN/MTA blend. Also, EQ168 *light, exam* was determined to not be typical in the non-facility setting so that equipment item was removed. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

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

Evaluation of Wheezing (Tab 25)
Megan Adamson, MD (AAFP); Alan Plummer, MD (ATS); Robert DeMarco, MD (CHEST); Kevin Kovitz, MD (CHEST); Katina Nicolacakis, MD (ATS)

The Relativity Assessment Workgroup (RAW) reviewed action plans for services that were RUC referrals to develop CPT Assistant articles from 2013-2016. The RUC recommended that these services be surveyed for April 2019. The RAW noted that CPT code 94400 *Breathing response to CO2 (CO2 response curve)* may be recommended for deletion. The specialty society agreed with the RAW and recommends that 94400 as well as 94770 *Carbon dioxide, expired gas determination by infrared analyzer* be referred to the CPT Editorial Panel for possible deletion. The specialty is requesting that other codes in the family 94010 *Spirometry, including graphic record, total and timed vital capacity, expiratory flow rate measurement(s), with or without maximal voluntary ventilation* and 94060 *Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration* be deferred to the October 2019 RUC meeting. The remaining services reviewed at the April 2019 RUC meeting are four practice expense (PE) only codes:

> **94640** ***Pressurized or nonpressurized inhalation treatment for acute airway obstruction for therapeutic purposes and/or for diagnostic purposes such as sputum induction with an aerosol generator, nebulizer, metered dose inhaler or intermittent positive pressure breathing (IPPB) device***
> **94667** ***Manipulation chest wall, such as cupping, percussing, and vibration to facilitate lung function; initial demonstration and/or evaluation***
> **94668** ***Manipulation chest wall, such as cupping, percussing, and vibration to facilitate lung function; subsequent***
> **94669** ***Mechanical chest wall oscillation to facilitate lung function, per session***

The PE Subcommittee discussed that 94668 is the only code of the four that is not typically performed with an evaluation and management (E/M) service in the non-facility setting. The specialty society had removed clinical staff time as if the code was reported with an E/M, so the PE Subcommittee adjusted the clinical staff time accordingly. Clinical staff time was removed for clinical activity, CA034 *Document*

procedure (nonPACS) (e.g. mandated reporting, registry logs, EEG file, etc.) across all the codes, because the clinical activity code was developed to account for extra documentation requirements and is not meant for standard documentation that a service has been performed. Lastly, adjustments were made to the equipment minute formula for equipment item, EF023 exam table, to capture the correct line items. The specialty societies confirmed that the vest needed for CPT code 94669 is not listed as a direct practice expense input, because the patient provides his or her own vest. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

Exhaled Nitric Oxide Measurement (PE Only) (Tab 26)
David Brown, MD (AAAAI); Gary Gross, MD (ACAAI); Katina Nicolacakis, MD (ATS); Robert DeMarco, MD (CHEST); Michael Blaiss, MD (ACAAI); Kevin Kovitz, MD (CHEST); Alan Plummer, MD (ATS). *A presenter was precluded from speaking due to a financial conflict.*

In January 2019, the Relativity Assessment Workgroup (RAW) reviewed services with 2017 Medicare utilization of 10,000 or more that has increased by at least 100% from 2012 through 2017 and the RUC recommended that CPT code 95012 *Nitric oxide expired gas determination* be surveyed for April 2019. The PE Subcommittee discussed potential overlap in clinical staff work between the pre-service of the service period and the intra-service of the service period. The PE Subcommittee determined that it was appropriate to remove clinical activity staff time for CA016, *Prepare, set-up and start IV, initial positioning and monitoring of patient* and reduce the clinical activity staff time for CA021 *Perform procedure/service---NOT directly related to physician work* from 10 minutes to 8 minutes. The PE Subcommittee discussed the recommendation that more expensive new supply item *sensor, filter, mouthpiece, nitric oxide* replace supply item, SM028 *filter, mouthpiece (NIOX)* and the specialty confirmed that this mouthpiece is disposable and is now typical to be used with the typical less expensive new equipment item, *monitoring system, nitric oxide*. The PE Subcommittee also revised the equipment time for the new monitoring system to exclude line item CA027, *Complete post-procedure diagnostic forms, lab and x-ray requisitions* as it is not included in the default equipment formula. **The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.**

XI. Practice Expense Subcommittee (Tab 27)

Doctor Thomas Weida provided a summary of the report of the Practice Expense (PE) Subcommittee:

- **Deferment of Methodological Issues**

The following methodological and policy issues were deferred to the October 2019 RUC Practice Expense (PE) Subcommittee meeting:

- Fluoroscopy rooms and tables
- Preventing duplication of supply items in kits
- Clinical staff time surveys

- **Direct and Indirect Practice Expense**

There was significant discussion at the meeting about determining whether practice expense inputs are direct or indirect, for example equipment items ED043 *refrigerator, vaccine, temperature monitor w-alarm, security mounting w-sensors, NIST certificates* and ED021 *computer, desktop, w-monitor.* Noting that the final determination of what is direct and indirect is made by CMS, the PE Subcommittee will form a workgroup to clarify guidelines and recommend corrections if necessary.

Doctor Smith noted that Doctor David C. Han, PE Subcommittee Vice Chair, served as the Chair for this meeting and Doctor ThomasWeida, PE Subcommittee member, served as the Vice Chair for the April 2019 meeting only.
The RUC approved the Practice Expense Subcommittee Report.

XII. Relativity Assessment Workgroup (Tab 28)

Doctor Margie Andreae, Chair, provided the Relativity Assessment Workgroup (RAW) report:

- **CMS Other Source Codes – Medicare Utilization over 20,000**

In October 2018, the Workgroup discussed future screens and recommends lowering the threshold and examining the list of CMS/Other source codes with Medicare utilization over 20,000. The Workgroup reviewed this list codes and noted that the six anesthesia codes should be removed as the Anesthesia Workgroup is currently developing a process to address the relativity of anesthesia services. **The Workgroup recommends action plans for the following codes to be presented at the October 2019 meeting: 70030, 75820, 76970, 76998, 80500, 94250, 94750, G0296 and G6014.**

- **Screening Pap carve out No interest – *Informational Item***

In January 2019, the Relativity Assessment Workgroup reviewed CMS/Other Source codes with 2017e Medicare utilization over 30,000. The RUC recommended that code Q0091 *Screening papanicolaou smear; obtaining, preparing and conveyance of cervical or vaginal smear to laboratory* be surveyed for April 2019. When the April 2019 level of interest (LOI) process was conducted, no specialty society interest was received to survey this service. **The Workgroup recommends noting in the CMS and Relativity Assessment Status report that the RUC recommended to survey Q0091 but no specialty society interest followed.** Members noted that the utilization of this service is expected to decrease as the U.S. Preventive Services Task Force (USPSTF) now recommends screening for cervical cancer in women 21 to 65 years of age with cytology (Papanicolaou [Pap] smear) every three years or, for women 30 to 65 years of age who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every five years. The USPSTF recommends against screening for cervical cancer in women older than 65 years who have had adequate prior screening and are not otherwise at high risk of cervical cancer.

- **Annals of Surgery Article – Patterns of Post-Operative Visits**

In January 2019, the Workgroup noted the publication of the December 2018 *Annals of Surgery* article "*Patterns of Postoperative Visits Among Medicare Fee-for-Service Beneficiaries*", written by RAND researchers based on the data 99024 post-operative visits data collection from July 1, 2017 – December 31, 2017. The Workgroup reviewed the study findings and discussed problems with the data. Due to the limitations in the data, the members determined the results should not be used to develop new screens at this time. **The Workgroup requested that AMA staff rerun the Post-Operative Visits screens for 010-day global services with more than 1.5 office visits and 090-day global with more than 6 office visits to see if any additional codes are identified.**

- **Work Per Unit of Time for MFS – *Informational Item***

At the January 2019 RUC meeting a RUC Member requested that AMA staff run the physician work per unit of time to review the relativity across the entire Medicare Physician Payment Schedule. AMA staff calculated the 2019 total time and work RVUs with the 2017 Medicare utilization data as well as a provided a non-weighted calculation for the 2019 Medicare Physician Payment Schedule.

- **Informational Items**

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

The RUC approved the Relativity Assessment Workgroup Report.

XIII. Anesthesia Workgroup (Tab 29)

Doctor Verdi DiSesa, Chair, provided the Anesthesia Workgroup report to the RUC noting that the Workgroup reviewed the survey results of the previously agreed upon on the 16 anesthesia codes that are intended to comprise the anesthesia reference service list (RSL). These codes are 00142, 00350, 00560, 00562, 00566, 00567, 00670, 00731, 00790, 00796, 00812, 01214, 01402, 01630, 01638 and 01810. These codes are highly utilized and span the breath of anesthesia base unit values (3 - 30).

These anesthesia codes were surveyed for time and according to the revised building block method devised by the Workgroup multiplied by the intensities previously determined by the Workgroup. The Workgroup had requested that the American Society of Anesthesiologists (ASA) survey the 16 anesthesia reference codes and to calculate proxy values, with and without the PIPPA contribution. The proxy relative values from the five phases of anesthesia care were summed to create a proxy value for each of the proposed reference service codes.

At this meeting, the Workgroup concluded that the PIPPA times should be included in the calculation of the base unit proxy values for the 16 RSL codes. This inclusion recognizes that PIPPA is the only way to assess the relative intensity of the post-induction anesthesia services furnished.

The Workgroup reviewed the proxy values of the 16 anesthesia services compared to the current base units and determined that five anesthesia services showed a large difference or fell off the regression line and warrant further examination (00142, 00566, 00567, 00731 and 00790). The Workgroup also examined the 16 anesthesia codes using linear interpolation with the proxy work values to calculate base unit values determined by the new building block method.

There was remarkable correlation between the proxy work values and existing base unit values in 10 of the 16 reference anesthesia services. The Workgroup concluded that the proposed method is likely a viable method. There were five services that had more than a 20% difference from the calculated base unit compared to the current base unit (00142, 00567, 00731, 00790 and 01630) and an additional code (00566) that compared to the proxy value was relatively far off the regression line. **Therefore, the Workgroup recommends that the six codes (00142, 00566, 00567, 00731, 00790 and 01630) identified via these two methodologies be removed from the RSL and either be resurveyed (for time and base unit) or replaced by a new anesthesia code with a similar base unit to fill in the gaps and be surveyed.**

The Workgroup confirmed that the 10 other anesthesia codes (00350, 00560, 00562, 00670, 00796, 00812, 01214, 01402, 01638 and 01810) are appropriate for the anesthesia reference service list.

The Workgroup noted that both methods of reviewing variances in base units should be examined by a statistician to help to determine the optimal method for examination of the relativity of these services. The Workgroup will review this information and discuss further at the October 2019 RUC meeting.

Next Steps

The Workgroup indicated that it will convene a conference call over the summer to discuss the codes that ASA will add to the RSL codes or which codes they will keep and resurvey. ASA will survey these codes for time and base unit for the Workgroup to review at the October 2019 RUC meeting. Consultation with a statistician will occur before this meeting.

The RUC approved the Anesthesia Workgroup Report.

XIV. New/ Other Business (Tab 31)

Referrals to Research Subcommittee for October 2019 Meeting:

- Explore whether the RUC should consider more routinely reviewing work per unit time in addition to intra-service work per unit of time.

- Pre- and post-service work performed on the day of surgery has a "standardized" value for IWPUT of 0.0224 for pre-service evaluation, resulting from the Harvard studies. A RUC member questioned whether this Harvard-based 0.0224 for pre-service time remains correct. He noted that when considering the compelling evidence for the office visits codes and the increased work burden and decreased efficiency related to HER use, the same burden may apply to the pre-service valuation component of other services. The RUC agreed to refer the issue to the Research Subcommittee.

- The validity of the surveys is crucial and includes having an adequate number of responses. RUC members requested review of the survey to improve response rate, including:
  - Explore general approaches such as frequency of reminder emails;
  - Review the survey instruments; and the ordering of questions, in particular;
  - Work with the specialties to get de-identified data from Qualtrics about how long it takes a physician to complete the survey.

Referral to Relativity Assessment Workgroup (RAW) for the October 2019 Meeting:

- Doctor Whitten, CMD, made the following request which was referred to RAW for a possible screen:

  The CMS/ RUC process does not generally create relative value units for Category III codes; however, it would assist the contractors in uniformity, if the RUC considered and CMS would value Category III codes that exceed some utilization threshold (e.g. ≥ 50 providers & ≥ 25,000 services/yr.).

  For example, CMS made one code "A" status this year and added RVUs: 0509T (pattern ERG). While other codes, like the glaucoma procedure iStent (0191T) has been around for years with more than 47,000 billed in 2017, but currently is not valued.

  Staff clarified Doctor Whitten's point is when you start to see real volume in a Cat III code that is carrier-priced, it becomes inefficient to the process to remain contractor-priced. Ideally, an application would be submitted for it to be Category I but, if that is not forthcoming, should those codes at least be reviewed by the RUC. It is important to note that the whole issue of the Cat III codes does not mean non-coverage, it does mean contractor-priced.

The RUC adjourned at 11:35 a.m. on Saturday, April 27, 2019.

AMA/Specialty Society RVS Update Committee **Tab 27**
Practice Expense Subcommittee
April 24-25, 2019

Members Present: David C. Han, MD (Chair), Thomas Weida, MD (Vice-Chair), MD Jordan Pritzker, MD (CPT Resource), Jennifer Aloff, MD; Amy Aronsky, DO; Gregory L. Barkley, MD, Eileen Brewer, MD, Joseph Cleveland, MD, Neal H. Cohen, MD, Leisha Eiten, AuD, CCC-A; William F. Gee, MD, Alan Lazaroff, MD, Mollie MacCormack, MD, FAAD, Bradley Marple, MD, Tye Ouzounian, MD, Donald Selzer, MD, W. Bryan Sims, DNP, APRN-BC, FNP, Adam Weinstein, MD

Doctor David C. Han, Practice Expense (PE) Subcommittee Vice Chair, served as the Chair and Doctor Thomas Weida, PE Subcommittee member, served as the Vice Chair for the April 2019 meeting only.

I. Deferment of Methodological Issues

Due to the volume of work related to review of direct practice expense inputs for individual services at this meeting, methodological and policy issues have been deferred to the October 2019 RUC Practice Expense (PE) Subcommittee meeting. The PE Subcommittee will review data and analysis on the following issues at the October 2019 meeting:

- Fluoroscopy rooms and tables
- Preventing duplication of supply items in kits
- Clinical staff time surveys

II. Direct and Indirect Practice Expense

There was significant discussion at the meeting about determining whether practice expense inputs are direct or indirect, for example equipment items ED043 *refrigerator, vaccine, temperature monitor w-alarm, security mounting w-sensors, NIST certificates* and ED021 *computer, desktop, w-monitor.* Noting that the final determination of what is direct and indirect is made by CMS, The PE Subcommittee will form a workgroup to clarify guidelines and recommend corrections if necessary.

III. Practice Expense Recommendations for CPT 2021:

Tab	Title	PE Input Changes
5	Lung Biopsy-CT Guidance Bundle	Modifications
6	Auditory Evoked Potentials	Modifications
7	Vestibular Evoked Myogenic Potential Testing	No Change

Tab	Title	PE Input Changes
8	Exercise Test for Bronchospasm	Defer to October 2019 RUC Meeting
9	Office Visits	Modifications
10	Hip/Knee Arthroplasty	No Change
11	Toe Amputation	No Change
12	Esophagogastroduodenoscopy (EGD) with Biopsy	No Change
13	Colonoscopy	Modifications
14	Intravitreal Injection	No Change
15	CT Head/Brain	Modifications
16	X-Ray Bile Ducts	Facility Only No PE Inputs
17	Introduction of Catheter or Stent	No Change
18	Ophthalmic Ultrasound	Refer to CPT
19	Proton Beam Treatment Delivery (PE Only)	No Change
20	Complete Electrocardiogram	Modifications
21	Complete Transthoracic Echocardiography (TTE) with Doppler	Modifications
22	Pacing Heart Stimulation	Facility Only No PE Inputs
23	Intracardiac Echocardiography	Facility Only No PE Inputs

Tab	Title	PE Input Changes
24	Ventricular Assist Device (VAD) Interrogation	Modifications
25	Evaluation of Wheezing	Modifications
26	Exhaled Nitric Oxide Measurement (PE Only)	Modifications

AMA/Specialty Society RVS Update Committee **Tab 28**
Relativity Assessment Workgroup
April 26, 2019

Members: Doctors Margie Andreae (Chair), Norman Smith (Vice Chair), Jeffrey Paul Edelstein, Matthew Grierson, Gregory Harris, John Heiner, David Hitzeman, Thomas Kintanar, Timothy Laing, John Lanza, Alan Lazaroff, Charles Mabry, Dee Adams Nikjeh, PhD, CCC-SLP, Scott Oates, John Proctor and David Wilkinson.

I. CMS Other Source Codes – Medicare Utilization over 20,000

In October 2018, the Workgroup discussed future screens and recommends lowering the threshold and examining the list of CMS/Other source codes with Medicare utilization over 20,000. The Workgroup reviewed this list codes and noted that the 6 anesthesia codes should be removed as the Anesthesia Workgroup is currently developing a process to address the relativity of anesthesia services. **The Workgroup recommends action plans for the following codes to be presented at the October 2019 meeting: 70030, 75820, 76970, 76998, 80500, 94250, 94750, G0296 and G6014.**

II. Screening Pap carve out No interest – *Informational Item*

In January 2019, the Relativity Assessment Workgroup reviewed CMS/Other Source codes with 2017e Medicare utilization over 30,000. The RUC recommended that code Q0091 *Screening papanicolaou smear; obtaining, preparing and conveyance of cervical or vaginal smear to laboratory* be surveyed for April 2019. When the April 2019 level of interest (LOI) process was conducted, no specialty society interest was received to survey this service. **The Workgroup recommends noting in the CMS and Relativity Assessment Status report that the RUC recommended to survey Q0091 but no specialty society interest followed.** Members noted that the utilization of this service is expected to decrease as the U.S. Preventive Services Task Force (USPSTF) now recommends screening for cervical cancer in women 21 to 65 years of age with cytology (Papanicolaou [Pap] smear) every three years or, for women 30 to 65 years of age who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every five years. The USPSTF recommends against screening for cervical cancer in women older than 65 years who have had adequate prior screening and are not otherwise at high risk of cervical cancer.

III. Annals of Surgery Article – Patterns of Post-Operative Visits

In January 2019, the Workgroup noted the publication of the December 2018 *Annals of Surgery* article "*Patterns of Postoperative Visits Among Medicare Fee-for-Service Beneficiaries*", written by RAND researchers based on the data 99024 post-operative visits data collection from July 1, 2017 – December 31, 2017. The Workgroup reviewed the study findings and discussed problems with the data. Due to the limitations in the data, the members determined the results should not be used to develop new screens at this time. **The Workgroup requested that AMA staff rerun the Post-Operative Visits screens for 010-day global services with more than 1.5 office visits and 090-day global with more than 6 office visits to see if any additional codes are identified.**

IV. Work Per Unit of Time for MFS – *Informational Item*

At the January 2019 RUC meeting a RUC Member requested that AMA staff run the physician work per unit of time to review the relativity across the entire Medicare Physician Payment Schedule. AMA staff calculated the 2019 total time and work RVUs with the 2017 Medicare utilization data as well as a provided a non-weighted calculation for the 2019 Medicare Physician Payment Schedule.

V. Informational Items

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

AMA/Specialty Society RVS Update Committee **Tab 29**
Anesthesia Workgroup
April 25, 2019

Members: Doctors Verdi DiSesa (Chair), Dale Blasier (Vice Chair), Scott Collins, William Donovan, Peter Hollmann, Christopher Senkowski, James Waldorf, Thomas Weida and Robert Zwolak.

In October 2018, the Workgroup agreed on the 16 anesthesia codes that are intended to comprise the anesthesia reference service list (RSL). These codes are 00142, 00350, 00560, 00562, 00566, 00567, 00670, 00731, 00790, 00796, 00812, 01214, 01402, 01630, 01638 and 01810. These codes are highly utilized and span the breath of anesthesia base unit values (3 - 30).

These anesthesia codes were surveyed for time and according to the revised building block method devised by the Workgroup multiplied by the intensities previously determined by the Workgroup. The Workgroup had requested that the American Society of Anesthesiologists (ASA) survey the 16 anesthesia reference codes and to calculate proxy values, with and without the PIPPA contribution. The proxy relative values from the five phases of anesthesia care were summed to create a proxy value for each of the proposed reference service codes.

At this meeting, the Workgroup concluded that the PIPPA times should be included in the calculation of the base unit proxy values for the 16 RSL codes. This inclusion recognizes that PIPPA is the only way to assess the relative intensity of the post-induction anesthesia services furnished.

The Workgroup reviewed the proxy values of the 16 anesthesia services compared to the current base units and determined that five anesthesia services showed a large difference or fell off the regression line and warrant further examination (00142, 00566, 00567, 00731 and 00790). The Workgroup also examined the 16 anesthesia codes using linear interpolation with the proxy work values to calculate base unit values determined by the new building block method. The linear interpolation process was accomplished using the following method:

- The highest proxy value was paired with the highest base unit value (30) and a low level proxy work value was paired with the lowest base unit value (3)
- These pairings define two points in the first quadrant of the two-dimensional Cartesian coordinates
- Assuming a linear relationship between base units and proxy work values, the two points define a line of which the slope and y-intercept can be calculated
- The remaining proxy values can be "converted" to base units by using the former as the independent variable in the equation defined by the line described above

The Workgroup noted that via this method, five services had more than a 20% difference from the calculated base unit compared to the current base unit (00142, 00567, 00731, 00790 and 01630). The Workgroup noted an additional code (00566) that compared to the proxy value was relatively far off the regression line. **Therefore, the Workgroup recommends that the six codes (00142, 00566, 00567, 00731, 00790 and 01630) identified via these two methodologies be removed from the RSL and either be resurveyed (for time and base unit) or replaced by a new anesthesia code with a similar base unit to fill in the gaps and be surveyed.**

The Workgroup confirmed that the 10 other anesthesia codes (00350, 00560, 00562, 00670, 00796, 00812, 01214, 01402, 01638 and 01810) are appropriate for the anesthesia reference service list.

Approved by the RUC – April 27, 2019

The Workgroup noted that both methods of reviewing variances in base units should be examined by a statistician to help to determine the optimal method for examination of the relativity of these services. The Workgroup will review this information and discuss further at the October 2019 RUC meeting.

Next Steps

The Workgroup indicated that it will convene a conference call over the summer to discuss the codes that ASA will add to the RSL codes or which codes they will keep and resurvey. ASA will survey these codes for time and base unit for the Workgroup to review at the October 2019 RUC meeting. Consultation with a statistician will occur before this meeting.

AMA/Specialty Society RVS Update Committee **Tab 40**
MPC Workgroup
January 17, 2019

Workgroup members in attendance: Doctors Alan Lazaroff (Chair), Allan Anderson (Vice Chair) Amr Abouleish, Jennifer Aloff, Gregory Barkley, Jimmy Clark, Jeffrey Edelstein, John Lanza, Alnoor Malick, Bradley Marple, Nader Massarweh, Daniel McQuillen, John H. Proctor, M. Eugene Sherman, Norman Smith, Ezequiel Silva III, James Waldorf

Review of Specialty Code Recommendations

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

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

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

Code	Long Descriptor	Work RVU	Global	Most Recent RUC Review	2017 Frequency
19303	Mastectomy, simple, complete	15.00	090	Apr-16	23,014
29580	Strapping; Unna boot	0.55	000	Oct-16	299,359
31600	Tracheostomy, planned (separate procedure);	5.56	000	Apr-16	27,002

34705	Endovascular repair of infrarenal aorta and/or iliac artery(ies) by deployment of an aorto-bi-iliac endograft including pre-procedure sizing and device selection, all nonselective catheterization(s), all associated radiological supervision and interpretation, all endograft extension(s) placed in the aorta from the level of the renal arteries to the iliac bifurcation, and all angioplasty/stenting performed from the level of the renal arteries to the iliac bifurcation; for other than rupture (eg, for aneurysm, pseudoaneurysm, dissection, penetrating ulcer)	29.58	090	Jan-17	
34812	Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral (List separately in addition to code for primary procedure)	4.13	ZZZ	Jan-17	18,205
36905	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty	9.00	000	Jan-16	43,181
36906	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transcatheter placement of intravascular stent(s), peripheral dialysis segment, including all	10.42	000	Jan-16	13,347
43117	Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision, with or without proximal gastrectomy; with thoracic esophagogastrostomy, with or without pyloroplasty (Ivor Lewis)	57.50	090	Oct-16	733
71046	Radiologic examination, chest; 2 views	0.22	XXX	Apr-16	
71111	Radiologic examination, ribs, bilateral; including posteroanterior chest, minimum of 4 views	0.32	XXX	Apr-16	30,514
74019	Radiologic examination, abdomen; 2 views	0.23	XXX	Apr-16	
75635	Computed tomographic angiography, abdominal aorta and bilateral iliofemoral lower extremity runoff, with contrast material(s), including noncontrast images, if performed, and image postprocessing	2.40	XXX	Apr-16	104,789
77001	Fluoroscopic guidance for central venous access device placement, replacement (catheter only or complete), or removal (includes fluoroscopic guidance for vascular access and catheter manipulation, any necessary contrast injections through access site or catheter with related venography radiologic supervision and interpretation, and radiographic documentation of final catheter position) (List separately in addition to code for primary procedure)	0.38	ZZZ	Oct-15	413,947

77002	Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device) (List separately in addition to code for primary procedure)	0.54	ZZZ	Oct-15	476,693

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

Code	Long Descriptor	Work RVU	Global	Most Recent RUC Review	2017 Frequency
43760	Change of gastrostomy tube, percutaneous, without imaging or endoscopic guidance	0.90	000	Apr-07	54,095
70460	Computed tomography, head or brain; with contrast material(s)	1.13	XXX	Oct-12	31,683
70470	Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections	1.27	XXX	Apr-11	107,627
72100	Radiologic examination, spine, lumbosacral; 2 or 3 views	0.22	XXX	Feb-11	1,861,601
72114	Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views	0.32	XXX	Feb-11	96,666
74280	Radiologic examination, colon; air contrast with specific high density barium, with or without glucagon	0.99	XXX	Sept-11	12,013
76536	Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation	0.56	XXX	Apr-09	868,983
76815	Ultrasound, pregnant uterus, real time with image documentation, limited (eg, fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses	0.65	XXX	Apr-02	16,145

Addendum

At the January 2019 RUC meeting, MPC Workgroup members agreed that prior to the April 2019 RUC meeting, AMA staff would review the updated MPC list to determine the volume of codes that have not been reviewed by the RUC in the last 15 years or more. The members agreed that following this staff review, the MPC Workgroup would sunset these codes.

Sixteen codes were identified on the list as not being RUC reviewed in the last 15 years or more. The top performing specialty societies were contacted and all agreed to sunset these codes from the MPC list. **The MPC Workgroup recommends to sunset the following CPT codes from the MPC list:**

Code	Long Descriptor	Work RVU	Global	Most Recent RUC Review	2017 Frequency
33249	Insertion or replacement of permanent implantable defibrillator system, with transvenous lead(s), single or dual chamber	14.92	090	May-99	46298
50546	Laparoscopy, surgical; nephrectomy, including partial ureterectomy	21.87	090	May-99	1971
57267	Insertion of mesh or other prosthesis for repair of pelvic floor defect, each site (anterior, posterior compartment), vaginal approach (List separately in addition to code for primary procedure)	4.88	ZZZ	Apr-04	5391
57452	Colposcopy of the cervix including upper/adjacent vagina;	1.50	000	Apr-02	6924
62264	Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (eg, catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 1 day	4.42	010	Apr-02	8359
76805	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, after first trimester (> or = 14 weeks 0 days), transabdominal approach; single or first gestation	0.99	XXX	Apr-02	8682
76816	Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus	0.85	XXX	Apr-02	18539
76817	Ultrasound, pregnant uterus, real time with image documentation, transvaginal	0.75	XXX	Apr-02	18144
95991	Refilling and maintenance of implantable pump or reservoir for drug delivery, spinal (intrathecal, epidural) or brain (intraventricular), includes electronic analysis of pump, when performed; requiring skill of a physician or other qualified health care professional	0.77	XXX	Feb-03	11179
96521	Refilling and maintenance of portable pump	0.21	XXX	Oct-04	53858
99343	Home visit for the evaluation and management of a new patient, which requires these 3 key components: A detailed history; A detailed examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 45 minutes are spent face-to-face with the patient and/or family.	2.53	XXX	Apr-97	56843

99344	Home visit for the evaluation and management of a new patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of high severity. Typically, 60 minutes are spent face-to-face with the patient and/or family.	3.38	XXX	Apr-97	74266
99345	Home visit for the evaluation and management of a new patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant new problem requiring immediate physician attention. Typically, 75 minutes are spent face-to-face with the patient and/or family.	4.09	XXX	Apr-97	65709
99348	Home visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: An expanded problem focused interval history; An expanded problem focused examination; Medical decision making of low complexity.	1.56	XXX	Apr-97	519843
99349	Home visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A detailed interval history; A detailed examination; Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are moderate to high severity. Typically, 40 minutes are spent face-to-face with the patient and/or family.	2.33	XXX	Apr-97	1134545
99350	Home visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: A comprehensive interval history; A comprehensive examination; Medical decision making of moderate to high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to	3.28	XXX	Apr-97	422851

	high severity. The patient may be unstable or may have developed a significant new problem requiring immediate physician attention. Typically, 60 minutes are spent face-to-face with the patient and/or family.				